# *Senate Hearings*

*Before the Committee on Appropriations*

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# Departments of Labor, and Health, Education, and Welfare Appropriations

H R. 18037

90*th* CONGRESS, SECOND SESSION

*Fiscal Year* 1969

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# DEPARTMENTS OF LABOR, AND HEALTH, EDUCATION, AND WELFARE APPROPRIATIONS FOR FISCAL YEAR 1969

## HEARINGS

BEFORE THE

## SUBCOMMITTEE OF THE COMMITTEE ON APPROPRIATIONS UNITED STATES SENATE

NINETIETH CONGRESS

SECOND SESSION

ON

## H.R. 18037

AN ACT MAKING APPROPRIATIONS FOR THE DEPARTMENTS OF LABOR, AND HEALTH, EDUCATION, AND WELFARE, AND RELATED AGENCIES, FOR THE FISCAL YEAR ENDING JUNE 30, 1969, AND FOR OTHER PURPOSES

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# DEPARTMENTS OF LABOR, AND HEALTH, EDUCATION, AND WELFARE, AND RELATED AGENCIES APPROPRIATIONS FOR FISCAL YEAR 1969

TUESDAY, APRIL 2, 1968

U.S. SENATE,
SUBCOMMITTEE OF THE COMMITTEE ON APPROPRIATIONS.
*Washington, D.C.*

The subcommittee met at 10 a.m., in room 1224, New Senate Office Building, Hon. Lister Hill (chairman) presiding.

Present: Senators Hill and Javits.

## DEPARTMENT OF LABOR

**STATEMENT OF HON. WILLARD WIRTZ, SECRETARY OF LABOR**
**ACCOMPANIED BY:**
**JAMES REYNOLDS, UNDER SECRETARY OF LABOR**
**LEO R. WERTS, ASSISTANT SECRETARY FOR ADMINISTRATION**
**RICHARD E. MILLER, DIRECTOR, OFFICE OF PROGRAM AND BUDGET REVIEW**

### INTRODUCTION OF ASSOCIATES

Senator HILL. The subcommittee will come to order.

We are honored to have the Secretary of Labor here with us. Secretary Wirtz, will you proceed, sir.

Secretary WIRTZ. Mr. Chairman, just two or three introductory matters. I want to identify those who are with me. The Under Secretary of Labor, Mr. James Reynolds; Assistant Secretary of Labor for Administration, Mr. Leo Werts. I also want to refer to one who is not here. You realize this is the first year we have come here without the invaluable benefit and assistance of Jim Hudson, who appeared many times before the committee—very many, many years.

Senator HILL. He was with us many, many times, and always most helpful.

Secretary WIRTZ. It is always our mistake that we wait too long to say our thank you's. I want to say mine now.

### PREPARED STATEMENT

Mr. Chairman, I want to file with you the statement that goes into considerable detail. We have the officers of the Department here. I know you will want to talk with them. I suggest the possibility of my filing the statement and summarizing it briefly only as a basis for such questions as you may have.

Senator HILL. We will have it appear in full in the record.

(The statement follows:)

You have before you the detailed budget request for the Department of Labor for Fiscal Year 1969. My associates and I will welcome the opportunity to discuss any item in this budget which presents any question, for each item represents a careful balancing of what have often seemed competing considerations.

It has seemed to me essential, however, to full understanding and informed evaluation of this budget request, that I try to give the Committee something of an overview of the Department's evolving structure and sense of purpose. For despite this 1969 budget request looking very much like a long series before it, and despite the fact that most of the issues which it may present will be—I think—minor ones, there are significant elements of change, of growth, of new purpose involved here.

This 1969 Department of Labor budget request reflects properly and necessarily, a significant evolution in the national sense of purpose.

The Labor Department's responsibilities lie peculiarly in that area in which "economic" and "human" concerns (neither term is quite right) overlap; and this is precisely the area in which America is today re-thinking its course and redefining its purpose.

The central element in this rethinking is a stronger, sharper, clearer emphasis on "human", as distinguished from "economic", values. Perhaps a better way of putting it is that having achieved an unprecedented degree of economic success (reflected in an unparalleled expansion of the economy and a sustained high growth rate in personal incomes and job opportunities) we are turning increasingly to an emphasis on the *quality* of human opportunity and to the extension of opportunity to those who have not shared fully in it before. Economic problems remain, some of them formidable; but there is also great emphasis now on eliminating poverty, increasing educational and employment opportunity, providing safe work places, removing social discrimination and disadvantage, enlarging older people's security, rebuilding the cities, and so forth—significantly beyond what was possible (or at least likely as a practical matter) when the economy was working less well, less reliably. It is easier today to recognize that the economy is an essential *means;* the *end* is people.

All of this is having a material effect, much more than appears at first, on the responsibilities and the operations of the Department of Labor.

The change is clearest in the development in the past six years of a comprehensive and affirmative "manpower" policy and program—where before, and for the preceding 30 years (approximately), the "employment security" program had been confined largely to maintaining the Federal-State system of "employment offices" and administering an unemployment insurance program.

This particular change merits further comment; but it is important, before proceeding with that, to point out how broadly the identification of new national purpose has affected virtually *all* of the operations in the Department:

The Bureau of Labor Statistics, oldest of the Department's constituent units, is engaged much more extensively than before, just as one example in identifying the individualized aspects of unemployment and underemployment—as well as in conducting the surveys and studies of aggregate unemployment as an element in the nation-wide "economic" picture.

The Wage and Hour and Public Contracts Division is concerned now not just with the maintenance of a survival wage minimum, but with the administration and development of a "fair labor standards" concept which comes infinitely closer than in 1938 (when the Fair Labor Standards Act was passed) to living up to the clear meaning of that phrase.

In a related connection, the Wage and Labor Standards Administration is advancing now a good deal more boldly into new and vitally important areas of human concern—reflected in its recent action to extend workmen's compensation benefits to "left-out" workers, promote equal opportunity for women, particularly the disadvantaged, reduce radiation hazards in uranium mines, and in the President's proposal to this Session of the Congress for a comprehensive Occupational Safety and Health Act.

"Equal employment opportunity" was no part of the Department's responsibility or authority even as recently as four years ago. Today there is a broad responsibility (with commensurate authority) for eliminating discrimination based on race, creed, sex and age.

The operations of the constituent units in the Labor-Management Relations Administration are no longer confined to elements of controversy which arise in particular collective bargaining disputes. The broader concern is now in

maximizing the extent to which the interests of the individual are enlarged by his participation in the institutions and procedures (trade unions, collective bargaining, pension and welfare plans, among others) which are increasingly important in a large, complex society.

The Bureau of International Labor Affairs becomes an increasingly important instrument in the development of international economic policy—but this is in part because of the emergent importance of its emphasis on the raising of human standards of living throughout the world, as a necessary condition of free trade.

The budget we present is for a Department whose responsibility is identified by statute as being to promote the interests of "wage earners." But the Department is not an end in itself—any more than is *any* institution. So this budget is defensible only to the extent it can be identified, dollar by dollar, as contributing to human purposes of wage earners—which is most of us. This purpose goes beyond living by bread alone. Being a "wage earner" in today's well-to-do society is more than being somebody else's hired hand. We are in a position now to recognize the truth that the measure of a nation's freedom is the extent to which *all* of its members have the *full* opportunity to participate in all of its affairs.

This may seem needlessly, perhaps even pointlessly, vague and philosophical as part of a budget presentation at an appropriations hearing. But if this is so, it is to invite your harder examination; not to avoid scrutiny of the smallest budgetary detail, but to assure your understanding and to ask your constructive criticism of all we are about.

This is particularly important in connection with the "manpower" program. Most of the Department of Labor budget goes into this program, as well as substantial amounts transferred to the Department from OEO and HEW. This is the program which has been expanded most substantially over the past few years, and in which there has been the most change from year to year. It is a complex program and one which is not well understood generally. So I should like to say some more about it.

The manpower program is administered through one central unit—the Manpower Administration in the Department of Labor. All manpower programs for which the Department has responsibility are administered by the Manpower Administration. This unit is under the direction of Assistant Secretary of Labor Stanley Ruttenberg, who is also identified as the Manpower Administrator.

There are three operational units in the Manpower Administration:

The Bureau of Employment Security—which includes the Employment Service, the Unemployment Insurance Service, and (as of the time of the preparation of this budget request) the Farm Labor Service.

The Bureau of Apprenticeship and Training.

The Bureau of Work Training Programs.

This situation is best understood by recognizing six lines of statutory development of a manpower policy—all of which are now brought together in the functions of the Manpower Administration.

Congress established a Federal-State Employment Service in the Wagner-Peyser Act of 1933, and then an Unemployment Insurance system as part of the Social Security Act of 1935. These "*employment service*" and "*unemployment insurance*" functions have been exercised ever since, and are today. They are financed from the Unemployment Insurance Trust Fund. They are administered on a Federal-State basis: with the Federal responsibilities being handled in the Bureau of Employment Security (one of the three Manpower Administration units); and with the State responsibilities being exercised through the State employment security agencies and some 2,000 local offices (about 60,000 employees) maintained by the State agencies.

The Fitzgerald Act of 1938 provided for the promotion of private apprenticeship programs by the Department of Labor. This function is administered by the Bureau of Apprenticeship and Training (another unit in the Manpower Administration), which also works with the State Apprenticeship agencies.

The Manpower Development and Training Act of 1962, as subsequently amended, provides for a broad-gauge *training* program. This is administered by the Manpower Administration, with provisions under the statute for handling by the Department of Health, Education, and Welfare for the supplying (through the State vocational education agencies) of the institutional vocational training services. The Act also provides for the payment of training allowances, and for the establishment of on-the-job training programs by contract with either public

or private (typically, private employer) agencies, and also provides for research, experimental and demonstration projects.

The Economic Opportunity Act of 1964, as subsequently amended, establishes several *work-training* programs, for adults, and for youths. The authority to administer one of these, the Neighborhood Youth Corps program, was delegated by OEO to the Department of Labor shortly after the 1964 Act was passed. Similar delegations have subsequently been made so that the Department now also administers the Operation Mainstream, New Careers, and Special Impact (all work-training) programs. These programs are administered, within the Manpower Administration, by the Bureau of Work-Training Programs.

In the Social Security Amendments of 1967, the Congress transferred to the Department of Labor (from HEW) the "work incentive program" which is part of the welfare provisions of the Social Security Act—and which closely resembles the "work-training" programs set up under the Economic Opportunity Act.

A good deal of this has happened, as these things go, pretty fast. If this has meant some disorderliness and temporary confusion, that had to be expected. A giant of a nation wakened almost suddenly to the need for much more of an affirmative manpower program—a human redevelopment program—than it had previously had. And the Congress did *not* make the *mistake*—although this would have avoided a lot of the confusion—of "turning it all over to the Federal Government." Instead of that, the new programs were designed—in some cases legislatively, in other cases administratively—to make full use of available State agencies; and, in addition, new lines of operating and financing relationship were established with *local* agencies.

Recognizing these complications (not all of which are yet *fully* worked out), what this comes down to is a responsible and recently extremely aggressive response by "government" in this country to the evolving need for the kind of employment and manpower program we now have:

first (in 1933) the setting up of a system of offices where unemployed people and vacant jobs could be matched;

then (in 1935) the establishment of an unemployment insurance system.

then (in 1938) the taking of steps to promote the private apprenticeship training programs;

then (in 1962, and after too long a period of inattention) the establishment of a program to provide institutional training, with training allowances paid, for the unemployed; with a shifting emphasis, as part of the development of this program, to on-the-job training arrangements.

then (in 1964) the setting up of work-training programs which recognize the need in many cases for what are principally "employment" opportunities for the disadvantaged—but with provision made for associated training which makes those opportunities means to people becoming self-sufficient.

and now most recently (in 1967) the tying in with this pattern of development of a related program (work incentive) which was growing up as part of the nation's "welfare" system.

There are still today—and must always be—programs of a not totally dissimilar nature which are nevertheless so closely associated with *other* functions of government that their administration is linked with the carrying out of those other functions (particularly the vocational education program, vocational rehabilitation, servicemen and veterans programs, the Job Corps). But in general, the manpower program administered by and through the Manpower Administration in the Department of Labor constitutes today an effective, integrated—and proud!—operation.

No single figure conveys an accurate picture of the number of people served by this manpower program in the course of a year. There are fairly precise caseload figures available for each of the programs, taken separately. But these figures overlap, for a single individual could very possibly be serviced in the course of a year by the employment service, the unemployment insurance service, and one or even more of the training and work-training programs. A composite figure, furthermore, would give equal weight to (i) the case of a person who made a single call at an employment office and was referred to a job which he took, and (ii) another case in which the individual received a full year's training, and training allowances, before he could be placed in private employment.

Here, however, are *general* indications of the present magnitude of the various types of programs, using calendar year 1967 as a base for the estimates.

The State employment offices handled almost 11 million new job applications.

The State unemployment insurance offices processed over 11.5 million initial claims for benefits.

The Bureau of Apprenticeship and Training and the State apprenticeship agencies worked in one way or another with private apprenticeship programs in which 278,000 apprentices were enrolled.

Approximately 177,000 men and women were enrolled in and received training (either full or partial courses) under MDTA institutional training programs.

Approximately 110,000 men and women received work and training under MDTA on-the-job training contracts with private employers.

Approximately 162,000 individuals (those out of school) received work and training in the programs administered by the Department of Labor under a delegation of authority from the OEO.

Approximately 455,000 high school age boys and girls received work and training (either part-time work during the school year; or full-time summer work; or both) under the in-school Neighborhood Youth Corps program (also administered by the Department under OEO delegation).

One comparison is particularly important. The total of over 900 thousand individuals who received work and training under the MDTA or EOA programs (administered by the Department of Labor) last year compares with a total of 41 thousand in 1963. This is a rough (and incomplete) suggestion of the extent to which the Nation has put into actual, effective operation in this five-year period an affirmative manpower program (in addition to the traditional employment service, unemployment insurance, and apprenticeship programs).

This is far from being, today, a completed program, or one whose form or scope we consider set for the future. It is, to the contrary, a program which is now fully operative and yet still very much in the developmental stage. This will, to some extent, always be true. The very nature of unemployment is constantly changing. The demands on a "manpower development" program will always depend, on the one hand, on how efficiently the general education program is operating, and, on the other, on the state of the economy. There are other variables.

This Committee should be advised not only of our achievements so far in the development of an adequate manpower program but of what we recognize as our most significant present and prospective problems.

I would note three groups of such problems. Although they are identifiable separately, they obviously interlock.

The first grouping of problems is essentially administrative: how best to organize and carry out a federal-state-local manpower program and to link it with what is essentially (at least so far as the bulk of it is concerned) a private program (i.e., employment and the private training that normally goes with it).

The second set of problems involves the necessary effort to see to it that this program is directed where the need for it is greatest—that is on the hard-core unemployed, and in the areas where they are concentrated.

The third set of problems, so far only half-recognized, is how the meeting of the employment and training needs of disadvantaged people—especially those most seriously disadvantaged—is tied in with the meeting of other needs which have to be met if they are to become full participants in the life of the community.

*I. Regarding the administrative problems*

These have been hard during the past three or four years. They are now, in my judgment, under control or well along toward being brought under control.

There has been a good deal of public discussion of the problems of coordination of the manpower program at the Federal level. This problem has now been *substantially* worked out. The consolidation in the Department of Labor of operating responsibility for the various programs I have described provides most of what was needed for a comprehensive, integrated manpower program.

It has been necessary, as various new legislation was enacted, to realign on several different occasions the exercise of functions within the Manpower Administration, including its full operations. A clear central authority and responsibility has had to be established and maintained in the Manpower Administrator. The special competence of established bureaus has had to be preserved and relied upon while recognizing at the same time the different procedures which new and different programs required. By action taken in December, in which I have received the full cooperation of my associates in the Department, these internal administrative needs have been met—with significant gains in both effectiveness and economy.

The matter of working out the best possible working relationships between Federal, State, and local agencies is still unfinished business. We are way ahead of where we were a year ago; but we are still in the process of completing this

assignment. This is a matter involving particularly our working partnership with the State Employment Security agencies, particularly the State employment services. The direction of our effort is to rely upon these services in the administration not only of the traditional employment service and unemployment insurance programs but also programs authorized by the MDTA, EOA, and the work incentive (Social Security Welfare) programs. The State vocational training and welfare agencies are also involved in certain phases of these programs. There is the additional matter of developing the required working relationships with (and sometimes between) both State and local agencies; and sometimes between various local agencies (a matter affected to some extent by action of the Congress last year). I consider all of these factors in the situation clearly manageable now; but you may well want to inquire in more detail about this.

It may well be the most basic "administrative" problem that it is essential to mark clearly, and meet correctly, the question of how the work-training function—involving particularly the seriously disadvantaged person—should be distributed between public agencies and private employers (performing it, possibly, on some kind of reimbursable basis). The present direction of our approach to this can be better suggested in connection with the consideration of the second set of "problems."

*II. Regarding the increased concentration of the manpower program on the problem of "hard-core" unemployed*

The national unemployment rate in this country, as it has traditionally been measured, has now been at between 3.5% and 4.0% almost continuously (there was a flare-up last Fall to 4.3%) for the past two years.

The rate for adult males is about 2%, and most of this is short-term, between-jobs, or seasonal, unemployment.

*The general situation in the country as a whole and for people in general* is that there is today virtually minimal unemployment.

In contrast to this *general* situation:

The unemployment rate for minority group members—particularly Negroes, Mexican-Americans, Puerto Ricans, and Indians—is over 6%.

The unemployment rate in city slums and ghettoes and in particular rural areas is about 10%.

The unemployment rate among 16-to-19 year olds is about 11%; and the figure for minority group members in this age bracket is almost twice that.

These figures, furthermore, show nothing of the serious underemployment and "nonparticipation in the work force" among these groups.

We face squarely now, with the economy working as well as it is, the central problem of what to do about those people who are so seriously disadvantaged that no conceivable development in the economy will result in their becoming employed—unless something is done about their individual situations. It is a fair working figure (no precise statistics are available) that there are about a million such people, perhaps as many as 1¼ million. Approximately half of this group live in the slum areas of the 50 largest cities. Most of the rest are in "pockets of poverty"—both urban and rural. Their unemployment is more an individual than a general economic problem.

During the past year, and especially in the past six months, special efforts have been made to bring the manpower program to bear particularly on this "hard-core unemployment" situation. This effort is reflected in two special programs: the Concentrated Employment Program (CEP) initiated about a year ago; and the JOBS program outlined by the President in his January 23, 1968 Message to the Congress.

These programs do not require separate statutory authorization. They are not, furthermore, the subject of appropriations requests which are separate and distinct from the broader program requests. This is because the CEP and JOBS programs involve only the special *concentration* of part of the various work, training, and work-training programs on these areas where the hard-core unemployment problem is concentrated.

There are, at the same time, two distinctive features of these special programs.

First, each involves *bringing together*—in single contracts entered into by the Manpower Administration—the resources available under various different manpower programs. A CEP contract is made with a single local agency (typically a local Community Action agency). This one contract could include, separately earmarked, an MDTA institutional training component, a MDTA on-the-job training component, a Neighborhood Youth Corps component, and New Careers,

and Operation Mainstream components. Provision is made for the use of the CEP programs only for the hard-core unemployed in the community, and includes special "outreach", counselling, and "orientation" features designed especially for these groups. It is then also designed to permit the routing of those who enter the program along whichever of the work, work-training, or training lines will be most effective in the particular case.

*Second,* both the CEP and JOBS programs—more specifically the latter—are especially designed to evoke the full participation of private employers. The JOBS contracts will be made directly with the private employers. They will be, in effect—and in terms of statutory authorization and appropriations action—advanced forms of what are essentially "on-the-job training programs", with accompanying provision for "supportive services". They, too, will include components constructed from several different authorization and appropriation sources. The pattern of each contract will be developed to make maximum use of the individual employer's capacity to hire hard-core unemployed and of his "know-how" in shaping a training program to fit his own operation. But in appropriation terms, each such program will constitute specifically identified use of portions of the appropriation total for the various statutory authorizations.

It is our conviction that the CEP and JOBS programs will result in a material gain in moving in, with the essential help of private employers, on the hard core unemployment problem in the areas (146 CEP areas, urban and rural; 50 JOBS cities, the 50 largest in the country) where this problem is most serious.

*III. Regarding, finally, the broader problem to which jobs are an essential part of the answer, but not all of it*

This problem has no direct relevance to the matter of the present appropriation request, and I therefore note it only briefly.

It is important, nevertheless, to emphasize the fact of an emergent realization that jobs alone—essential as they are—will not meet the situation which today affects severely a significant minority of Americans and the relationship between them and other Americans. The primary purpose of the manpower program is to provide work opportunities to those who have been denied those opportunities. But this has been only *part* of the denial, and *all* of it is going to have to be met.

Man (by which I include "woman") is a social being. He needs to be a part of a group. He needs the sense of belonging, and full participation and partnership in the society.

It is this need, this desire for recognition and to have a role in a group, that causes an individual to conform to the behavioral pattern and the value system of *some* group. Individuals excluded from the community group as a whole by denial of equal opportunity for education, training, employment, good housing, acceptable community services and environment, will seek and find the recognition in a group of their peers and will abide by whatever are the mores and attitudes of that group.

The serious domestic problems facing the Nation will not be solved until we recognize the underlying needs, hopes and aspirations of the disadvantaged minority as being essentially the same as our own. Providing work training—and jobs—is essential. But it will have to be solved as part of the full acceptance of the individual, not just providing for him.

A total of $1.4 billion is requested in these estimates. Another $845 million is included in the OEO and HEW budgets for those functions of the Labor Department that I have been discussing.

Our basic budget ($1.4 billion) shows an increase over 1968 of $157 million (just over 12%). This includes $87 million to meet mandatory costs required by law (such as UCFEX) and $70 million for program items that allow some discretion.

The budgets for functions included in other than Department of Labor appropriations increase by $322 million (over 61%).

The estimates can best be summarized as shown in the table attached to this statement.

Regarding the number of positions:

For the estimates being considered here, 9,902 positions are requested, an increase of 751 (slightly over 8%).

For delegated programs 1,080 positions are included. This is an increase of 290 or almost 37%.

Mr. Chairman, and Members of the Committee, what you have before you would be properly considered a wastrel budget if either (i) we didn't know

what we were doing—in clear, purposive terms, or (ii) this purpose were not directly relevant to the central purpose of the Nation.

The purpose of everything we propose here is to perfect the *opportunity* of every person in this country to earn a decent living—conditioned only on his willingness to do his part, to match *right* with *responsibility.*

We conceive of this purpose as being necessarily set in a context of providing the individual the opportunity to be a full participant—not just a hired hand—in the process of being useful.

We believe we know what we are doing, and respectfully request your approval—subject of course to the improvements which you find appropriate—of our proposal for the means necessary to implement these programs.

Thank you.

APPROPRIATION ESTIMATES BY MAJOR FUNCTION

| Function | 1968 | | 1969 | |
|---|---|---|---|---|
| | Estimate | Percent | Estimate | Percent |
| For training, allowances and experimental projects under MDTA | $400,987,400 | 31.8 | $435,228,400 | 30.7 |
| For administration of State employment security agencies | 557,227,000 | 44.2 | 659,573,000 | 46.5 |
| For unemployment and workmen's compensation benefit payments to covered workers | 181,705,000 | 14.4 | 188,819,000 | 13.3 |
| For administration of programs | 120,828,407 | 9.6 | 133,868,600 | 9.5 |
| Total, Department of Labor appropriations | 1,260,747,807 | 100.0 | 1,417,489,000 | 100.0 |
| Delegated programs: | | | | |
| From OEO | 488,500,000 | ---------- | 745,000,000 | ---------- |
| From HEW | 35,000,000 | ---------- | 100,000,000 | ---------- |
| Grand total | 1,784,247,807 | ---------- | 2,262,489,000 | ---------- |

HUMAN WELFARE OF WAGE EARNERS

Secretary Wirtz. The presentation this year is divided really into two parts, the second part being the traditional identification of the figures that are involved. The first part of the statement is an attempt to stand back and review what we are doing in broadest outline to make clear these points:

One, that in the manpower program in particular, but throughout the Department, we realize that we are moving in a very significant way from some of the purely economic aspects of service to the wage earner, to the recognition of the human welfare of the individual.

Those are words that are likely to be interpreted as soft words—human welfare—and thus we realize we are doing what we are doing on the most pragmatic possible basis.

I believe that we are significantly at a point in the development of the economy, and the society in this country where we have found ways of making the economy as a whole work better than it has ever worked before.

Now we are brought face-to-face with the fact that even with the economy working on that basis, there are some people for one reason or another are left out.

Our concentration is increasingly not only in the manpower programs but also in other programs—on those aspects of the economy and the society which involve what we are to do as people whose muscles are as strong as our hearts are warm, what we are going to do about meeting that problem.

In the minimum wage we are moving away from a purely subsistence level which would fill a man's stomach and put a thread on his back and a shack over his head, to a point where the minimum wage is evaluated now in social terms as well as in economic terms.

If you go across the board on that with respect to all the programs of the Department, there is a good deal more of that.

Then you come particularly to the manpower program. Here the emphasis is on the development of a program which is devised not just to serve the system, I mean the economic system, but which is devised to serve the decent desires, to be matched by the responsibilities, of the individual person.

### MANPOWER DEVELOPMENT

Now I have sketched in the longer statement but need not set out in detail before this committee, except as it is an important part of the record, extraordinary development of the manpower program. This program within the experience of a good many people in the present Congress and particularly within your expeirence, Mr. Chairman, because you have been one of the architects of it from the beginning, started back with the Wagner-Peyser Act in 1933 and the Social Security Act in 1935 and picked up the Apprenticeship Act in 1938. After this there was a long period during which very little was done, picking up again in 1961 and in 1962 with the Area Redevelopment Act and then with the Manpower Development and Training Act, in 1962. The program then moved through a period of legislative and executive interworking—interrelationships—in the amendment of those acts, including the Economic Development Act of 1964 and various other legislative enactments of one kind or another, moving up to date last fall with the Social Security Act amendments, the welfare provisions of which involve additional training programs.

### Employment and Training

When you stand back and look at it, what we have done in a period of at least 4 or 5 years is suggested by a single statistic. In 1963, 41,000 people in this country were in training programs of one kind or another.

In 1967, that figure was up to 900,000. That is a fantastic response of a successful nation, a society, to the problems which are presented when the economy does not do the whole job.

I repeat again, to move in 4 years from 41,000 to 900,000 is in my judgment an accomplishment which the Nation should recognize. Of course, it becomes very relevant to the matter we are talking about here, because, Mr. Chairman, a good deal of the budget of the Department of Labor is directed to that program.

In terms again of the same comparison, the appropriation requests which you have or will have before you are ones which—continuing that same series of figures—would move that 900,000 figure to 1 million.

So that under the program which includes both the Department of Labor budget which is technically before you at the moment and the delegated programs which we are now administering, we would in fiscal 1969 move that figure to 1 million people who are in training or work training programs of one kind or another.

Those are our accomplishments. Briefly noted to a point, that does some injustice to those here who have been participating in their administration.

ADMINISTRATIVE REORGANIZATION

You should also be aware of our problems. A program that grows that fast presents administrative problems of one kind or another. I have suggested in the presentation those internal changes which have been necessary and are still in process to gear us up to meet a program of these dimensions.

We have been reorganizing within the manpower administration. We have been realining functions of one kind or another. Where 2 years ago those realinments presented real problems because of reactions of one kind or another, I say to you now they are being worked out with understanding between the various traditional units within the Department, and perhaps more significantly between the Department and the States with whom we are working more and more closely so that these administrative problems are now being met.

There has been a great deal said, a great deal heard, about the problems of coordination. Those problems are being met in the method that I have described.

UNEMPLOYMENT

A second of the problems we face, and I list only three of them, is the desirability, indeed, it seems to us the necessity, of concentrating our program where the need is more seriously concentrated.

The overall unemployment record in this country today is quite extraordinarily good. The economy has done its part in bringing unemployment down to about 4 percent. We can boast in terms of figures which are averages—which conceal the failures because they are averages. We can be proud of the fact that just in general the employment rate for heads of families is now up over 98 percent.

That is about as far as you can go.

Senator HILL. Over 98?

Secretary WIRTZ. Over 98 percent. There are various definitions but I am talking about the adult who is head of a family, and that figure is now at about 98 percent. That is fine.

YOUTH AND MINORITY GROUPS

On the other hand, there are those figures for youth and for minority groups. Employment rates for women are less satisfactory than the others, and then there are those figures for the particular areas in our cities and our rural communities where we go way down to figures which at the extreme would be the minority groups, the teenage girls and women.

This is not a fair picture of the economy as a whole, but the figures are illustrative of what I consider to be our second problem which is to put these programs where the needs are greatest.

To put the picture in context, this is a situation where in concentrated areas in this country, in the slums in the cities, and in the slums in the urban communities, there is unemployment of between 10 and 35 percent, depending on which of several definitions we want to use. So, our second problem is to concentrate on programs there.

### Budget Concentration

The budget which you have before you includes an infinitely larger degree of concentration than any before. It takes the form particularly of two programs, the Concentrated Employment Program and then the JOBS program proposed by the President in his message to the Congress of January 23 of this year.

We are trying to bore in. We realize the problems that are involved, some of them political, because it does mean concentrating our expenditures and concentrating our programs in terms of need rather than on a broad basis.

We just do not think that this problem is best met with a scatter gun. We think that concentration is the live ammunition in the war on poverty and we want to aim fairly and that is being done here in a very real way.

### Enlistment of Private Resources

The third point to which I would call the committee's attention is the point of the enlistment of the private resources of this economy for doing the "hard core" job.

This program presented to you involves a very substantially larger reliance upon the private forces in the country to do part of these jobs.

Oversimplifying, the direction to which I am referring is illustrated by a sequence which starts with the on-the-job training programs and moves now to the JOBS program which the President has identified so strongly and includes basically this proposition: private employers do the hiring and the training. We require that the hiring and the training of the hard-core unemployed be in the areas in which unemployment is concentrated. We rely on the proposition that the most effective kind of training is that which is done on the job because it moves a person directly into employment, and we have the Government pick up the tab for the private employers' expenditures which are traceable directly to the expenses related to hard-core unemployment.

So, it is a characteristic—and an essential characteristic—of the program that you have before you that there is that concentration.

### Equality of Life and Just Work

I mention a final point, Mr. Chairman, and one which is not developed in detail because it is still not clear in our minds. One characteristic of this country, this economy, this society, at the present time is that there is more recognition of the problem of quality and equality of life as well as the quantity of the provision of just work.

We are trying to make participants in a society rather than a hired hand out of everybody, particularly those at the bottom.

We know that there is a great deal more to be done as far as identifying the satisfactions of work is concerned. We need social indicators in this country that are as helpful to us as the economic indicators are.

We know that there is a job to be done in making life real as well as earnest and we are attempting to move in that direction. But I do not develop the point that I am talking only about our horizons now and not about our frontiers which we have reached.

BUDGET INCREASE OF PRESIDENTIAL PRIORITIES

Within the areas, Mr. Chairman and members of the committee, of this very general discussion, we have presented to you a budget request which does constitute an increase over last year's budget. There should be no misunderstanding about that.

This budget represents a clear identification of priorities on the part of the President, and I appeal to you for a recognition of those priorities. Nobody could be more cognizant than I am of the necessity of there being a reduction in the deficit, stability in the economy.

MINORITY EMPLOYMENT AND ADMINISTRATION OF MINIMUM WAGE LAW

I think those goals can be reached without the sacrifice of priorities and I think one of the priorities today has to be the employment of those people in this country who are left out. It has to include the administration of a minimum wage law which in a single day in February, as a result of congressional action last year, carried another million people further out of poverty and which requires constant and careful administration as far as we are concerned.

AGE DISCRIMINATION AND JOB KILLING

It has to include the effective administration of the new law prohibiting discrimination in employment on the basis of age. It has to include, in my judgment, a recognition of the responsibility of the society to stop killing 14,500 people on the job each year.

We think that is intolerable. As I have talked here, in perhaps 15 or 20 minutes, there have been three people killed on the job in this country. There have been about a hundred disabled that had to leave their jobs, some of them never to come back.

We have to stop that kind of thing, if we mean as Woodrow Wilson phrased it, that this society is for the individual as well as for the system.

TRAINING

So we have a budget which represents an increased request for appropriations. We have a budget which, in manpower terms, means 1 million people instead of 900,000 will receive the training we are talking about. And there are counterpart considerations.

BUREAU OF LABOR STATISTICS

The Bureau of Labor Statistics includes provisions for going into some things we have not gone into before. It is not a retreating budget.

It is, I think, a responsible budget, and it is one which, wherever there is an enlargement over previous expenditures, puts us in a position to trace that enlargement to the fact that life will have meaning for somebody for whom it did not have meaning before.

COST-OF-LIVING INCREASE

Senator HILL. Has the increased cost of living, an increase in prices which seems to have been pretty steady, given you any concern?

Secretary WIRTZ. Yes, sir; it has increased 0.3 percent per month for the last 5 months.

It certainly gives me very great concern. I temper that concern only with the realization that it still remains the most successful record of any of the industrialized countries in the last 10 or 15 years.

We are not talking about runaway inflation in the sense that it happens in these other countries.

We are not talking about runaway inflation in the sense that we had it in 1950 to 1951 at the time of the Korean war. There can be only one answer to your question. At a point at which prices are increasing 0.3 percent a month, we are into an area where we have to be terribly vigilant. And vigilance won't be enough; there has to be, in my judgment, action taken. There is necessity for the adoption of the President's tax proposal. But I don't mean to go beyond your question.

### Fiscal Responsibility

Under Secretary Reynolds points out to me that in the light of previous indiscretions, my statement on that might be interpreted as getting into the area of wage and price controls.

I am talking about fiscal policy in my statement.

I want to leave no question in the record as far as the wage and price controls are concerned. I went through that twice personally. It was during the period when prices and wages were zooming on up.

This is not a period which calls for wage and price controls in my judgment. It is a period which calls for the adoption of fiscal, monetary, and budget policies which will meet the problem.

### Budget Reduction of Nonpriority Items

Senator Hill. You think your budget falls within that category?

Secretary Wirtz. I would have to recognize that the request for the budget is larger. In my judgment, it is entirely proper and possible to reconcile the needs for stability, even for the reduction of the deficit, and at the same time recognize a sense of priorities.

Indeed, I think this country will make a great mistake if it tries to meet the fiscal problem on an across-the-board basis which leaves out the priorities.

I would press these priorities very strongly.

Senator Hill. Is there anything you would like to add, Secretary Reynolds?

Mr. Reynolds. I think Secretary Wirtz' statement is about as clear and eloquent an outline of the mission of the Labor Department for fiscal year 1969 as I have ever heard.

The only thing I would add would put me in a position of Lou Gehrig batting after Babe Ruth. I would rather sit on the bench.

Secretary Wirtz. I would point out that Lou Gehrig played 3 years after Babe Ruth.

Senator Hill. Anything you would like to add, sir?

Mr. Werts. No, sir.

Senator Hill. You certainly have made a clear, strong statement, Mr. Secretary. We appreciate very much and we want to thank you.

Secretary Wirtz. Thank you, Mr. Chairman. I would like to say that the people who follow me, the people whom you are about to hear, represent, in my judgment, the most seasoned, responsible staff in the Government of the United States.

I call your attention to the fact that the people who will be talking to you are the people who, in most cases have been doing this now for several years, and there will be no better opportunity for me to say that it represents a magnificence of Government service which I think has no parallel. It has a relevance to this because these people know their business and know what they are talking about when they are talking to you.

Thank you.

Senator HILL. You are speaking of the team now?

Secretary WIRTZ. Yes, sir. That is a phrase from another administration.

## Manpower Administration

## Manpower Development and Training Activities

**STATEMENT OF STANLEY H. RUTTENBERG, ASSISTANT SECRETARY FOR MANPOWER**

**ACCOMPANIED BY:**

**ROBERT C. GOODWIN, ADMINISTRATOR, BUREAU OF EMPLOYMENT SECURITY**
**HUGH C. MURPHY, ADMINISTRATOR, BUREAU OF APPRENTICESHIP AND TRAINING**
**MARK BATTLE, ADMINISTRATOR, BUREAU OF WORK TRAINING PROGRAMS**
**DR. CURTIS C. ALLER, ASSOCIATE MANPOWER ADMINISTRATOR**
**MISS MARGARET E. THOMAS, ASSISTANT MANPOWER ADMINISTRATOR FOR ADMINISTRATION**
**HERBERT A. MEYER, CHIEF, BUDGET DIVISION, OFFICE OF FINANCIAL AND MANAGEMENT SERVICES**
**RICHARD E. MILLER, DIRECTOR, OFFICE OF PROGRAM AND BUDGET REVIEW**

### Appropriation Estimate

"Manpower Development and Training Activities

"For expenses, not otherwise provided for, necessary to carry into effect the Manpower Development and Training Act of 1962, as amended (42 U.S.C. 2571–2620), [$385,497,000] *$413,096,000*, to remain available until June 30, [1969] *1970*."



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SUMMARY OF THE 1968 AND 1969 MANPOWER DEVELOPMENT AND TRAINING ACT PROGRAM BY TITLE AND BY APPROPRIATION

| | Appropriation adjusted, 1968 [1] | Estimate, 1969 |
|---|---|---|
| Title I: | | |
| Direct program costs: | | |
| Research programs (O/MA) | $3,800,000 | $4,800,000 |
| Experimental and demonstration programs (O/MA) | 15,000,000 | 15,000,000 |
| Labor mobility program (O/MA) | 3,866,000 | ---------- |
| Trainee bonding program (O/MA) | 200,000 | ---------- |
| Subtotal, direct program costs | 22,866,000 | 19,800,000 |
| Federal administrative costs: Planning, research, and evaluation (O/MA) | 2,082,200 | 2,413,700 |
| Total, title I | 24,948,200 | 22,213,700 |
| Title II: | | |
| Training costs and allowance payments: | | |
| Training costs (MDTA) | 166,573,000 | 180,124,000 |
| Allowance payments (MDTA) | 170,927,000 | 173,658,000 |
| Subtotal | 337,500,000 | 353,782,000 |
| Program services: | | |
| Employment security services (MDTA) | 33,521,400 | 33,521,400 |
| State education services (MDTA) | 8,000,000 | 8,000,000 |
| On-the-job training services (MDTA) | 4,000,000 | 4,000,000 |
| Comprehensive manpower program planning (MDTA) | ---------- | 11,225,000 |
| Subtotal | 45,521,400 | 56,746,400 |
| Federal administrative costs: | | |
| Planning, research, and evaluation (O/MA) | 1,381,300 | 1,897,000 |
| Bureau of Employment Security (BES) | 2,645,000 | 2,998,000 |
| Bureau of Apprenticeship and Training (BAT) | 1,888,100 | 2,468,400 |
| Office of Financial and Management Services (O/MA) | 1,536,200 | 2,322,300 |
| Office of the Administrator (O/MA) | 727,200 | 931,600 |
| Department of Health, Education, and Welfare (MDTA) | 2,285,000 | 2,377,000 |
| Subtotal | 10,462,800 | 12,994,300 |
| Total, title II | 393,484,200 | 423,522,700 |
| Title III: | | |
| Federal administrative costs: | | |
| Planning, research, and evaluation (O/MA) | 1,675,100 | 2,057,400 |
| Department of Health, Education, and Welfare (MDTA) | 190,600 | 190,600 |
| Total, title III | 1,865,700 | 2,248,000 |
| H.J. Res. 888 (Public Law 90-218) adjustments: | | |
| Amount subject to reserve under H.J. Res. 888 (Public Law 90-218) | −20,900,000 | ---------- |
| Exempted under sec. 203(a)(4) H.J. Res. 888 (Public Law 90-218) | +16,000,000 | ---------- |
| Net reserve for subsequent year | −4,900,000 | ---------- |
| Reserve from prior year under H.J. Res. 888 (Public Law 90-218) | ---------- | +4,900,000 |
| Total adjustments H.J. Res. 888 (Public Law 90-218) | −4,900,000 | +4,900,000 |
| Total estimate | 415,398,100 | 452,884,400 |
| Summary by appropriation account: | | |
| Manpower development and training activities (MDTA) | 385,497,000 | 413,096,000 |
| Adjustments due to H.J. Res. 888 (Public Law 90-218) | −4,900,000 | +4,900,000 |
| Office of Manpower Administrator, salaries and expenses (O/MA) | 30,268,000 | 29,422,000 |
| Bureau of Employment Security, salaries and expenses (BES) | 2,645,000 | 2,998,000 |
| Bureau of Apprenticeship and Training, salaries and expenses (BAT) | 1,888,100 | 2,468,400 |
| Total | 415,398,100 | 452,884,400 |

[1] Excludes $925,333 of carryover funds from prior years. Also excludes $428,000 proposed transfers from "Office of Manpower Administrator, salaries and expenses" to other appropriations for pay raise costs. Of this amount, $11,200 is for transfer to "Bureau of Employment Security, salaries and expenses" and $28,000 is for transfer to "Bureau of Apprenticeship and Training, salaries and expenses" for pay raise costs related to manpower development and training activities.

## AMOUNTS AVAILABLE FOR OBLIGATION

| | 1968 | 1969 |
|---|---|---|
| Appropriation or estimate | $385,497,000 | $413,096,000 |
| Amount subject to reserve under H.J. Res. 888 (Public Law 90-218) | −$20,900,000 | ---------- |
| Exempted under sec. 203(a)(4), H.J. Res. 888 (Public Law 90-218) | +16,000,000 | ---------- |
| Amount reserved for subsequent year | −4,900,000 | ---------- |
| Available from prior year | 710,199 | 4,900,000 |
| Appropriation or estimate, revised | 381,307,199 | 417,996,000 |

## OBLIGATIONS BY ACTIVITY

| Description | Appropriation revised, 1968 [1] | | Estimate, 1969 | | Change | |
|---|---|---|---|---|---|---|
| | Position | Amount | Position | Amount | Position | Amount |
| 1. Training and allowance payments | | $338,210,199 | | $353,782,000 | | +$15,571,801 |
| Adjustments due to H.J. Res. 888 (Public Law 90-218) | | −4,900,000 | | +4,900,000 | | +9,800,000 |
| Subtotal | | 333,310,199 | | 353,682,000 | | +25,371,801 |
| 2. Program services | 25 | 45,521,400 | 25 | 56,746,400 | | +11,225,000 |
| (a) Employment security services | [2] 25 | 33,521,400 | [2] 25 | 33,521,400 | | |
| (b) State education services | | 8,000,000 | | 8,000,000 | | |
| (c) On-the-job training services | | 4,000,000 | | 4,000,000 | | |
| (d) Comprehensive manpower program planning | | | | 11,225,000 | | +11,225,000 |
| [2] Federal Institutional Training services | 168 | 2,475,600 | 168 | 2,567,600 | | +92,000 |
| Total obligations | 193 | 381,307,199 | 193 | 417,996,000 | | +36,688,801 |

[1] Includes funds available from prior year of $710,199 for activity 1.
[2] Represents positions in the U.S. Employment Service for the District of Columbia.

## OBLIGATIONS BY OBJECT

| | | Appropriation revised, 1968 | 1969 estimate | 1969 change |
|---|---|---|---|---|
| | Total number of permanent positions | 193 | 193 | ---------- |
| | Positions other than permanent | 2 | 2 | ---------- |
| | Average number of all employees | 185 | 185 | ---------- |
| 11 | Personnel compensation | $1,769,500 | $1,854,600 | +$85,100 |
| 12 | Personnel benefits | 129,100 | 136,000 | +6,900 |
| 21 | Travel and transportation of persons | 220,000 | 220,000 | ---------- |
| 22 | Transportation of things | 3,500 | 3,500 | ---------- |
| 23 | Rent, communications, and utilities | 31,400 | 31,400 | ---------- |
| 24 | Printing and reproduction | 50,000 | 50,000 | ---------- |
| 25 | Other services | 440,200 | 440,200 | ---------- |
| 26 | Supplies and materials | 20,900 | 20,900 | ---------- |
| 31 | Equipment | 41,000 | 41,000 | ---------- |
| 41 | Grants, subsidies, and contributions | 383,501,599 | 410,298,400 | +26,796,801 |
| | Adjustment due to H.J. Res. 888 (Public Law 90-218) | −4,900,000 | +4,900,000 | +9,800,000 |
| | Total obligations | 381,307,199 | 417,996,000 | +36,688,801 |

## SUMMARY OF CHANGES

| | Positions | Amount |
|---|---|---|
| 1968 enacted appropriation | 193 | $385,497,000 |
| Appropriation available from prior year | | 710,199 |
| Amount subject to reserve under H.J. Res. 888 (Public Law 90-218) | | −20,900,000 |
| Amount exempted under sec. 203(a)(4), H.J. Res. 888 (Public Law 90-218) | | +16,000,000 |
| Net reserve for subsequent year | | −4,900,000 |
| 1968 appropriation, revised | 193 | 381,307,199 |
| 1969 estimate | 193 | 413,096,000 |
| Reserve from prior year under H.J. Res. 888 (Public Law 90-218) | | 4,900,000 |
| 1969 estimated availability | 193 | 417,996,000 |
| Total change | | +36,688,801 |
| Mandatory items: | | |
| Increases: | | |
| Net additional pay increase costs not completely funded in 1968 | | +85,700 |
| To provide for 1 extra day of pay in 1969 for current year staff | | +6,300 |
| Subtotal, increases | | +92,000 |
| Decreases: | | |
| Nonrecurring balance made available in 1968 from 1967 | | −710,199 |
| Subtotal, mandatory items | | −618,199 |
| Program items: | | |
| Increases: | | |
| Net increase due to postponement of trainee approvals from fiscal year 1968 to 1969 arising out of reserves established under H.J. Res. 888 (Public Law 90-218) | | +9,800,000 |
| To strengthen the on-the-job training program which will provide for training and full support services through contracts with private employers | | +16,282,000 |
| To provide for comprehensive manpower program planning | | +11,225,000 |
| Subtotal, program items | | +37,307,000 |
| Total change | | +36,688,801 |

## MANDATORY CHANGES BY ACTIVITY

| Type of change | Activity 1 | | Activity 2 | | Activity 3 | | Total | |
|---|---|---|---|---|---|---|---|---|
| | Positions | Amount | Positions | Amount | Positions | Amount | Positions | Amount |
| Net additional pay increase costs | | | | | | +$85,700 | | +$85,700 |
| To provide for 1 extra day of pay in 1969 for current year staff | | | | | | +6,300 | | +6,300 |
| Decrease for nonrecurring balance made available in 1968 from 1967 | | −$710,199 | | | | | | −710,199 |
| Total | | −710,199 | | | | +92,000 | | −618,199 |

### *Mandatory changes for 1969*

| | |
|---|---|
| Increases: | |
| To provide for full-year cost of pay increases effective Oct. 8, 1967, and to provide full funding of part-year costs | +$85,700 |
| To provide for 1 extra day of pay in 1969 for current year staff | +6,300 |
| Decreases: Nonrecurring balance made available in 1968 from 1967 | −710,199 |
| Total, mandatory items | −618,199 |

EXPLANATION OF ACTIONS TAKEN UNDER HOUSE JOINT RESOLUTION 888 (PUBLIC LAW 90–218)

At the time the Department of Labor received the mark-up from the Bureau of the Budget for 1969 no decision had yet been made as to amount of reduction of obligations in 1968 to be applicable under H.J. Res. 888 (P.L. 90–218) to the appropriation for Manpower Development and Training Activities. These reductions as finally determined are as follows:

| | |
|---|---|
| 1968 estimate (congressional request) | $401,854,000 |
| Reduction due to congressional action | −16,357,000 |
| 1968 appropriation | 385,497,000 |
| Amount subject to reserve under H.J. Res. 888 (Public Law 90–218) | −20,900,000 |
| Exempted under sec. 203(a)(4) of H.J. Res. 888 (Public Law 90–218) | +16,000,000 |
| Net reserve for trainee approvals to be postponed to subsequent year | −4,900,000 |
| 1968 appropriation available for obligation | 380,597,000 |
| Funds available in 1968 from 1967 unobligated balance | 710,199 |
| 1968 appropriation availability | 381,307,199 |

Because of the critical nature of the Manpower Development and Training Act programs which are designed to reach the hard-core unemployed and the disadvantaged, the decision was made to defer until late in 1969 trainee approvals amounting to $4,900,000. This deferral of the trainee approvals in 1969 will defer the expenditures until 1970. The specific types of training to be deferred for later approval will depend on over-all program developments as the 1968 program is completed during the last five months of fiscal 1968. The rapidly changing nature of program emphasis in 1968 works against the specific identification of trainee projects to be deferred, and such identification will not be possible until late in the fiscal year.

*Activity 1. Training and allowance payments*

| | |
|---|---|
| 1968 less net reserve of $4,900,000 under H.J. Res. 888 (Public Law 90–218) | $338,210,199 |
| 1969 plus net reserve of $4,900,000 under H.J. Res. 888 (Public Law 90–218) | 353,782,000 |

NARRATIVE DESCRIPTION OF PROGRAM

The major goal of the Manpower Development and Training Act is to train unemployed persons with skills that will enable them to participate in productive employment. This goal is accomplished through various types of occupational training programs. Institutional training is conducted by State and local vocational education agencies and private educational institutions; and on-the-job training projects are conducted by private employers and other organizations. Part-time training opportunities are provided for workers to be trained in areas where skill shortages exist or are expected. Other assistance is also provided to persons in need of basic employment skills such as language and other basic education skills.

The principal functions of the Secretary of Labor under Title II of the Manpower Development and Training Act are to identify local occupational training needs, to counsel and select persons for training, to pay training and other allowances, to provide counseling and placement services, and to participate in the development of on-the-job training programs. The Secretary of Labor refers persons selected for institutional type training to the Secretary of Health, Education, and Welfare, who is responsible for seeing that curricula, instructors and facilities are provided for the trainees. When training is completed, the Secretary of Labor is responsible for assisting the trainees to find jobs and for follow-up after job placement.

The following tables summarize the MDTA program since its inception in August 1962.

SUMMARY OF MDTA TRAINING AND CHARACTERISTICS OF TRAINEES, FISCAL YEARS 1963 THROUGH 1968 AS OF DEC. 31, 1967

[In thousands]

| | 1963 | 1964 | 1965 | 1966 | 1967 | 1968 | Total |
|---|---|---|---|---|---|---|---|
| Number of trainees approved | 56.5 | 122.9 | 233.7 | 291.7 | 285.0 | 135.7 | 1,125.5 |
| Number of trainees approved for institutional projects | 54.2 | 109.6 | 168.9 | 169.2 | 132.3 | 67.9 | 702.1 |
| Number of trainees approved for on-the-job training projects | 2.3 | 13.3 | 64.8 | 122.5 | 152.7 | 58.5 | 414.1 |
| Number of trainees approved for part-time and other projects | | | | | | 9.3 | 9.3 |
| Estimated number of occupations approved for training | | | | | | | 1,400 |

ESTIMATED ENROLLMENTS, COMPLETIONS, PLACEMENTS (CUMULATIVE) AS OF DECEMBER 1967

| | Institutional | On the job | Total |
|---|---|---|---|
| Number of trainees enrolled in projects | 669,500 | 237,900 | 907,400 |
| Number of enrolees who completed training | 382,000 | 121,200 | 503,200 |
| Number of completers placed in jobs | 286,900 | 108,100 | 395,000 |
| Percent of those completers employed who are in training-related jobs | 78 | 94 | 83 |

PERCENT DISTRIBUTION OF CHARACTERISTICS OF TRAINEES ENROLLED UNDER THE MDTA INSTITUTIONAL AND ON-THE-JOB TRAINING PROGRAMS, CUMULATIVE AUGUST 1962 TO DECEMBER 1967

| Characteristic | Institutional | On the job |
|---|---|---|
| Sex: | | |
| Male | 59 | 70 |
| Female | 41 | 30 |
| Color: | | |
| White | 65 | 75 |
| Nonwhite | 35 | 25 |
| Age: | | |
| Under 19 years | 16 | 14 |
| 19–21 years | 23 | 23 |
| 22–44 years | 51 | 54 |
| 45 years and over | 11 | 10 |
| Education: | | |
| Less than 8th grade | 7 | 6 |
| 8th grade | 10 | 8 |
| 9th–11th grade | 36 | 30 |
| 12th grade | 42 | 48 |
| Over 12th grade | 6 | 8 |
| Labor force status prior to enrollment: | | |
| Unemployed | 85 | 62 |
| Family farm worker | 1 | (1) |
| Reentrant to labor force | 3 | 3 |
| Underemployed | 11 | 35 |
| Duration of unemployment: | | |
| Less than 5 weeks | 33 | 45 |
| 5–14 weeks | 24 | 22 |
| 15–26 weeks | 13 | 11 |
| 27–52 weeks | 11 | 7 |
| Over 52 weeks | 19 | 14 |
| Family status: | | |
| Head of household | 53 | 50 |
| Other | 47 | 50 |
| Number of dependents: | | |
| 0 | 46 | 46 |
| 1 | 15 | 18 |
| 2 | 13 | 14 |
| 3 | 10 | 10 |
| 4 | 6 | 6 |
| 5 and over | 9 | 7 |
| U.I. claimant: | | |
| Yes | 16 | 7 |
| No | 84 | 94 |
| Public assistance recipient: | | |
| Yes | 11 | 3 |
| No | 89 | 97 |
| Handicapped: | | |
| Yes | 8 | 5 |
| No | 92 | 96 |
| Military service status: | | |
| Veteran | 23 | 29 |
| Rejectee | 4 | 4 |
| Other | 73 | 67 |

[1] Less than five-tenths of 1 percent.

Note.—Detail may not add to total due to rounding.

*In 1967*, projects were approved to provide institutional and on-the-job training for 284,965 persons at a Federal cost of $346,710,132 and a total cost of $357,355,954 including $10,645,822 of State matching contributions in cash or kind for institutional training. Of the total training opportunities 17,409 were in projects in redevelopment areas.

During fiscal year 1967, a total of 286,400 unemployed and underemployed persons were enrolled in training. Slightly more than three-fifths of these persons, 176,500, received institutional training and the balance of these, 109,900, were enrolled in on-the-job training. Fiscal 1967 marked the first year in which more individuals were in training during the year than new training opportunities were approved for the year.

The graduation roll of the 1967 enrollees ran to 163,500 persons who completed training—109,000 completing institution courses and 54,500 in on-the-job training programs.

Based on post-training reports received, 72 percent of the institution and 90 percent of the on-the-job training graduates were employed when last contacted. Well over 125,000 previously unemployed or underemployed persons improved their labor market status.

More meaningful has been the increasing penetration into the more disadvantaged population. The redirection of the Manpower Development Training Act program to focus on persons who face the most serious barriers in obtaining employment—the non-white minority groups, the undereducated, the long-term unemployed, youth from disadvantaged backgrounds, the older worker, the handicapped and public assistance recipients—gained momentum during the year.

Non-white enrollment continued in increasing proportion, consistent with trends since the inception of the program. From only 1 out of every 4 institutional enrollee initially they now account for more than 2 out of every 5. They increased from 37 percent of fiscal year 1966 enrollment to over 41 percent in fiscal year 1967.

The increase in on-the-job training was from 15 percent in the first year of the program to almost 25 percent in fiscal 1967 up slightly from 23 percent in fiscal 1966.

Undereducated persons, those with less than a high school education, accounted for 57 percent of the institutional enrollment and 43 percent of the on-the-job trainees. Eighteen percent of the institutional trainees and 13 percent of the on-the-job trainees had not gone beyond elementary school.

The proportion of the *long-term unemployed* has not shifted significantly as a result of generally declining unemployment and an emphasis on training of youth from poverty background. Slightly more than half of the institutional trainees and about one out of three of the on-the-job trainees had been unemployed 15 weeks or more prior to enrollment in training.

However the proportion of underemployed has increased sharply. This reflects another aspect of the intensified focus on the poverty population whose plight is very frequently underemployment rather than unemployment and who need training to enable them to participate more fully and in a more rewarding fashion in the labor market. About 1 out of 6 of the institutional enrollees and 1 out of 3 of the on-the-job trainees were utilizing their productive abilities for the social good.

Older workers have not as yet succeeded in gaining an equitable share in Manpower Development and Training Act training. They accounted for 11.0 percent of the institution and 10 percent of the on-the-job training enrollment in 1967.

Youth trainees, on the other hand, comprised 40 percent of the institutional and one-third of the on-the-job training enrollment.

Public assistance recipients and handicapped workers have shown slow progress in filling training. Public assistance recipients account for 12 and 4 percent of institutional and on-the-job training enrollment respectively as compared to 9 and 2 percent in earlier years.

Handicapped workers' participation in training is similar to that of public assistance recipients. Their proportion increased from about 7 percent of the institutional enrollment to 10 percent in 1967. They have consistently accounted for 4 percent of the on-the-job training enrollment.

As a result disadvantaged persons—those falling into at least two of the above categories—comprised somewhat less than two-thirds (64%) of the institutional and over 40 percent of the on-the-job training enrollee roster during fiscal year 1967. The following table, page MDTA–15, summarizes the fiscal year 1967 program.

U.S. DEPARTMENT OF LABOR—MANPOWER DEVELOPMENT AND TRAINING ACTIVITIES—SUMMARY OF FUNDS OBLIGATED AND TRAINEES APPROVED, FISCAL YEAR 1967, AS OF JUNE 30, 1967

| State or possession | Trainees approved for institutional and on-the-job training | Total Federal obligations | Total obligations[1] |
|---|---|---|---|
| Total | 284,965 | $346,710,132 | $357,355,954 |
| Alabama | 3,841 | 4,943,969 | 5,108,760 |
| Alaska | 395 | 858,712 | 884,431 |
| Arizona | 2,160 | 3,184,756 | 3,319,662 |
| Arkansas | 3,819 | 3,278,755 | 3,361,264 |
| California | 37,324 | 49,764,114 | 50,859,074 |
| Colorado | 1,972 | 3,125,307 | 3,206,132 |
| Connecticut | 4,104 | 4,123,803 | 4,296,919 |
| Delaware | 664 | 608,284 | 634,520 |
| District of Columbia | 4,045 | 2,980,166 | 3,013,251 |
| Florida | 5,198 | 6,093,188 | 6,245,152 |
| Georgia | 4,858 | 5,366,514 | 5,533,658 |
| Guam | 40 | 43,884 | 45,509 |
| Hawaii | 442 | 657,280 | 679,332 |
| Idaho | 493 | 831,584 | 859,425 |
| Illinois | 14,694 | 18,790,780 | 19,394,303 |
| Indiana | 5,459 | 6,091,221 | 6,277,017 |
| Iowa | 2,960 | 4,009,592 | 4,121,359 |
| Kansas | 3,556 | 3,044,152 | 3,155,147 |
| Kentucky | 5,844 | 7,941,417 | 8,126,778 |
| Louisiana | 4,572 | 4,661,925 | 4,792,824 |
| Maine | 2,166 | 1,927,778 | 2,040,936 |
| Maryland | 5,623 | 6,637,082 | 6,758,840 |
| Massachusetts | 8,302 | 11,445,173 | 11,794,531 |
| Michigan | 9,973 | 14,465,456 | 14,824,175 |
| Minnesota | 3,810 | 5,136,515 | 5,290,167 |
| Mississippi | 3,673 | 4,792,827 | 4,882,792 |
| Missouri | 4,782 | 8,457,892 | 8,677,729 |
| Montana | 1,001 | 1,312,945 | 1,345,067 |
| Nebraska | 1,118 | 1,637,259 | 1,688,361 |
| Nevada | 717 | 942,060 | 969,333 |
| New Hampshire | 851 | 1,062,710 | 1,101,931 |
| New Jersey | 14,904 | 16,067,354 | 16,262,438 |
| New Mexico | 758 | 1,302,777 | 1,358,398 |
| New York | 31,216 | 39,505,176 | 41,422,451 |
| North Carolina | 5,866 | 5,724,315 | 5,925,443 |
| North Dakota | 943 | 1,928,306 | 1,956,256 |
| Ohio | 10,616 | 16,854,867 | 17,436,656 |
| Oklahoma | 4,105 | 3,428,552 | 3,583,626 |
| Oregon | 3,243 | 2,912,217 | 2,993,919 |
| Pennsylvania | 16,094 | 20,654,266 | 21,354,553 |
| Puerto Rico | 4,071 | 2,481,272 | 2,536,570 |
| Rhode Island | 876 | 1,142,760 | 1,300,444 |
| South Carolina | 5,245 | 3,483,027 | 3,596,514 |
| South Dakota | 1,130 | 1,626,630 | 1,665,738 |
| Tennessee | 5,276 | 5,679,950 | 5,808,638 |
| Texas | 10,103 | 13,221,850 | 13,545,537 |
| Utah | 1,089 | 1,336,119 | 1,401,420 |
| Vermont | 476 | 493,247 | 515,792 |
| Virginia | 3,925 | 3,719,533 | 3,848,494 |
| Virgin Islands | 156 | 64,385 | 71,882 |
| Washington | 4,670 | 5,130,858 | 5,328,846 |
| West Virginia | 6,249 | 4,767,673 | 4,840,639 |
| Wisconsin | 5,118 | 6,223,569 | 6,555,370 |
| Wyoming | 380 | 744,329 | 757,951 |

[1] Includes $10,645,822 of State matching contributions in cash or in kind required for institutional training.

*In 1968*, while data are still preliminary, there is indicated a continuing upward trend in enrolling the disadvantaged. More than two-thirds of the institutional enrollees and 45 per cent of the on-the-job training enrollees fall in the disadvantaged category. Both programs, on-the-job training and institutional training, were reaching further into the urban ghettos, as non-white enrollment rates continued to climb. In the first six months of the fiscal year, almost half of the new institutional enrollees and a third of on-the-job trainees were non-white.

Enrollment levels continue to be filled at approximately the same rate as in 1967. About 117,000 persons were enrolled in MDTA Training—70,000 in institutional and 47,000 in on-the-job training.

### Training Prison Inmates

Section 251 of the Manpower Development and Training Act, as amended in 1966, authorizes programs for the training and education for persons in correctional institutions, to equip them for employment upon release. For this purpose, the Manpower Development and Training Activities budget estimate for fiscal year 1968 included a request for $9,500,000 to carry out a large-scale pilot program to train an estimated 5,000 prison inmates. The Senate disallowed this request stating the following reasons:

> "The estimate included a new program to provide training for 5,000 prison inmates at an average cost of $1,900. This average cost is higher than the average cost for the full-time institutional trainee. The committee deems the training of prison inmates is too expensive and better falls within the purview of the responsibility of the Bureau of Prisons and the appropriate State agencies, thus has deleted the $9,500,000 sought for the purpose."

Although funds were not appropriated for the specific purpose of training prison inmates in fiscal year 1968, the Conferees in reporting out the 1968 appropriation for Manpower Development and Training Activities stated, "It was not the intention of the conferees, in agreeing to the lower figure, to ban the use of this appropriation for the training of prison inmates."

Since the initiation of a prison inmate program based on the 1966 amendments would have required more detailed coordination and planning than available for experimental and demonstration projects which were of limited scope, no projects involving prison inmates were funded under Title II of the Manpower Development and Training Act in fiscal year 1967.

During 1968 the program for prison inmates is in transition from a strictly experimental program to a pilot operational program under Title II of the Manpower Development and Training Act. Instructions have been issued for the development of projects and project proposals are being developed. Some of the projects which began as experimental projects may be continued.

The total program is presently estimated at about 600 trainees and $1,000,000 for 1968. The 600 prisoners will be trained as auto body repairmen, automobile mechanics, brick-layers, carpenters, electrical appliance servicemen, maintenance men, welders and TV and radio repairmen. All trainees will be given basic education prior to entering the vocational training courses. One such project has already been funded at a cost of $324,430 for an estimated 200 trainees at the South Carolina Correctional Institution—MDTA Training Center.

Projects are also being considered for Utah State Prison, the Minnesota State Prison at Stillwater, Minnesota, Draper Correctional Institution at Elmore, Alabama (which as an experimental program currently funded), Washington State Reformatory and Pontiac Penitentiary, Illinois. The prison inmate program for 1969 is presently estimated at about 1,800 trainees at a cost of $3,000,000.

The following tables, MDTA pages 17 to 19, summarize the fiscal year 1968 MDTA program as of December 31, 1967.

U.S. DEPARTMENT OF LABOR—MANPOWER DEVELOPMENT AND TRAINING ACTIVITIES—SUMMARY OF FUNDS OBLIGATED AND TRAINEES APPROVED, FISCAL YEAR 1968, AS OF DEC. 31, 1967

| State or possession | Trainees approved for institutional and on-the-job training | Trainees approved for part-time and other training | Federal obligations | Total obligations [1] |
|---|---|---|---|---|
| Total | 126,462 | 9,278 | $184,670,975 | $189,410,316 |
| Alabama | 2,025 | ---------- | 3,780,967 | 3,891,745 |
| Alaska | 184 | 25 | 286,190 | 296,701 |
| Arizona | 1,341 | 2,135 | 2,735,836 | 2,757,684 |
| Arkansas | 1,489 | ---------- | 2,312,979 | 2,339,459 |
| California | 18,300 | 220 | 25,473,622 | 25,750,842 |
| Colorado | 1,150 | 15 | 1,975,485 | 2,008,651 |
| Connecticut | 1,726 | 430 | 2,596,181 | 2,735,029 |
| Delaware | 487 | ---------- | 136,077 | 143,342 |
| District of Columbia | 1,706 | ---------- | 1,174,521 | 1,198,824 |
| Florida | 1,835 | ---------- | 2,838,622 | 2,948,271 |
| Georgia | 1,683 | ---------- | 2,231,855 | 2,289,563 |
| Guam | 30 | ---------- | 31,736 | 33,156 |
| Hawaii | 271 | ---------- | 363,445 | 376,406 |
| Idaho | 370 | ---------- | 730,691 | 739,347 |
| Illinois | 7,090 | 2,110 | 11,241,859 | 11,650,316 |
| Indiana | 2,607 | 380 | 3,196,549 | 3,296,348 |
| Iowa | 1,227 | ---------- | 2,651,796 | 2,829,029 |
| Kansas | 1,198 | 60 | 2,046,840 | 2,173,132 |
| Kentucky | 2,165 | ---------- | 3,002,652 | 3,068,927 |
| Louisiana | 2,207 | ---------- | 3,374,593 | 3,445,658 |
| Maine | 943 | 140 | 1,240,229 | 1,302,790 |
| Maryland | 2,895 | ---------- | 1,899,201 | 1,964,664 |
| Massachusetts | 2,219 | 424 | 5,155,667 | 5,251,083 |
| Michigan | 4,535 | ---------- | 10,021,958 | 10,157,969 |
| Minnesota | 1,863 | 150 | 3,194,740 | 3,287,213 |
| Mississippi | 2,277 | 2,415 | 3,865,114 | 3,909,813 |
| Missouri | 1,170 | ---------- | 2,077,912 | 2,125,506 |
| Montana | 428 | 30 | 837,904 | 860,929 |
| Nebraska | 815 | ---------- | 1,321,651 | 1,366,516 |
| Nevada | 306 | ---------- | 451,935 | 459,999 |
| New Hampshire | 362 | ---------- | 474,988 | 501,250 |
| New Jersey | 6,210 | 320 | 8,496,903 | 8,827,734 |
| New Mexico | 596 | ---------- | 1,017,514 | 1,031,933 |
| New York | 10,678 | 80 | 19,151,631 | 19,398,506 |
| North Carolina | 1,493 | ---------- | 1,376,050 | 1,405,332 |
| North Dakota | 237 | ---------- | 449,914 | 459,114 |
| Ohio | 6,033 | ---------- | 9,441,234 | 9,809,700 |
| Oklahoma | 1,900 | ---------- | 2,385,219 | 2,478,362 |
| Oregon | 1,528 | 120 | 1,774,944 | 1,815,054 |
| Pennsylvania | 11,436 | ---------- | 10,878,635 | 11,234,904 |
| Puerto Rico | 543 | 30 | 1,021,775 | 1,045,266 |
| Rhode Island | 335 | 70 | 684,356 | 712,504 |
| South Carolina | 1,273 | ---------- | 1,682,467 | 1,760,998 |
| South Dakota | 771 | ---------- | 846,491 | 854,691 |
| Tennessee | 2,563 | ---------- | 3,316,898 | 3,366,298 |
| Texas | 4,395 | 40 | 6,220,823 | 6,403,140 |
| Utah | 407 | ---------- | 795,837 | 838,422 |
| Vermont | 206 | 84 | 458,891 | 486,654 |
| Virginia | 1,672 | ---------- | 1,867,290 | 1,944,861 |
| Virgin Islands | 8 | ---------- | 28,040 | 28,040 |
| Washington | 2,743 | ---------- | 3,551,555 | 3,622,562 |
| West Virginia | 1,033 | ---------- | 749,708 | 766,341 |
| Wisconsin | 3,270 | ---------- | 5,362,607 | 5,570,385 |
| Wyoming | 178 | ---------- | 384,348 | 384,348 |

[1] Includes $4,739,341 of State matching contributions in case or in kind required for institutional training.

U.S. DEPARTMENT OF LABOR MANPOWER ADMINISTRATION—MANPOWER DEVELOPMENT AND TRAINING ACTIVITIES—SUMMARY OF FEDERAL FUNDS OBLIGATED AND TRAINEES APPROVED FISCAL YEAR 1968, AS OF DEC. 31, 1967

| State or possession | Total | | Institutional training | | On-the-job training | | Part-time and other | |
|---|---|---|---|---|---|---|---|---|
| | Trainees approved | Obligations | Trainees approved | Obligations | Trainees approved | Obligations | Trainees approved | Obligations |
| Total | 128, 939 | $173, 663, 998 | 63, 052 | $129, 593, 521 | 56, 609 | $40, 243, 891 | 9, 278 | $3, 826, 586 |
| Alabama | 2, 005 | 3, 729, 560 | 1, 125 | 3, 125, 393 | 880 | 604, 167 | | |
| Alaska | 209 | 286, 190 | 184 | 237, 858 | | | 25 | 48, 332 |
| Arizona | 3, 236 | 2, 625, 277 | 175 | 1, 144, 123 | 926 | 735, 355 | 2, 135 | 745, 799 |
| Arkansas | 1, 303 | 1, 855, 903 | 545 | 1, 485, 032 | 758 | 370, 871 | | |
| California | 17, 346 | 23, 775, 758 | 6, 836 | 15, 257, 797 | 10, 290 | 8, 402, 362 | 220 | 115, 599 |
| Colorado | 1, 060 | 1, 657, 695 | 497 | 1, 093, 926 | 548 | 540, 019 | 15 | 23, 750 |
| Connecticut | 2, 156 | 2, 596, 181 | 619 | 897, 693 | 1, 107 | 645, 554 | 430 | 1, 052, 934 |
| Delaware | 487 | 136, 077 | 116 | 101, 877 | 371 | 34, 200 | | |
| District of Columbia | 1, 706 | 1, 174, 521 | 1, 177 | 882, 890 | 529 | 291, 631 | | |
| Florida | 1, 835 | 2, 838, 622 | 1, 570 | 2, 685, 759 | 265 | 152, 863 | | |
| Georgia | 1, 373 | 1, 847, 219 | 790 | 1, 461, 194 | 583 | 386, 025 | | |
| Guam | 30 | 31, 736 | 30 | 31, 736 | | | | |
| Hawaii | 271 | 363, 445 | 252 | 351, 826 | 19 | 11, 619 | | |
| Idaho | 370 | 730, 691 | 160 | 608, 145 | 210 | 122, 546 | | |
| Illinois | 9, 180 | 11, 152, 569 | 4, 634 | 9, 284, 605 | 2, 436 | 1, 692, 988 | 2, 110 | 174, 976 |
| Indiana | 2, 987 | 3, 196, 549 | 1, 154 | 2, 177, 391 | 1, 453 | 902, 231 | 380 | 116, 927 |
| Iowa | 1, 227 | 2, 651, 796 | 1, 075 | 2, 600, 906 | 152 | 50, 890 | | |
| Kansas | 1, 258 | 2, 046, 840 | 735 | 1, 824, 230 | 463 | 213, 840 | 60 | 8, 770 |
| Kentucky | 1, 953 | 2, 575, 624 | 1, 233 | 2, 160, 530 | 720 | 415, 094 | | |
| Louisiana | 2, 107 | 3, 059, 677 | 849 | 2, 300, 314 | 1, 258 | 759, 363 | | |
| Maine | 879 | 949, 289 | 683 | 724, 053 | 56 | 40, 932 | 140 | 184, 304 |
| Maryland | 2, 895 | 1, 899, 201 | 1, 051 | 1, 264, 508 | 1, 844 | 634, 693 | | |
| Massachusetts | 2, 549 | 5, 011, 574 | 814 | 1, 842, 747 | 1, 311 | 2, 590, 050 | 424 | 578, 777 |
| Michigan | 4, 495 | 9, 884, 780 | 2, 713 | 7, 864, 256 | 1, 782 | 2, 020, 524 | | |
| Minnesota | 1, 873 | 2, 690, 914 | 1, 306 | 2, 098, 929 | 417 | 367, 090 | 150 | 224, 895 |
| Mississippi | 3, 889 | 2, 052, 434 | 470 | 1, 080, 116 | 1, 004 | 818, 510 | 2, 415 | 153, 808 |
| Missouri | 1, 130 | 1, 997, 544 | 671 | 1, 502, 247 | 459 | 495, 297 | | |
| Montana | 358 | 589, 552 | 295 | 545, 568 | 33 | 22, 984 | 30 | 21, 000 |
| Nebraska | 815 | 1, 321, 651 | 592 | 1, 158, 145 | 223 | 163, 506 | | |
| Nevada | 306 | 451, 935 | 172 | 326, 556 | 134 | 125, 379 | | |
| New Hampshire | 362 | 474, 988 | 311 | 424, 153 | 51 | 50, 835 | | |
| New Jersey | 6, 030 | 8, 015, 237 | 3, 730 | 6, 408, 833 | 1, 980 | 1, 550, 195 | 320 | 56, 209 |
| New Mexico | 200 | 369, 644 | 135 | 307, 151 | 65 | 62, 493 | | |
| New York | 10, 628 | 18, 766, 393 | 3, 625 | 13, 794, 833 | 6, 923 | 4, 945, 275 | 80 | 26, 285 |
| North Carolina | 1, 493 | 1, 376, 050 | 421 | 710, 155 | 1, 072 | 665, 895 | | |
| North Dakota | 222 | 422, 719 | 140 | 361, 621 | 82 | 61, 098 | | |
| Ohio | 5, 686 | 8, 868, 557 | 4, 124 | 7, 755, 285 | 1, 562 | 1, 113, 272 | | |
| Oklahoma | 1, 515 | 1, 858, 855 | 841 | 1, 550, 355 | 674 | 308, 500 | | |
| Oregon | 1, 648 | 1, 774, 944 | 880 | 1, 263, 315 | 648 | 496, 249 | 120 | 15, 380 |
| Pennsylvania | 11, 316 | 10, 708, 697 | 4, 985 | 8, 242, 814 | 6, 331 | 2, 465, 883 | | |
| Puerto Rico | 573 | 1, 021, 775 | 429 | 985, 624 | 114 | 29, 387 | 30 | 6, 764 |
| Rhode Island | 455 | 684, 356 | 254 | 461, 701 | 131 | 91, 101 | 70 | 131, 554 |
| South Carolina | 1, 273 | 1, 682, 467 | 790 | 1, 444, 160 | 483 | 238, 307 | | |
| South Dakota | 456 | 776, 261 | 235 | 523, 037 | 221 | 253, 224 | | |
| Tennessee | 2, 407 | 3, 172, 643 | 868 | 1, 981, 699 | 1, 539 | 1, 190, 944 | | |
| Texas | 4, 435 | 6, 220, 823 | 2, 499 | 4, 667, 485 | 1, 896 | 1, 536, 146 | 40 | 17, 192 |
| Utah | 387 | 749, 240 | 354 | 731, 668 | 33 | 17, 572 | | |
| Vermont | 290 | 458, 891 | 156 | 276, 798 | 50 | 58, 762 | 84 | 123, 331 |
| Virginia | 1, 621 | 1, 741, 886 | 1, 251 | 1, 549, 972 | 370 | 191, 914 | | |
| Virgin Islands | 8 | 28, 040 | 8 | 28, 040 | | | | |
| Washington | 2, 627 | 3, 335, 462 | 2, 264 | 3, 032, 244 | 363 | 303, 218 | | |
| West Virginia | 794 | 679, 704 | 142 | 432, 399 | 652 | 247, 305 | | |
| Wisconsin | 3, 047 | 4, 911, 214 | 2, 062 | 4, 219, 829 | 985 | 691, 385 | | |
| Wyoming | 178 | 384, 348 | 25 | 320, 000 | 153 | 64, 348 | | |

U.S. DEPARTMENT OF LABOR, MANPOWER ADMINISTRATION—MANPOWER DEVELOPMENT AND TRAINING ACTIVITIES REDEVELOPMENT AREAS, SEC. 241—SUMMARY OF FEDERAL FUNDS OBLIGATED AND TRAINEES APPROVED FISCAL YEAR 1968, AS OF DEC. 31, 1967

| State or possession | Total | | Institutional training | | On-the-job training | |
|---|---|---|---|---|---|---|
| | Trainees approved | Obligations | Trainees approved | Total obligations | Trainees approved | Total obligations |
| Total | 6,801 | $11,006,977 | 4,899 | $9,861,564 | 1,902 | $1,145,413 |
| Alabama | 20 | 51,407 | 20 | 51,407 | | |
| Alaska | | | | | | |
| Arizona | 240 | 110,559 | | | 240 | 110,559 |
| Arkansas | 186 | 457,076 | 140 | 421,690 | 46 | 35,386 |
| California | 1,174 | 1,697,864 | 474 | 913,872 | 700 | 783,992 |
| Colorado | 105 | 317,790 | 105 | 317,790 | | |
| Connecticut | | | | | | |
| Delaware | | | | | | |
| District of Columbia | | | | | | |
| Florida | | | | | | |
| Georgia | 310 | 384,636 | 280 | 373,100 | 30 | 11,536 |
| Guam | | | | | | |
| Hawaii | | | | | | |
| Idaho | | | | | | |
| Illinois | 20 | 89,290 | 20 | 89,290 | | |
| Indiana | | | | | | |
| Iowa | | | | | | |
| Kansas | | | | | | |
| Kentucky | 212 | 427,028 | 212 | 427,028 | | |
| Louisiana | 100 | 314,916 | 100 | 314,916 | | |
| Maine | 204 | 290,940 | 204 | 290,940 | | |
| Maryland | | | | | | |
| Massachusetts | 94 | 144,093 | 64 | 141,693 | 30 | 2,400 |
| Michigan | 40 | 137,178 | 40 | 137,178 | | |
| Minnesota | 140 | 503,826 | 140 | 503,826 | | |
| Mississippi | 803 | 1,812,680 | 690 | 1,774,988 | 113 | 37,692 |
| Missouri | 40 | 80,368 | 40 | 80,368 | | |
| Montana | 100 | 248,352 | 100 | 248,352 | | |
| Nebraska | | | | | | |
| Nevada | | | | | | |
| New Hampshire | | | | | | |
| New Jersey | 500 | 481,666 | 500 | 481,666 | | |
| New Mexico | 396 | 647,870 | 365 | 634,532 | 31 | 13,338 |
| New York | 130 | 385,238 | 130 | 385,238 | | |
| North Carolina | | | | | | |
| North Dakota | 15 | 27,195 | 15 | 27,195 | | |
| Ohio | 347 | 572,677 | 267 | 561,125 | 80 | 11,552 |
| Oklahoma | 385 | 526,364 | 385 | 526,364 | | |
| Oregon | | | | | | |
| Pennsylvania | 120 | 169,938 | 120 | 169,938 | | |
| Puerto Rico | | | | | | |
| Rhode Island | | | | | | |
| South Carolina | | | | | | |
| South Dakota | 315 | 70,230 | | | 315 | 70,230 |
| Tennessee | 156 | 144,255 | 60 | 122,933 | 96 | 21,322 |
| Texas | | | | | | |
| Utah | 20 | 50,647 | 20 | 50,647 | | |
| Vermont | | | | | | |
| Virginia | 51 | 125,404 | 51 | 125,404 | | |
| Virgin Islands | | | | | | |
| Washington | 116 | 216,093 | 116 | 216,093 | | |
| West Virginia | 239 | 70,004 | 18 | 22,598 | 221 | 47,406 |
| Wisconsin | 223 | 451,393 | 223 | 451,393 | | |
| Wyoming | | | | | | |

*Changes for 1969*

| | |
|---|---|
| Mandatory changes amount to | —$710,199 |
| Program changes amount to | +16,282,000 |
| Net increase due to postponement of trainee approvals from fiscal year 1968 to 1969 arising out of reserves established under H.J. Res. 888 (Public Law 90–218) | +9,800,000 |
| Positions | None |

BASIS FOR THE ESTIMATE

The 1969 program is designed to provide a program of training for 274,700 persons compared to the 1968 program planned for 275,000 persons. The anticipated 1969 Federal cost is $353,782,000, an increase of $16,282,000 over the 1968 base of $337,500,000. Almost all of the increase is to be allocated to strengthen the on-the-job training program for a portion of the most disadvantaged group of persons expected to be provided this type of training. The 1969 program for 274,700 trainees provides for 109,000 in institutional training, 102,700 in on-the-job training and 63,000 in part-time and other training. About 13,700 of the 274,700 will be approved for projects in Redevelopment Areas. The over-all program designs for 1968 and 1969 is shown on page MDTA–24.

The Federal cost of $353,782,000 excludes an estimated $8,900,000 of State matching funds, required in connection with institutional training costs provided under Section 231. A table showing an estimated distribution of the 1969 funds which are to be apportioned among the States and the estimated State matching funds appears in page MDTA–25. The distribution was made in accordance with Section 301 and Section 231 of the Manpower Devleopment and Training Act, as amended.

PROGRAM EMPHASIS IN 1969

The unemployed and underemployed and their families, along with those employed at low wages and a significant number of persons who although within the normal working age group and in need of jobs, are not in the work force, account for "the poor" in this Nation. Those who fail to seek work despite a crucial need for income include many mature women who are heads of families and youth and adults who have become discouraged with repeated failures in job hunting, or who are hindered from seeking work for any of a variety of reasons. In round numbers the poor are estimated at about 30,000,000 based on a sliding scale of cash incomes related to family size, age of family members and location. A survey of 1965 incomes indicated that a disporportionate share of the poor are nonwhites—32 percent versus 12 percent of the total population. The survey revealed that the poor are disproportionately located in rural areas—39 percent compared with 30 percent of the total population.

Although the proportion of rural poor is high, about 21,000,000 poor live in the urban areas, with large concentrations in the big city slums. The more than 10,000,000 who in 1965 resided on the central city portions of the Nation's 221 Standard Metropolitan Statistical Areas suffer from a complex of acute problems affecting their employability. A series of late 1966 surveys in 10 selected slum neighborhoods showed unemployment, as traditionally measured, averaging about 10 percent, approximately three times that of the average for the rest of the country. From these surveys a "subemployment" concept and index was developed to include not only the unemployed but the part-time employed seeking full time work, those employed but with earnings below the poverty line, an allowance for the disproportionate number of males 20–64 years-of-age who were not in the labor force (on the presumption that they were discouraged by lack of success from further job-seeking), and a conservative estimate of the male "undercount" group. The subemployment rate for the 10 areas were 33.9 percent—one in three with a serious employment problem.

Clearly, there is a need for concerted action to assist hard-core unemployed disadvantaged individuals in urban and rural areas to become qualified for and obtain steady, suitable employment. It is recognized that this can be accomplished effectively only with greater involvement of private industry in the manpower development and training of the disadvantaged. Since the on-the-job training program has been popular with employers and highly successful in placing those who complete training, it is regarded as a good vehicle for obtaining greater cooperation from private industry in the training and employment of the disadvantaged. However, during the past several years as more emphasis in the on-the-job training program was placed on the disadvantaged, it became apparent

that many employers were reluctant to participate because (1) most disadvantaged persons are not ready for employment and cannot benefit from on-the-job training without basic education and other supportive services; and (2) payments to employers were insufficient to make it worthwhile to assume the extra risks and difficulty in hiring and training the most severly disadvantaged. To cope with these problems and make on-the-job training for the disadvantaged more acceptable to private employers, heavy emphasis in 1969 will be put on a strengthened on-the-job training program.

This on-the-job training will—

direct a significant part of the on-the-job program to the most disadvantaged of the hard-core unemployed

offer more attractive financial incentives to employers in order to increase the number of employers willing to take on a higher proportion of disadvantaged trainees

involve contracting with private firms to train and hire a designated number of disadvantaged persons as permanent employees

put the entire training job in the hands of the employer

require each firm to provide a comprehensive program of supportive education, prevocational and on-the-job skill training to insure continued employment of the persons hired

include counseling, testing, coaching, and follow-up appraisal

set up contracts on a fixed unit cost basis, with provision for incentive awards for continuous employment of designated numbers of employee-trainees

stipulate that the participating employer is expected to retain as permanent, full-time employees, those persons who successfully complete the training.

It is estimated that to provide the complete range of services required by the hard-core unemployed and disadvantaged, may require a cost of about $3,500 per trainee. Such services will include transportation assistance, special counseling, remedial education, individually tailored job-skill training, and adequate compensation to employers to offset the risks and difficulties involved in training and employing the severly disadvantaged. Plans for 1969 are to provide this intensified form of on-the-job training for 13,700 of the 102,700 trainees. An investment of this type by the Federal Government is warranted for a program which has great promise for the development of discouraged, hard-core unemployed, disadvantaged individuals into steadily employed, self-respecting, productive citizens, and which will induce private industry to play a much more active role in the rehabilitation and employment of the disadvantaged.

In 1969, 169,700 of the 274,700 training opportunities will be programed for disadvantaged trainees and the 105,000 remainder devoted to the alleviation of skill shortages. This is the same distribution as in 1968. The percentage of training slots to be programed for the disadvantaged in the major program components are institutional—76 percent, on-the-job training—58 percent and part time and other 43 percent.

MANPOWER DEVELOPMENT AND TRAINING ACTIVITIES—COMPARISON OF ESTIMATED PROGRAM DESIGN, FISCAL YEARS 1968 AND 1969

| | Fiscal year 1968 | | | Fiscal year 1969 | | |
|---|---|---|---|---|---|---|
| | Trainees | Average cost | Total Federal training and allowance costs (thousands) | Trainees | Average cost | Total Federal training and allowance costs (thousands) |
| MDTA total | [1] 275,000 | $1,227 | [1] $337,500 | [1] 274,700 | $1,288 | [1] $353,782 |
| Institutional | 109,000 | 1,934 | 210,800 | 109,000 | 1,934 | 210,800 |
| On-the-job training | 109,000 | 866 | 94,372 | 102,700 | 1,056 | 108,412 |
| Regular on-the-job training | 62,500 | 537 | 33,540 | 62,500 | 537 | 33,540 |
| On-the-job training coupled | 46,500 | 1,308 | 60,832 | 40,200 | 1,862 | 74,872 |
| Part-time and other | 57,000 | 567 | 32,328 | 63,000 | 549 | 34,570 |

[1] Includes 13,700 redevelopment area trainees at an estimated $22,000,000; also includes an estimated 600 trainees and $1,000,000 for training in correctional institutions in 1968 and 1,800 trainees and an estimated $3,000,000 in 1969.

Note: Program design table is based on the appropriation for 1968 and the 1969 estimate. H.J. Res. 888 (Public Law 90-218) adjustments will create a postponement of some trainee approvals from 1968 into 1969, the number of which cannot be determined at this time.

ESTIMATED DISTRIBUTION OF 1969 MDTA FUNDS TO BE APPORTIONED AMONG THE STATES AS REQUIRED BY SEC. 301 OF THE ACT AND STATE MATCHING FUNDS AS REQUIRED BY SEC. 231 OF THE ACT

| State or possession | 1968 apportionment factor [1] | Federal apportionment | State matching funds |
|---|---|---|---|
| Total | 100.00 | $265,000,000 | $8,900,000 |
| Alabama | 1.48 | 3,922,000 | 123,000 |
| Alaska | .35 | 928,000 | 20,000 |
| Arizona | .63 | 1,670,000 | 69,000 |
| Arkansas | .87 | 2,305,000 | 79,000 |
| California | 15.25 | 40,412,000 | 1,339,000 |
| Colorado | .97 | 2,571.000 | 88,000 |
| Connecticut | 1.42 | 3,763,000 | 127,000 |
| Delaware | .25 | 663,000 | 20,000 |
| District of Columbia | .43 | 1,140,000 | 39,000 |
| Florida | 1.70 | 4,505,000 | 158,000 |
| Georgia | 1.66 | 4,399,000 | 147,000 |
| Guam | .02 | 53,000 | 2,000 |
| Hawaii | .33 | 875,000 | 27,000 |
| Idaho | .43 | 1,140,000 | 36,000 |
| Illinois | 5.30 | 14,045,000 | 461,000 |
| Indiana | 1.87 | 4,955,000 | 161,000 |
| Iowa | 1.50 | 3,975,000 | 113,000 |
| Kansas | 1.03 | 2,730,000 | 101,000 |
| Kentucky | 1.48 | 3,922,000 | 136,000 |
| Louisiana | 1.49 | 3,948,000 | 138,000 |
| Maine | .41 | 1,087,000 | 32,000 |
| Maryland | 1.32 | 3,498,000 | 123,000 |
| Massachusetts | 3.59 | 9,513,000 | 324,000 |
| Michigan | 4.69 | 12,428,000 | 344,000 |
| Minnesota | 1.55 | 4,108,000 | 152,000 |
| Mississippi | .94 | 2,491,000 | 85,000 |
| Missouri | 2.33 | 6,174,000 | 197,000 |
| Montana | .34 | 901,000 | 31,000 |
| Nebraska | .69 | 1,829,000 | 66,000 |
| Nevada | .38 | 1,007,000 | 28,000 |
| New Hampshire | .25 | 663,000 | 24,000 |
| New Jersey | 3.90 | 10,335,000 | 363,000 |
| New Mexico | .39 | 1,034,000 | 36,000 |
| New York | 11.41 | 30,236,000 | 1,003,000 |
| North Carolina | 1.91 | 5,061,000 | 166,000 |
| North Dakota | .49 | 1,298,000 | 40,000 |
| Ohio | 4.43 | 11,739,000 | 420,000 |
| Oklahoma | .89 | 2,358,000 | 85,000 |
| Oregon | 1.11 | 2,941,000 | 92,000 |
| Pennsylvania | 4.88 | 12,932,000 | 471,000 |
| Puerto Rico | 1.59 | 4,213,000 | 120,000 |
| Rhode Island | .47 | 1,246,000 | 38,000 |
| South Carolina | 1.11 | 2,941,000 | 99,000 |
| South Dakota | .36 | 954,000 | 33,000 |
| Tennessee | 1.59 | 4,213,000 | 146,000 |
| Texas | 3.55 | 9,408,000 | 348,000 |
| Utah | .56 | 1,484,000 | 55,000 |
| Vermont | .22 | 583,000 | 20,000 |
| Virginia | 1.36 | 3,604,000 | 126,000 |
| Virgin Islands | .02 | 53,000 | 2,000 |
| Washington | 1.47 | 3,896,000 | 150,000 |
| West Virginia | .72 | 1,908,000 | 68,000 |
| Wisconsin | 2.44 | 6,466,000 | 212,000 |
| Wyoming | .18 | 477,000 | 17,000 |

[1] Based on fiscal year 1968 apportionment factor, Public Law 87–415, sec. 301 requires annual redetermination of State apportionment factors.

*Activity 2. Program services*

| | |
|---|---|
| 1968 (positions 25) | $45,521,400 |
| 1969 (positions 25) | 56,746,400 |

NARRATIVE DESCRIPTION OF PROGRAM

Occupational training under the Manpower Development and Training Act is predicated upon these basic requirements: (1) determination of occupations in which there is a need for workers; (2) outreach and identification of unemployed workers who require training in order to become employed; (3) intensive counseling and testing services for those selected and referred to training; (4) provisions of the kind and amount of training which fills the gap between a trainee's aptitudes and current occupational capabilities and his potential placement in the occupation for which he is receiving training; (5) reasonable expectation of placing the graduate trainees in a suitable job.

Training programs are closely identified with communities, and it is here in large degree that training programs are planned, developed and operated, providing training to local residents with expectation of employment in their own home towns. Where circumstances warrant, training programs may take on broader geographic coverage, reaching several communities or even across State borders to become regional or, conceivably, national in scope. The focal point for the development and administration of training programs is the State, and it is for these reasons that the Secretary of Labor has entered into agreements with State employment security and State apprenticeship agencies and the Secretary of Health, Education, and Welfare with State vocational education agencies. In addition, the Secretary of Labor has entered into contracts with national, State and local associations and organizations for the purpose of promoting, developing and supervising on-the-job training projects while the Secretary of Health, Education and Welfare is authorized to provide training directly through public and private institutions.

A number of programs designed to improve the employability of the Nation's manpower resources, such as basic education, work experience, skill training, have been enacted in recent years. These new and varied manpower and related programs, under dispersed administrative responsibilities, must be effectively coordinated in the communities and States where the manpower resources, the job openings, and the training facilities are located. Such coordination can only be achieved through comprehensive community and State manpower program planning.

Accordingly, six Executive Departments and two independent agencies, have joined in the Cooperative Area Manpower Planning System to provide interprogram coordination of local, State, regional and National program administration. The Secretary of Labor, as the principal Cabinet Officer responsible for manpower policy and programs, and under the general responsibilities of Section 201, Manpower Development and Training Act, as amended, provides leadership and administrative support for National and Regional Cooperative Area Manpower Planning System activities and secretariat support to State and local manpower coordinating committees.

*Activity 2. (a) Employment Security Services*

| | |
|---|---|
| 1968 (positions 25) | $33,521,400 |
| 1969 (positions 25) | 33,521,400 |

State employment security agencies (and their local offices) are responsible for: (1) determining the occupations in which there is a need for training; (2) outreach and identification of workers requiring training; (3) screening, intensive counseling and testing services prior to taking training; (4) selecting and referring individuals to training; (5) determining entitlements and making training allowances and subsistence payments to persons who are eligible for such payments under the Act; (6) providing job orientation, job development and placement of individuals upon conclusion of training and follow-up activities after placement. In the administration of the program the State agencies provide continuing technical services to their local offices and carry on program review and monitoring. State Agency personnel will work in close cooperation with their counterpart State vocational education agencies in the promulgation, development and review of all institutional training projects, and with State apprenticeship

agencies relative to on-the-job training projects, and, within their area of responsibility, recommend these training projects for Federal review and approval.

*In 1967*, accomplishments were supporting services for 284,965 of approved training opportunities.

*In 1968*, it is planned to provide supporting services for 275,000 training opportunities.

*In 1969*, it is planned to provide supporting services for 274,700 training opportunities.

CHANGES FOR 1969

None.

BASIS FOR THE ESTIMATE

The concentrated employment concept assumes that the State Employment Service will be the prime source and deliverer of manpower support services at the local level. This concept visualizes the outstationing of Employment Service personnel in Concentrated Employment Program areas to provide a variety of manpower services.

These services will be made available to the disadvantaged in the target areas and will include the identification of outreach services to such groups, regardless of age, sex, race, religion or national origin referring them to the appropriate manpower facility for the assistance needed to resolve their employment problems. The Concentrated Employment Program concept will offer a wide variety of employment and training opportunities to the individual.

In developing an individual's employability plan for example the Employment Service counselor after reviewing an applicant's test results will now have the option of referring an individual to a regular Manpower Development and Training Activity institutional program for a portion of the day with the balance being devoted to practical work experience type training. The various work-training-on-the-job type mixture available under the concentrated employment concept is limited only by the imagination and resourcefulness of the local project director and supportive staff and the terms of the project agreement.

Intensive use will be made of the "job coach" concept coupled with new orientation and counseling techniques. The counselor workload will be kept to manageable proportions enabling the coach to take a personal interest in each trainee. Each coach will be responsible for the periodic updating of the individuals employability plan; insuring that the individual is regularly attending scheduled training classes and insuring that once the individual is placed on the job he remains employed. Employment Service personnel may be stationed at the project area site. This plan will enable manpower supportive service activities such as testing, counseling and job development to be more responsive to local project needs. This program to integrate the Employment Services Human Resources Development program is expected to be utilized with the more comprehensive systems being structured under the Model Cities program.

*Activity 2. (b) State Education Services*

| | |
|---|---|
| 1968 (positions 0) | $8,000,000 |
| 1969 (positions 0) | 8,000,000 |

In order to carry out the institutional training aspect of the Manpower Development and Training Act among the States, it is necessary that funds be provided for salaries of employees of State agencies associated with the administration and supervision of the program under agreements authorized by Section 231 of this Act.

It is anticipated that, for the most part, such agreements will continue to vest State responsibilities with the appropriate State vocational education agencies which will provide the majority of the training for persons referred by the Secretary of Labor. If, however, the Secretary of Health, Education and Welfare determines that a given training project or a certain type of training may be provided more quickly, more effectively, or more efficiently through private educational or training agencies, or any other agency that may give effect to the intent of the Congress, he may enter into agreements with these entities.

From information supplied by local public employment offices, the local education agency determines which occupations are suitable for training and what resources are needed. Local school officials assist in estimating any additional costs. Based on the above information, a training proposal is prepared and when approved, the training program is developed and begun by local school officials. As training proceeds, there is constant interchange of information between the

education facilities and employment service agencies to insure that trainable persons are being selected and that the curriculum and instructional programs are providing job-related skills, including basic education needed by trainees with educational handicaps.

The State education agency is responsible for administering training on a State-wide basis and for the participation in the development of State manpower plans through the Cooperative Area Manpower Planning System. For the most part, this will be accomplished by the Division of Vocational Education in the State education agency, although it may solicit inputs from other agencies of State government such as welfare, Vocational Rehabilitation, etc. The State education agency assists and supervises local operating units in getting programs started, and it may also provide them with funds for the purpose of developing project applications for review and approval. The State education agency, together with the State employment security agency (except in those cases where the Secretary of Health, Education and Welfare contracts directly) reviews all training programs proposed or undertaken in the State to insure conformity with standards prescribed under the Manpower Development and Training Act.

*In 1967*, accomplishments were supporting services for the 132,259 of approved institutional training opportunities and related instruction activities for about 51,000 trainees in coupled on-the-job training projects.

*In 1968*, it is planned to provide supporting services for 109,000 of institutional training opportunities plus related instruction activities for coupled on-the-job training projects.

*In 1969*, it is planned to provide supporting services for 109,000 of institutional training opportunities plus related instruction activities for coupled on-the-job training projects.

CHANGES FOR 1969

None.

BASIS FOR THE ESTIMATE

In 1969 with part of the MDTA program flowing through the integrated delivery system—the Concentrated Employment Program—a significant additional workload factor will be incurred by the State educational agencies. The State employment service will play a major role in the implementation of the concentrated employment effort and is the presumed supplier of a major portion of manpower supportive service activities. Because of this input and the concentrated nature of the employment program itself the State vocational education agencies will be required to work in even closer coordination with the State employment service in order to develop new and varied institutional training programs to be responsive to the individual needs of locally developed projects. This will be achieved without any additional funds for 1969.

*Activity 2. (c) On-the-job training services*

| | |
|---|---|
| 1968 (positions 0) | $4,000,000 |
| 1969 (positions 0) | 4,000,000 |

Section 204 of the Manpower Development and Training Act provides that "The Secretary of Labor shall encourage, develop and secure the adoption of programs for on-the-job training needed to equip persons selected for training with the appropriate skills". The same section also states that the Secretary shall, to the maximum extent possible, secure the adoption by the States and other agencies and organizations of on-the-job training programs. Section 206 of Manpower Development and Training Act authorizes the Secretary to utilize the services of appropriate State agencies for the purpose of achieving the training objectives of the Act, and to make payments to such agencies for expenses incurred in the development and administration of training programs.

*In 1967*, 12 State apprenticeship agencies participated with the Department of Labor for the promotion, development and servicing of on-the-job training projects covering approximately 25,000 trainees. The States were Arizona, California, Colorado, Connecticut, District of Columbia, Florida, Hawaii, Louisiana, New York, Puerto Rico, Utah and Wisconsin.

In addition to agreements with State apprenticeship agencies, national contracts were made with various public and private organizations for the purpose of promoting, developing and servicing on-the-job training projects. Some examples of the on-the-job training programs developed follow:

The Food Service Industry Training Project, Inc., of Hartford, Connecticut, has a contract to develop on-the-job training projects for 600 cooks and chefs and 450

waitresses in the New England States, New York, New Jersey and Pennsylvania. The contractors recruit from among the disadvantaged minorities and seek to give status to service occupations. An additional 500 persons will be trained under the contract without additional cost to the Federal government.

Aircraft workers are being trained under contracts with Lockheed of California and Georgia, Douglas Aircraft, Northrop Norair, and Boeing Companies in Washington, Kansas and Louisiana. Occupations include electronic assemblers, general machinists of all types, instrument assemblers and airframe riveters.

More than 3,000 tool and die makers are being trained in 26 cities under an OJT contract with the National Tool, Die and Precision Machining Association. The apprentice-entry projects run for 52 weeks with related classroom instruction.

The Urban League, which sponsors programs in 44 cities and regions, has contracts to find employers who will hire and train nearly 17,000 ghetto dwellers for worthwhile jobs.

*In 1968*, agreements are being continued with State apprenticeship agencies for the promotion, development and servicing of on-the-job training projects. In addition to agreements with State apprenticeship agencies, contracts with public and private organizations for promoting, developing and servicing of on-the-job training projects are being utilized.

*In 1969*, it is planned to enter into agreements totaling $2,000,000 with up to 20 State apprenticeship agencies for the promotion, development and servicing on-the-job training programs. A listing by State of activity planned for 1969 is shown on page MDTA–38. It is also planned in 1969 to develop national on-the-job training contracts totaling $2,000,000 with private and public organizations.

CHANGES FOR 1969

None.

BASIS FOR THE ESTIMATE

The State apprenticeship agencies will cooperate with State and Federal manpower coordinating committees in the development of each State manpower development plan under the Cooperative Area Manpower Planning System. The agencies will participate in the identification of major manpower problems of unemployment, poverty, skill shortages and plan the deployment of manpower resources to yield the greatest returns and to provide concentration of services in selected areas where needs are critical as determined by the concentrated employment effort.

*Activity 2. (d) Comprehensive manpower program planning*

| | |
|---|---|
| 1968 (positions 0) | 0 |
| 1969 (positions 0) | $11,225,000 |

Section 201 of the Manpower Development and Training Act charges the Secretary of Labor with responsibility for (1) determining the skill requirements of the economy, (2) developing policies for the adequate occupational development and maximum utilization of the skills of the Nation's workers, (3) promoting the development of broad and diversified training programs, and (4) providing for combinations of programs under the Manpower Development and Training Act with programs under other Federal acts. The language provides a broad mandate for the assessment of manpower needs and the programming of resources available to meet them under a variety of Federal statutes. This mandate is carried out through the Cooperative Area Manpower Planning System.

The Cooperative Area Manpower Planning System is a nationwide, Federal, State, and local system through which the Departments of Labor, Health, Education and Welfare, Commerce, Agriculture, the Interior, and Housing and Urban Development, the Office of Economic Opportunity and the Civil Service Commission, together with affiliated State and local agencies and nongovernment organizations with which they maintain grant-in-aid or contractual relationships, cooperate in jointly planning and implementing their manpower and related programs. The Department of Labor provides leadership and administrative support at the National level to the Cooperative Manpower Planning System.

This system was initiated to jointly plan the 1968 comprehensive manpower programs. Statewide plans, covering a wide variety of manpower and related services, were developed in all States. About 70 area comprehensive manpower plans were also developed, covering the largest areas with the most urgent man-

power problems. These plans, although a good beginning, were only marginally adequate, owing primarily to two limitations: (1) lack of support staff for the State and area manpower coordinating committees, and (2) lack of adequate projections of occupational requirements and other detailed manpower information on which to base comprehensive manpower programs.

*Changes for 1969*

| | |
|---|---|
| Mandatory changes amount to | None |
| Program changes amount to | +$11,225,000 |
| Positions | None |

BASIS FOR THE ESTIMATE

In 1969 the Cooperative Area Manpower Planning System will be extended to about 30 additional job market areas, bringing the number of areas preparing required comprehensive manpower plans to almost 100. Each State will also prepare comprehensive manpower program plans for the parts of the State not covered by area programs and an overall State summary plan.

To facilitate the development of comprehensive manpower program plans that will maximize the utilization of existing resources (federal and non-federal) staff support for State and local manpower coordinating committees is needed. Such support will be provided by the Secretary of Labor, as head of the principal manpower policy instrumentality of the Federal Government, through the making of planning grants to State agencies or other organizations satisfactory to the Secretary, designated by the governors, and to support local manpower programming activities. With the provision of staff support the manpower coordinating committees will be formed into truly effective bodies through which collective grassroots assessments of the size and urgency of manpower problems will be made and available resources will be allocated to priority needs. Through this process, agencies at all levels, administering manpower and related programs, will be enabled to participate cooperatively in the development of rational, agreed-upon manpower and related services programs to be carried out by the several program agencies.

$6,225,000 of the $11,225,000 requested for 1969 will permit minimum staffing of State and area manpower coordinating committees for comprehensive manpower planning through Cooperative Area Manpower Planning System machinery. The estimate would provide an average of about 7 positions per State and 2 positions per Cooperative Area Manpower Planning System area.

The remaining $5,000,000 will provide for the essential projections of occupational requirements and related manpower surveys to provide the factual basis for area and State program operating plans. The same data will also support local employment development and provide the detailed occupational job market information called for in the Vocational Education Act of 1963.

To meet the multiple requirements of the Cooperative Area Manpower Planning System and related programs, comprehensive job market information is needed, by State and local area, for detailed occupational groupings. Such information must encompass both current data on employment by occupation, as well as short-range and long-range manpower projections. Current resources of the Department of Labor and the affiliated State employment security agencies are adequate to finance about 20 such comprehensive occupational manpower surveys per year. The need is for at least 100 additional such surveys each year in order to achieve the full potential of the Cooperative Area Manpower Planning System multi-agency joint planning process and for the implementation of related activities.

Over two billion dollars is requested in the President's budget this year for training under the several manpower development programs. Additional funds will go into closely related efforts, such as the Vocational Education Act. The proposed expenditure in manpower information constitutes a small proportion of this total to insure that such training is responsive to changing job market conditions in each local area, and that there are useful employment prospects for graduates in occupations for which they have been trained.

The manpower shortages which are discernible throughout the United States are not universal in nature. In many areas, unfilled job openings exist side-by-side with unutilized or underutilized human resources. Unemployment in some areas still ranges from moderate to substantial, and is heavily concentrated in certain neighborhoods and in groups such as non-whites, youth, and older workers.

In addition, during the 1969–1973 period close to 3,000,000 new workers will be entering the labor force. Many millions of other workers will be making job changes because of the general growth in the economy and in response to automation and technological change. For these workers, improved occupational information is needed to provide appropriate guidance in making vocational choices, and to answer the perennial question "what occupations to train for." This information is needed by specific occupation and individual local areas because the hiring of workers to fill jobs is done primarily in an occupational framework within a local economic area.

The requested funds will make it possible to provide the following items of information for the 100 Cooperative Area Manpower Planning System areas, economic regions within the State, and the 50 States on an annual basis:

a. A current inventory of employment by occupation, in occupations suitable for skill training and vocational education, for each of the Cooperative Area Manpower Planning System areas, economic districts and the 50 "States". At present, the most recent benchmark information is available for local areas only from the 1960 Decennial Census of Population.

b. An analysis of the current employment market situation for occupations suitable for training in these areas, districts and States.

c. Projections of local occupational requirements in these areas. These projections will provide information on both expansion and replacement requirements, and take account of both short-term and long-term (up to 5 years) needs.

d. Information on the characteristics of the local manpower resources. Manpower availability information will cover workers now in training in these occupations, as well as unemployed workers, young people entering the labor force, reentrants, and individuals hindered from looking for work and becoming self-supporting who can benefit from occupational training.

e. Systematically updating and correcting occupational projections to reflect significant change in job market developments as they occur.

ESTIMATED DISTRIBUTION OF 1969, COMPREHENSIVE MANPOWER PROGRAM PLANNING ACTIVITIES

| State or possession | Amount | Position equivalents | State or possession | Amount | Position equivalents |
|---|---|---|---|---|---|
| Total | $11,225,000 | 1,101 | Missouri | $243,800 | 24 |
| | | | Montana | 115,000 | 11 |
| Alabama | 194,200 | 19 | Nebraska | 134,000 | 13 |
| Alaska | 115,000 | 11 | Nevada | 115,000 | 11 |
| Arizona | 153,000 | 15 | | | |
| Arkansas | 134,000 | 13 | New Hampshire | 134,000 | 13 |
| California | 667,000 | 66 | New Jersey | 373,600 | 37 |
| | | | New Mexico | 134,000 | 13 |
| Colorado | 164,600 | 16 | New York | 610,000 | 60 |
| Connecticut | 232,200 | 23 | North Carolina | 205,800 | 20 |
| Delaware | 134,000 | 13 | | | |
| District of Columbia | 115,000 | 11 | North Dakota | 115,000 | 11 |
| Florida | 270,200 | 27 | Ohio | 441,300 | 44 |
| | | | Oklahoma | 153,000 | 15 |
| Georgia | 232,200 | 23 | Oregon | 145,600 | 14 |
| Guam | | | Pennsylvania | 471,800 | 47 |
| Hawaii | 134,000 | 13 | | | |
| Idaho | 115,000 | 11 | Puerto Rico | 175,200 | 17 |
| Illinois | 410,000 | 40 | Rhode Island | 134,000 | 13 |
| | | | South Carolina | 163,600 | 16 |
| Indiana | 243,800 | 24 | South Dakota | 115,000 | 11 |
| Iowa | 166,200 | 16 | Tennessee | 241,300 | 24 |
| Kansas | 164,600 | 16 | | | |
| Kentucky | 194,200 | 19 | Texas | 446,000 | 45 |
| Louisiana | 175,200 | 17 | Utah | 134,000 | 13 |
| | | | Vermont | 134,000 | 13 |
| Maine | 134,000 | 13 | Virginia | 143,500 | 14 |
| Maryland | 192,100 | 19 | Virgin Islands | 23,200 | 2 |
| Massachusetts | 370,000 | 37 | | | |
| Michigan | 384,200 | 38 | Washington | 194,300 | 19 |
| Minnesota | 194,200 | 19 | West Virginia | 134,000 | 13 |
| | | | Wisconsin | 226,500 | 22 |
| Mississippi | 164,600 | 16 | Wyoming | 115,000 | 11 |

ESTIMATED DISTRIBUTION OF 1969 MANPOWER DEVELOPMENT AND TRAINING ACTIVITIES—STATE AGENCY PROGRAM SERVICES FUNDS BY STATE

| State or possession | Total | | Employment security agencies | | Vocational education agencies | | Apprenticeship agencies | |
|---|---|---|---|---|---|---|---|---|
| | Amount | Position equivalents | Amount | Position equivalents | Amount | Position equivalents | Amount | Position equivalents |
| Total | $43,521,000 | 5,087 | $33,521,000 | 3,808 | $8,000,000 | 1,100 | $2,000,000 | 179 |
| Alabama | 515,000 | 66 | 363,000 | 42 | 152,000 | 24 | | |
| Alaska | 281,000 | 35 | 181,000 | 20 | 100,000 | 15 | | |
| Arizona | 487,000 | 58 | 300,000 | 35 | 141,000 | 19 | 46,000 | 4 |
| Arkansas | 359,000 | 47 | 278,000 | 31 | 81,000 | 16 | | |
| California | 5,539,000 | 619 | 4,152,000 | 474 | 593,000 | 84 | 794,000 | 61 |
| Colorado | 508,000 | 55 | 358,000 | 41 | 127,000 | 12 | 23,000 | 2 |
| Connecticut | 789,000 | 103 | 522,000 | 59 | 169,000 | 34 | 98,000 | 10 |
| Delaware | 155,000 | 14 | 100,000 | 11 | 55,000 | 3 | | |
| District of Columbia | 303,000 | 33 | 200,000 | 25 | 69,000 | 5 | 34,000 | 3 |
| Florida | 834,000 | 98 | 642,000 | 74 | 157,000 | 21 | 35,000 | 3 |
| Georgia | 856,000 | 99 | 663,000 | 76 | 193,000 | 23 | | |
| Guam | 57,000 | 7 | 32,000 | 3 | 25,000 | 4 | | |
| Hawaii | 278,000 | 36 | 138,000 | 16 | 133,000 | 19 | 7,000 | 1 |
| Idaho | 184,000 | 23 | 149,000 | 17 | 35,000 | 6 | | |
| Illinois | 2,291,000 | 309 | 1,924,000 | 224 | 367,000 | 85 | | |
| Indiana | 742,000 | 87 | 602,000 | 68 | 140,000 | 19 | | |
| Iowa | 396,000 | 45 | 309,000 | 35 | 87,000 | 11 | | |
| Kansas | 581,000 | 64 | 369,000 | 42 | 212,000 | 22 | | |
| Kentucky | 652,000 | 75 | 541,000 | 61 | 117,000 | 14 | | |
| Louisiana | 891,000 | 95 | 644,000 | 72 | 131,000 | 14 | 116,000 | 9 |
| Maine | 343,000 | 34 | 249,000 | 27 | 94,000 | 7 | | |
| Maryland | 562,000 | 60 | 449,000 | 51 | 113,000 | 9 | | |
| Massachusetts | 1,701,000 | 218 | 1,437,000 | 162 | 222,000 | 50 | 42,000 | 6 |
| Michigan | 1,496,000 | 188 | 1,240,000 | 140 | 256,000 | 48 | | |
| Minnesota | 950,000 | 109 | 649,000 | 75 | 301,000 | 34 | | |
| Mississippi | 672,000 | 72 | 365,000 | 43 | 307,000 | 29 | | |
| Missouri | 860,000 | 101 | 778,000 | 89 | 82,000 | 12 | | |
| Montana | 172,000 | 18 | 110,000 | 13 | 46,000 | 3 | 16,000 | 2 |
| Nebraska | 302,000 | 35 | 246,000 | 28 | 56,000 | 7 | | |
| Nevada | 213,000 | 21 | 149,000 | 17 | 64,000 | 4 | | |
| New Hampshire | 156,000 | 18 | 119,000 | 14 | 37,000 | 4 | | |
| New Jersey | 2,144,000 | 273 | 1,814,000 | 206 | 330,000 | 67 | | |
| New Mexico | 195,000 | 22 | 107,000 | 13 | 78,000 | 8 | 10,000 | 1 |
| New York | 4,240,000 | 465 | 2,873,000 | 318 | 868,000 | 102 | 499,000 | 45 |
| North Carolina | 535,000 | 62 | 435,000 | 50 | 100,000 | 12 | | |
| North Dakota | 225,000 | 23 | 169,000 | 19 | 56,000 | 4 | | |
| Ohio | 1,717,000 | 208 | 1,571,000 | 177 | 146,000 | 31 | | |
| Oklahoma | 367,000 | 40 | 256,000 | 29 | 111,000 | 11 | | |
| Oregon | 570,000 | 61 | 413,000 | 47 | 130,000 | 11 | 27,000 | 3 |
| Pennsylvania | 2,661,000 | 345 | 2,289,000 | 258 | 372,000 | 87 | | |
| Puerto Rico | 478,000 | 54 | 346,000 | 39 | 74,000 | 6 | 58,000 | 9 |
| Rhode Island | 299,000 | 35 | 229,000 | 26 | 70,000 | 9 | | |
| South Carolina | 499,000 | 57 | 329,000 | 38 | 170,000 | 19 | | |
| South Dakota | 170,000 | 18 | 142,000 | 16 | 28,000 | 2 | | |
| Tennessee | 731,000 | 73 | 500,000 | 56 | 231,000 | 17 | | |
| Texas | 1,250,000 | 143 | 1,100,000 | 125 | 150,000 | 18 | | |
| Utah | 278,000 | 31 | 228,000 | 25 | 33,000 | 4 | 17,000 | 2 |
| Vermont | 178,000 | 20 | 119,000 | 14 | 38,000 | 4 | 21,000 | 2 |
| Virginia | 437,000 | 48 | 335,000 | 39 | 81,000 | 7 | 21,000 | 2 |
| Virgin Islands | 53,000 | 7 | 32,000 | 3 | 11,000 | 2 | 10,000 | 2 |
| Washington | 1,252,000 | 143 | 1,158,000 | 133 | 73,000 | 8 | 21,000 | 2 |
| West Virginia | 363,000 | 38 | 287,000 | 32 | 76,000 | 6 | | |
| Wisconsin | 632,000 | 66 | 441,000 | 50 | 86,000 | 6 | 105,000 | 10 |
| Wyoming | 116,000 | 12 | 90,000 | 10 | 26,000 | 2 | | |

*Activity 3. Federal institutional training services*

1968 (positions, 168)---------- $2,475,600
1969 (positions, 168)---------- $2,567,600

NARRATIVE DESCRIPTION OF PROGRAM

Under the provisions of the Manpower Development and Training Act, the Secretary of Health, Education, and Welfare is responsible for providing institutional training and retraining to individuals whose skills have been rendered obsolete by forces not under their control and arising from dislocation in the economy due to automation, foreign competition, relocation of industries, shifts in market demands, and other economic changes, and to develop skills for new positions which are now or will be in demand.

The Department of Helath, Education, and Welfare cooperates with the Department of Labor in carrying out the provisions of the Manpower Development and Training Act. The Secretary of Health, Education, and Welfare submits a separate report of the activities of his Department under Title II of the Act, together with recommendations regarding continuation and improvement of the program. The Office of the General Counsel furnishes necessary legal services. The Office of Audit of the Department provides audit standards and performs audits of programs operated through appropriate public and/or private agencies. The Office of Education, through the Bureau of Audit, Vocational, and Libarary Programs, Division of Manpower Development and Training, directs program operation and management. Specifically, through its field staff, the Office of Education helps the States to develop training programs providing assistance in such areas as selection of courses of study; planning, organizing, and developing training standards for programs and instructors; preparing training plans and programs procedures; designing course outlines; evaluating course content and the relationship of training to job opportunities; planning in-service training programs; tying program plans to manpower utilization surveys and expected effects of changing technology on the labor force; and coordinating State activities with those of the Department of Labor, the Office of Economic Opportunity, the Department of Housing and Urban Development, and other activities of the Department of Health, Education, and Welfare. In addition, the Office of Education prepares and issues procedural guides, instructions, and application forms; provides assistance to appropriate State Educational Agencies in planning and financing their programs; contracts with public or private educational agencies to conduct training activities where appropriate and offers guidance on improvement of curriculum and methods in training and retraining programs.

The Office of Education also prepares for use of State and other training agencies and institutions, suggested curriculums for use in providing instruction for individuals referred for training by the Secretary of Labor, and it also disseminates the findings of experimental and demonstration projects having implications for education and training.

*In 1967*, accomplishments were to provide institutional training for 132,259 trainees.

*In 1968*, it is planned to provide institutional training for 109,000 trainees.

*In 1969*, it is planned to provide institutional training for 109,000 trainees.

*Changes for 1969*

Mandatory changes amount to---------- +$92,000
Program changes amount to---------- None
Positions ---------- None

BASIS FOR THE ESTIMATE

The role of the Department of Health, Education, and Welfare has been affected as a result of the responsibilities imposed by the redirection of Manpower Development and Training Activities. Without regard to changes in enrollment, the changes in the nature of the program now require additional and different services. It is increasingly apparent as the program continues into fiscal year 1969 that the instructional services, the facilities and equipment, and the instructional staff developed at the local program operating level the first four years of the Manpower program must be modified or substituted for in order to meet current objectives. Expert leadership is required to develop or adapt training resources, public and private, for extended training and services to the disad-

vantaged. Immediate needs are apparent in the areas of teacher training, curriculum materials, supervision and, within this framework, attention to their appropriateness for functional illiterates, older workers, underemployed women, minority group members, just to mention a few.

The Department of Health, Education, and Welfare staff must assist local and State staffs to be increasingly effective in satisfying the objectives of the redirected Manpower Development and Training program. Increased assistance must be provided the regional representatives in order that they may provide leadership rather than expend themselves in the formality of endorsing project proposals. This must be accomplished without risking the integrity of the project proposal by more careful cost estimates, course content, and length of training required.

The State Agreement and consequently the State budget for supervision and administration justifies a continual evaluation and adjustment in order to respond to the changing emphasis in program direction and redirection.

Further ability to become flexible requires staff assistance in fiscal matters. The reassignment of project funds must be practiced consistently throughout the fiscal year rather than on annual accounting.

On-the-job training National contracting requires staff to assist prospective contractors in proposal development and to assist in processing proposals with the Contracts Branch of the Office of Education, and subsequently to serve as project officers to provide supervision for the duration of each project. The assistance that is realized on regular institutional projects from State, local and regional personnel is available only on a limited basis, if at all, in national contracting although the time and effort in project review and approval is comparable.

The Department of Health, Education, and Welfare will continue to provide operational liaison with the President's Committee on Manpower for Health, Education, and Welfare, and some logistical support.

To bring about meaningful use of the Cooperative Area Manpower Planning System, personnel must be assigned on a full-time basis to evaluate projections on a State and regional basis and to reassess goals and objectives and redirect energies where evaluation data may suggest. This will also include assessment of needs and priorities for manpower activities which fall outside State plans and allotments in order to be able to recommend to the Secretary of Health, Education, and Welfare those areas of activity which should be considered eligible for funding not subject to State apportionment.

The amendment to Section 231 of the Manpower Development and Training Act permits the Secretary to contract with the appropriate State education agency and also with such other public or private educational agencies or institutions as may be necessary. This amendment requires complete re-evaluation and, in many instances, renegotiation of existing State agreements. It will also require the establishment of a monitoring system and closer liaison with the referral process of State employment security divisions so that the Secretary may be in position to exercise his prerogative to make direct contracts with other than State educational agencies, where such contracts will cause training to be made available more effectively, or more quickly than under the State agreement. In order to give full force to this 1966 amendment, the Department of Health, Education, and Welfare staff will have, both at the national level and the field, responsibilities and activities not previously required.

The benefits from the experimental and demonstration part, Title I, are now available as a result of experimental and demonstration projects of the past four years. Department of Health, Education, and Welfare staff will be applying these findings to current program operation.

Effort to locate and acquire excess Government property and equipment for use in training programs will be intensified in 1969.

Emphasis on multiple-agency activities will require considerable additional staff time for coordination of plans and projects with other Federal agencies. However, no change is proposed in the total number of positions in 1969 as compared to 1968.

DISTRIBUTION OF FIELD STAFF—DEPARTMENT OF HEALTH, EDUCATION, AND WELFARE

| Supervising offices | 1968 | | | 1969 | | |
|---|---|---|---|---|---|---|
| | Professional | Clerical | Total | Professional | Clerical | Total |
| Atlanta, Ga | 3 | 2 | 5 | 3 | 2 | 5 |
| Boston, Mass | 2 | 2 | 4 | 2 | 2 | 4 |
| Charlottesville, Va | 2 | 2 | 4 | 2 | 2 | 4 |
| Chicago, Ill | 3 | 3 | 6 | 3 | 3 | 6 |
| Dallas, Tex | 3 | 2 | 5 | 3 | 2 | 5 |
| Denver, Colo | 2 | 2 | 4 | 2 | 2 | 4 |
| Kansas City, Mo | 3 | 2 | 5 | 3 | 2 | 5 |
| New York City, N.Y | 4 | 3 | 7 | 4 | 3 | 7 |
| San Francisco, Calif | 4 | 3 | 7 | 4 | 3 | 7 |
| Total, field staff | 26 | 21 | 47 | 26 | 21 | 47 |

EXPLANATION OF ESTIMATE BY OBJECT

*Personnel compensation, $1,854,600*

The estimate for 1969 provides for $1,854,600 and 193 full-time permanent positions, and 185 man-years which includes 2 man-years of temporary and intermittent employment.

The increase of $85,100 over 1968 includes a mandatory net additional cost of pay increases in 1969 for current year staff due to P. L. 90–206 of $79,300 and for a mandatory increase of $5,800 for an extra day of pay in 1969 for current year staff.

*Personnel benefits, $136,000*

The estimate of $136,000 for 1969 is based upon personnel compensation and represents the cost of retirement, insurance, health benefits and payments under the Federal Insurance Contributions Act (FICA).

The increase of $6,900 in 1969 includes a mandatory increase related to net additional cost of pay increases for current year staff due to P. L. 90–206 of $6,400 and for a mandatory increase of $500 resulting from an extra day of pay in 1969 for current years staff.

| | 1968 | 1969 | Change |
|---|---|---|---|
| Retirement | $114,483 | $121,383 | +$6,900 |
| Group life insurance | 4,647 | 4,647 | ---------- |
| Health benefits | 9,294 | 9,294 | ---------- |
| FICA | 676 | 676 | ---------- |
| Total | 129,100 | 136,000 | +6,900 |

*Travel and transportation of persons, $220,000*

There is no change in the estimate from 1968.

The estimate of $220,000 for 1969 provides for per diem, mileage and transportation costs for departmental and field personnel and for travel of consultants.

| | 1968 | 1969 | Change |
|---|---|---|---|
| Number of travelers: | | | |
| Departmental | 50 | 50 | |
| Field | 26 | 26 | |
| Consultants | 10 | 10 | |
| Total | 86 | 86 | |
| Number of days traveled: | | | |
| Departmental | 1,250 | 1,250 | |
| Field | 3,034 | 3,034 | |
| Consultants | 100 | 100 | |
| Total | 4,384 | 4,384 | |
| Estimated cost: | | | |
| Departmental | $63,300 | $63,300 | |
| Field | 151,700 | 151,700 | |
| Consultants | 5,000 | 5,000 | |
| Total | 220,000 | 220,000 | |

*Transportation of things, $3,500*

There is no change in the estimate from 1968.

| | 1968 | 1969 | Change |
|---|---|---|---|
| Shipments of publications, exhibits, supplies, and materials | $2,500 | $2,500 | |
| Movement of household goods | 1,000 | 1,000 | |
| Total | 3,500 | 3,500 | |

*Rent, communications, and utilities, $31,400*

There is no change in the estimate from 1968.

| | 1968 | 1969 | Change |
|---|---|---|---|
| Rental of equipment | $2,000 | $2,000 | |
| Communication services, including telephone toll calls, teletype and telegrams | 17,400 | 17,400 | |
| Paid official mail | 12,000 | 12,000 | |
| Total | 31,400 | 31,400 | |

*Printing and reproduction, $50,000*

There is no change in the estimate from 1968.

The estimate of $50,000 for 1969 will provide for printing and reproduction of instructions, forms, technical publications, promotion materials and other documents related to the institutional and on-the-job training programs.

| | 1968 | 1969 | Change |
|---|---|---|---|
| Forms and schedules | $3,500 | $3,500 | |
| Envelopes and letterheads | 1,500 | 1,500 | |
| Publications and reports | 45,000 | 45,000 | |
| Total | 50,000 | 50,000 | |

*Other services, $440,200*

There is no change in the estimate from 1968.

| | 1968 | 1969 | Change |
|---|---|---|---|
| Development of curriculum guides | $400,000 | $400,000 | ---------- |
| Miscellaneous services, including moving, maintenance, machine repair, expenses for employee training, etc | 40,200 | 40,200 | ---------- |
| Total | 440,200 | 440,200 | ---------- |

*Supplies and materials, $20,900*

There is no change in the estimate from 1968.

| | 1968 | 1969 | Change |
|---|---|---|---|
| Subscriptions | $1,500 | $1,500 | ---------- |
| Desk top supplies, envelopes, and duplicating supplies | 19,400 | 19,400 | ---------- |
| Total | 20,900 | 20,900 | ---------- |

*Equipment, $41,000*

There is no change in the estimate from 1968.

The estimate of $41,000 for 1969 will provide for necessary purchases of furniture and office equipment.

*Grants, subsidies, and contributions, $415,198,400*

The estimate of $415,198,400 for 1969 represents a net program increase of $36,596,801 for training costs and allowance payments and accompanying program services which is reflected in the table below. There was a non-recurring carryover from the 1967 appropriation of $710,199. Of the 1968 appropriation of $337,500,000, $4,900,000 will not be obligated until 1969. This carryover is added to the 1969 estimate resulting in a net increase of $9,800,000 between 1968 and 1969 in addition to the 1969 program increase estimate of $16,282,000.

| | 1968 | 1969 | Change |
|---|---|---|---|
| Training and allowance payments | $337,500,000 | $353,782,000 | +$16,282,000 |
| Adjustments due to H.J. Res. 888 (Public Law 90-218) | 4,900,000 | +4,900,000 | +9,800,000 |
| Program Services, employment security services | 33,291,400 | 33,291,400 | ---------- |
| State education services | 8,000,000 | 8,000,000 | ---------- |
| On-the-job training services | 4,000,000 | 4,000,000 | ---------- |
| Comprehensive manpower program planning | ---------- | 11,225,000 | +11,225,000 |
| Unobligated fiscal year 1967 funds for title II carried in fiscal year 1968 | 710,199 | ---------- | -710,199 |
| Total | 378,601,599 | 415,198,400 | +36,596,801 |

## INTRODUCTION OF ASSOCIATES

Senator HILL. Secretary Ruttenberg, we are glad to have you here. We shall be glad to have you proceed in your own way, sir.

Mr. RUTTENBERG. Thank you very much, Mr. Chairman.

The Administrators of various bureaus in the Manpower Administration will join me here, Mr. Goodwin, Bureau of Employment Security; Mr. Hugh Murphy, Bureau of Apprenticeship and Training; Mr. Mark Battle, Bureau of Work Training programs; Dr. Curtis Aller, Associate Manpower Administrator; and Miss Thomas, head of our Office of Financial Management Services, will join us here.

## PREPARED STATEMENT

I have a broad general statement about the manpower programs which follows the Secretary's pattern and spells out in some detail the

involvement of the Manpower Administration with other agencies of the Government.

I would like to file that for the record if I might.

Senator HILL. We will have it appear in the record.

(The statement follows:)

I am pleased to have the opportunity today to discuss with you the President's Manpower Program and the central role of the Manpower Development and Training Act (MDTA) and the Office of Manpower Administrator (OMA) 1969 appropriations estimates in the overall program. I hope the Committee will find this perspective helpful as you proceed to consider the specifics of the MDTA and OMA budgets, and those of the other specific manpower program components over the weeks and months ahead.

The right to earn a living, as the President said in his Manpower Message, is fundamental to the maintenance of a free society. However, even after seven unprecedented years of uninterrupted prosperity, this Nation continues to face staggering unemployment rates among some groups of citizens, an intolerable level of poverty, and a mounting clamour of the "have nots" for full access to the fruits of their land of plenty. I do not want to repeat the President's Manpower Message. Suffice it to say, the $2.1 billion Manpower Program proposed for 1969 in the President's Manpower Message is a significant step toward assuring every American, who is willing to work, the right to earn a decent living.

The Manpower Administration is directly responsible for administering about $1.6 billion of the President's overall Manpower Program and for providing leadership and direction to the entire effort. A bold new course in manpower development has been charted, keyed to three principles gleaned from recent experience.

Concentrate programs in pockets of need.

Focus programs on the most disadvantaged individuals.

Maximize involvement of private industry.

The Department's Manpower Activities include several separately authorized program components of which MDTA and OMA are integral parts and will be discussed in more detail in a few minutes. The following table may be helpful to the Committee and attempts to summarize and compare those manpower programs outlined in the President's Manpower Message with the Manpower Administration's fiscal 1969 appropriation request. The Committee will be considering each of these budget requests in some detail over the next several weeks.

COMPARISON OF FISCAL YEAR 1969 PROGRAM LEVELS AS REFLECTED IN THE PRESIDENT'S MANPOWER MESSAGE AND THE MANPOWER ADMINISTRATION'S CONGRESSIONAL SUBMISSIONS

[In millions of dollars]

| Fund source | 1969 Manpower Administration congressional submission | 1969 President's manpower message |
|---|---|---|
| MDTA | 413 | 413 |
| OMA—S. & E. | 29 | 34 |
| Labor Mobility and Bonding Program | | 4 |
| Other | | 30 |
| BAT—S. & E. | 9 | 9 |
| BES-UCFE-X | 92 | |
| Trade Adjustment Activities | 1 | |
| BES—S. & E. | 24 | 15 |
| Employment Service | 15 | 15 |
| Other | 9 | |
| Trust funds (grants to States) | 617 | 316 |
| Employment Service | 316 | 316 |
| Other | 301 | |
| BWTP (EOA programs) | 735 | 735 |
| Work experience (title V) | 10 | 10 |
| Work incentive program | 100 | 100 |
| Other | 2 | |
| Other agencies | | 455 |
| Total | 2,032 | 2,087 |

I would like to describe to you how we are going about the job of administering this sometimes bewildering array of program components so as to achieve an integrated and comprehensive manpower program keyed to the three principles mentioned earlier. This too, is covered in the President's Manpower Message, but perhaps some additional information will be useful to the Committee.

First, we have established the Concentrated Employment Program (CEP). Basically, CEP is an integrated delivery system through which the various program services are marshalled and made available to the disadvantaged individual in such amounts and sequences as are required to move him from a state of dependency to self-supporting, self-reliant, self-respecting citizenship. The CEP is, then, simply an administrative process for organizing—from several funding sources—the particular program resources needed to reach out to, motivate, provide orientation and place in employment—with or without basic remedial education and skill training, and frequently utilizing on-the-job training—the hard core unemployed in specially selected pockets of urban and rural poverty.

In 1969 we propose to use $490 million of the total manpower program resources available on the CEP. This will include $51 million of the MDTA appropriation estimate which you are considering today. The balance of the fund will come mainly from the Economic Opportunity Act and Work Incentive Program appropriations. With these combined resources we expect to continue the CEP projects initiated in 1967 and 1968, and to initiate 70 new CEP's—35 of which will be in some of the most deprived, depressed areas in *rural* America. Before the end of fiscal year 1969, then, this integrated delivery system, or CEP, would be operative in 146 urban and rural areas throughout the country.

As this Committee knows, the Model Cities program under the Department of Housing and Urban Development is seeking to demonstrate the practical feasibility of revitalizing our cities—large and small—through a carefully structured array of remedial programs, including among others health, welfare, housing and manpower. We have made arrangements with D/HUD to correlate the Concentrated Employment Program with the Model Cities program so that for the most part the manpower component of each Model City undertaking will be a CEP.

Another administrative arrangement, through which we hope to secure major involvement of private industry in the vast job of preparing rejected men and women for productive employment, is the President's new JOBS program—Job Opportunities in the Business Sector. We are proposing to spend $244 million in 1969—including $48 million of MDTA-OJT money—on this pinpointed effort to put the hardcore unemployed to work in private industry. The JOBS partnership of government and industry intends to rehabilitate 100,000 of the hardcore unemployed in the 50 largest cities through this new hire-train-retain approach by the end of 1969—70,000 of whom will be funded from the 1969 budgets. In JOBS, the employer hires the disadvantaged first, provides them the training they need to become productive workers, and continues them in regular employment. We expect to reimburse employers for the extra costs of training and supportive services required to overcome the multiple disadvantages of the hardcore unemployed.

Since most of the cities in which the JOBS program will be operating will also have Concentrated Employment Programs, the JOBS will be very closely coordinated with the CEP; it will in fact be the major on-the-job training component in those CEP areas and employers participating in JOBS will hire the hard core unemployed referred to them by the CEP.

However, we are not running a manpower program exclusively for the big cities and depressed rural areas. We are running a Nationwide manpower program. Last year a number of Federal Departments and agencies, in cooperation with the Manpower Administration, launched a system through which Federal, State and local authorities representing most manpower program components and interests jointly plan and implement comprehensive community and Statewide manpower programs. We call this system the Cooperative Area Manpower Planning System and it now involves six Cabinet Departments and two other agencies, together with their State and local affiliates and counterparts. In addition to the services which make up the direct manpower program, there are a welter of closely related activities which must be efficiently united if maximum effect is to be realized from these administratively separate but functionally interdependent federal programs. By way of illustration, I would name but a few of the "manpower related" activities: Adult Basic Education, Vocational Education, Health Manpower, Vocational Rehabilitation, and Wel-

fare programs of the D/HEW; Model cities, Urban Planning Assistance, and Neighborhood Facilities programs of D/HUD; Public Works and Economic Development programs of D/Commerce; Cooperative Extension Service, and the Rural Areas Development programs of the D/Agriculture; and federal employee recruitment programs of the Civil Service Commission. All of these action programs, and many others, are tied together with the dozen or so direct manpower programs through the Cooperative Area Manpower Planning System (CAMPS).

We see CAMPS as the answer to the very difficult problem of interprogram coordination. Such coordination can be achieved only through comprehensive community and State manpower planning and cooperative implementation. Complementary programs and activities, such as basic education, skill training, health services, day care, and job development, *must* be made to *complement* one another—not to compete!

We now have the administrative machinery to accomplish this difficult but vital business. Through CAMPS the vocational educators, the welfare people, the people in housing, economic development, health services, vocational rehabilitation and others, get together with employment service and anti-poverty people, and with those representing the Rural Areas Development work, water pollution control, and other manpower users, to jointly assess the local manpower picture, to appraise their priority manpower problems, and to program available resources so that they dovetail with each other and stretch as far as possible toward meeting the needs.

The guiding and monitoring of activities on all these many fronts requires competent management machinery. The management problem comes to focus in the Manpower Administration. It was in response to the need for improved management that the President spoke of strengthening and streamlining the Manpower Administration and of improving and increasing its capacity to guide the overall manpower program. Secretary Wirtz has already mentioned some realignments in the Manpower Administration designed to fit it for the job of running a $2 billion, widely dispersed manpower program.

As part of the strengthening of the Manpower Administration, our several manpower program budget estimates provide for 621 new positions, as follows: OMA—146, BAT–OJT—40, BES—145, EOA delegated programs—200, and the new Work Incentive (WIN) program—90. As you can see, the bulk of these positions are to support new and expanded operating programs.

I wish, at the moment, only to underscore a few of the increases now before the Committee, which will effect the management and functioning of the entire manpower effort. Our MDTA estimate includes a $16,282,000 increase in on-the-job training funds to strengthen this program for service to the hard-core disavantaged through the JOBS system. The hire-train-retain process focuses on the problems we have had heretofore in getting this group into on-the-job training. It will provide the supportive services such as intensive counseling, job coaching and followup which these people need. Our MDTA estimate also includes $11,225,000 to support CAMPS. This is central to our effort to tie the diverse manpower and related supporting programs together into cohesive, linked, and nonduplicative comprehensive community manpower programs in all our States and areas.

The OMA budget estimates include an increase of 146 positions in the executive direction, program staff and financial management and administration, the program evaluation, the integrated data system—underlie the whole superstructure of operating program components through which concepts and resources are translated into action and services are carried to the people who need them. In short, these staff services are basic to the job of husbanding and deploying wisely the whole gamut of component program resources—not only those made available under the MDTA. It is upon these services that the efficient design, with an eye to maximum cost-effectiveness, of the entire realm of highly complex and sophisticated Federal manpower programs rest.

In subsequent specific parts of the budget estimates of the overall manpower program you will be considering our request for 40 additional positions for the OJT program. Mr. Hugh Murphy will be covering this when he discusses the estimates for the Bureau of Apprenticeship and Training. I only want to say, that as we move ahead with the JOBS program, it is essential that a representative of the Manpower Administration be assigned exclusively to assist the National Alliance of Businessmen in each of the 50 cities to expedite the preparation of contracts and the hiring of the disadvantaged. These 40 positions will help us meet this responsibility.

We are looking to the Employment Service and in particular its Human Resources Development Program, to play an increasingly crucial role in delivering the broad spectrum of manpower services. The State grants budget and the BES S&E estimates, which Mr. Robert Goodwin will discuss with you, include only very small increases over mandatory amounts, primarily to implement a management improvement program in the employment security areas.

Mr. Chairman, members of the Committee, I hope this brief discussion of the scope and complexity of the Federal manpower program, and the role of the MDTA and OMA budgets in the larger context, will be useful to you. I would be happy to try to answer any questions.

## Manpower Development and Training Activities

I am pleased to appear before you today on the 1969 appropriation estimate for Manpower Development and Training Activities. The 1969 estimate is for $413,096,000 which is estimated to provide training for 274,700 workers. Of this number 109,000 are estimated to be in institutional training projects and 102,700 in on-the-job training projects with a large part of the on-the-job trainees receiving related institutional instruction in addition to on-the-job training. Sixty-three thousand will receive training in communications and employment skills and vocational training on a part-time basis.

The institutional training projects are designed to provide classroom training in occupational skills plus a program of basic education to those trainees who lack such training. In on-the-job training the individual is trained in a specific job as he actually works at it. These on-the-job projects are frequently "coupled" with related institutional training and basic education when the trainee is also in need of this type of instruction.

Part-time and other training projects are designed to upgrade the skills of underemployed workers to qualify them for jobs in the skill shortage areas, and to provide for assistance to persons who have skills to offer but need employment skills such as work orientation, language skills, etc., to make them employable.

These 1969 program levels reflect a continuing redirection of the program begun during 1967 to increase the effectiveness of the MDTA programs to serve the disadvantaged. As I indicated in my general statement, these are the people who are in greatest need of help.

However, our continuing analysis of the characteristics of persons enrolling in training indicates that we have not been nearly as successful in getting the disadvantaged into training in the OJT program as we have in the institutional program. Yet the OJT program has the better placement rate since in OJT the employer trains the individual for the specific job in which he will eventually be placed. The main reason we have not been able to get as many disadvantaged trainees into OJT has become increasingly evident in this past year. The disadvantaged are too often not ready for a regular OJT program. Most require a comprehensive program of supportive education and prevocational training as well as intensive counseling, testing, job coaching and followup. Under the existing OJT funding this level of services is not possible. As a result it is increasingly difficult to get employers to accept the disadvantaged trainee in an OJT program. We are therefore requesting an increase of $16,282,000 for 1969 which will do much to make the OJT program for the disadvantaged more acceptable to private employers.

As I mentioned in my earlier general statement summarizing the overall manpower program, $51 million of the 1969 MDTA program will be included in programs developed through the Concentrated Employment Program effort. Likewise $48 million of the on-the-job training program will be funded through JOBS projects. Twenty-two million dollars, the same amount as in 1968, is for training under the Economic Development Act as directed by Section 241 of the Manpower Development and Training Act.

The one other area of increase in our 1969 request is for the support of a comprehensive manpower program planning system. In 1967, the Department of Labor initiated the Cooperative Area Manpower Planning System (CAMPS) in support of planning for this year's 1968 manpower programs. The objective is to provide a manpower planning system which will reflect the inputs of all agencies at the Federal, state, and local levels which are involved in carrying out manpower programs. The CAMPS program has been moving forward but it has also made obvious the need for funds for planning support staff at the state and local

levels. If adequate planning is to take place at these levels there must be sufficient resources to do it.

The 1969 estimate proposes a total of $11,225,000 to provide these resources at the State and local levels. $6,225,000 of this amount will provide for people who will coordinate manpower planning at the State and local levels. The balance, $5,000,000, will provide for the collection and analysis of data on which to base manpower plans. Especially important for such planning is information on local and regional occupational requirements as well as manpower surveys to determine manpower resources in these areas.

The 1968 program provides for 275,000 trainees, the same level proposed for 1969. At the end of February projects had been approved to provide training for 173,800 trainees or 63 percent of the total planned program. The institutional training program, planned for 109,000 this year, had 88,600 training opportunities approved, or 81 percent of the annual plan. OJT training had been approved for 75,800 trainees, 70 percent of the annual plan of 109,000. Part-time and other training had been approved for 9,400 trainees or 16 percent of the annual plan of 57,000.

The Part-time and other training activities projects being introduced into the 1968 over-all program as a result of the latest Amendments to the Manpower Development and Training Act are being developed more slowly than the longer on-going institutional and on-the-job training projects. Consequently more of these projects will be approved later in the fiscal year. In line with the provisions of H. J. Resolution 888, projects representing $4.9 million developed under the 1968 plan will be deferred until fiscal 1969. A major share of the $4.9 million can be expected to be used for part-time and other training projects, in which case about 6,000 training opportunities will be provided.

The Senate has approved a supplemental appropriation of $75,000,000 for 1968 for summer programs of the "Neighborhood Youth Corps type" under authority of Section 102 of the Manpower Development and Training Act. Final action by the Conferees on this supplemental is still pending.

To summarize, the 1968 MDTA appropriation is $395,497,000 and the 1969 estimate is $413,096,000, an increase of $27,599,000. Of this total, $16,282,000 is for enrichment of the on-the-job training program for a portion of the seriously disadvantaged: $11,225,000 is for resources to support the cooperative area manpower planning systems at state and local levels; $92,000 is for mandatory items related to the Federal staff of the Department of Health, Education and Welfare, financed under this appropriation.

Mr. Chairman, this very briefly summarizes the Manpower Development and Training Activities budget estimate for 1969. I shall be very happy to answer any questions you may have.

### BUDGET REQUEST

Mr. RUTTENBERG. There are two specific appropriations I would like to talk about.

Mr. Goodwin, of course, will appear later on the Bureau of Employment Security, and Mr. Murphy on the Bureau of Apprenticeship and Training, and the respective budgets relating to those programs.

If I might first talk to the Manpower Development and Training activities, this is an appropriation which for fiscal year 1969 is for $413 million.

It provides training for almost 275,000 workers divided between institutional, on-the-job training, and part-time and skill-employment training.

### ON-THE-JOB TRAINING INCREASE

There are in this budget two major items of increase over the previous year. One is an increase for $16.3 million for on-the-job training. This comes about because of the concentration on providing job opportunities in the private sector, encouraging private involvement of industry and training programs, and trying to dig deeper

and involve the hard-core, long-term unemployed, the disadvantaged, in the on-the-job training program.

### Cooperative Manpower Planning System Increase

In addition to that request, the MDTA budget provides for an $11.2 million increase to support a new development which got started a year ago; namely, the cooperative area manpower planning system.

This is a system in which the 50 States are involved in developing a manpower plan for their States and localities. It started in 1967. The States cooperated with the welfare agencies, the vocational rehabilitation agencies, vocational education agencies, Office of Education, and the various State employment agencies led by the Employment Security Agency within the State. We found two difficulties in the program last year. There was no staff at all to help them develop the plan and there was a lack of adequate information, data and analysis of manpower programs to enable them to do a good job.

Therefore, the proposal this year is for $6.2 million to assist the staff of the area manpower planning systems in the States and localities and $5 million for collection and analysis of data for a total of $11.2 million.

My prepared statement includes where we stand now in terms of funding programs through the end of February 1968.

### Total Increase

I might just summarize and say, Mr. Chairman, that this is an appropriation which for fiscal year 1968 was $385.5 million, with an increased request of $27.6 million for the two specific programs that I have referred to.

Senator Hill. That much increase.

Mr. Ruttenberg. A total increase of $27.6 million over fiscal year 1968 for these two major items of CAMPS and on-the-job training in the private sector.

That concludes my statement, Mr. Chairman. I have one other that I can go on to.

Senator Hill. All right, go ahead.

## Office of Manpower, Administrator, Salaries and Expenses

**STATEMENT OF STANLEY H. RUTTENBERG, ASSISTANT SECRETARY FOR MANPOWER**

**ACCOMPANIED BY:**

**DR. CURTIS C. ALLER, ASSOCIATE MANPOWER ADMINISTRATOR**

**MISS MARGARET E. THOMAS, ASSISTANT MANPOWER ADMINISTRATOR FOR ADMINISTRATION**

**HERBERT A. MEYER, CHIEF, BUDGET DIVISION, OFFICE OF FINANCIAL AND MANAGEMENT SERVICES**

**RICHARD E. MILLER, DIRECTOR, OFFICE OF PROGRAM AND BUDGET REVIEW**

### Appropriation Estimate

"Office of Manpower Administrator, Salaries and Expenses

"For necessary expenses for the Office of the Manpower Administrator, including administering the Manpower Development and Training Act of 1962, as amended, and research under such Act, and for performing the functions of the Secretary in the fields of automation and manpower, [$30,696,000] *$29,422,000*, to remain available until June 30, [1969] *1970*."

AMOUNTS AVAILABLE FOR OBLIGATION

| | 1968 | 1969 |
|---|---|---|
| Appropriation or estimate | $30,696,000 | $29,422,000 |
| Proposed transfer to other accounts for pay increases (Public Law 90-206 effective Oct.8, 1967) [1] | −428,000 | |
| Appropriation available from prior year | [2] 215,194 | |
| Appropriation or estimate, revised | 30,483,194 | 29,422,000 |

OBLIGATIONS BY ACTIVITY

| Description | Appropriation revised, 1968 | | Estimate, 1969 | | 1969 change | |
|---|---|---|---|---|---|---|
| | Positions | Amount | Positions | Amount | Positions | Amount |
| 1. Experimental, demonstration, and research programs | | $23,064,555 | | $19,800,000 | | −$3,264,555 |
| 2. Planning, research, and evaluation | 282 | 5,155,239 | 369 | 6,368,100 | 87 | +1,212,861 |
| 3. Financial and management services | 110 | 1,536,200 | 159 | 2,322,300 | 49 | +786,100 |
| 4. Executive direction | 40 | 727,200 | 50 | 931,600 | 10 | +204,400 |
| Total obligations | 432 | 30,483,194 | 578 | 29,422,000 | 146 | −1,061,194 |

[1] Proposed transfer for pay increases to—

| | |
|---|---|
| Bureau of Apprenticeship and Training | $142,000 |
| Bureau of Employment Security | 42,000 |
| Labor-Management Services Administration | 25,000 |
| Wage and Hour Division | 73,000 |
| Women's Bureau | 9,000 |
| Bureau of Employee's Compensation | 17,000 |
| Bureau of Labor Statistics | 54,000 |
| Office of the Solicitor | 18,000 |
| Office of the Secretary | 45,000 |
| Office of Federal Contract Compliance | 3,000 |

[2] Allocated to activities as follows—

| | |
|---|---|
| Activity 1 | $198,555 |
| Activity 2 | 16,639 |
| Total | 215,194 |

## OBLIGATIONS BY OBJECT

| | Appropriation revised, 1968 | Estimate, 1969 | 1969 Change |
|---|---|---|---|
| Total number of permanent positions | 432 | 578 | +146 |
| Positions other than permanent | 4 | 4 | |
| Average number of all employees | 408 | 533 | +125 |
| 11 Personnel compensation | $4,834,900 | $6,270,400 | +$1,435,500 |
| 12 Personnel benefits | 359,700 | 466,400 | +106,700 |
| 21 Travel and transportation of persons | 277,100 | 340,100 | +63,000 |
| 22 Transportation of things | 18,600 | 33,600 | +15,000 |
| 23 Rent, communications, and utilities | 143,900 | 251,300 | +107,400 |
| 24 Printing and reproduction | 231,100 | 285,300 | +54,200 |
| 25 Other services | 1,423,439 | 1,737,000 | +313,561 |
| Services of other agencies | 23,064,555 | 19,800,000 | −3,264,555 |
| 26 Supplies and materials | 73,500 | 107,300 | +33,800 |
| 31 Equipment | 56,400 | 130,600 | +74,200 |
| Total obligations | 30,483,194 | 29,422,000 | −1,061,194 |
| Working capital fund items included above | (322,000) | (471,000) | (149,000) |

## SUMMARY OF CHANGES

| | Positions | Amount |
|---|---|---|
| 1968 enacted appropriation | 432 | $30,696,000 |
| Appropriation available from prior year | | 215,194 |
| Proposed transfer to other accounts for pay increases (Public Law 90-206 effective Oct. 8, 1967) [1] | | −428,000 |
| 1968 estimated fund availability | | 30,483,194 |
| 1969 estimate | 578 | 29,422,000 |
| Total change | +146 | −1,061,194 |
| Mandatory items: | | |
| Increases: | | |
| Net additional pay increase costs not completely funded in 1968 | | +114,300 |
| Net additional cost of within-grade promotions effective for part year in 1968 | | +44,900 |
| Net cost of within-grade promotions becoming effective in 1969 | | +54,300 |
| To provide for 1 extra day of pay in 1969 for current year staff | | +20,900 |
| Subtotal, mandatory increases | | +234,400 |
| Decreases: | | |
| Authority to conduct labor mobility demonstration program expires in 1968 in accordance with the 1966 amendments to the Manpower Development and Training Act of 1962, as amended (Public Law 87-415) | | −3,866,000 |
| Authority to conduct placement assistance (bonding) demonstration program expires in 1968 in accordance with the 1966 amendments to the Manpower Development and Training Act of 1962, as amended (Public Law 87-415) | | −200,000 |
| Nonrecurring 1967 funds available for obligations in 1968 | | −215,194 |
| Subtotal, mandatory decreases | | −4,281,194 |
| Subtotal, mandatory items | | −4,046,794 |

See footnotes at end of table.

SUMMARY OF CHANGES—Continued

| | Positions | Amount |
|---|---|---|
| Financing items: To provide for full cost of centralized services purchased from the working capital fund | | +$31,000 |
| Program items—Increases: | | |
| To provide for an increased level of manpower research to keep pace with the rapid expansion of manpower problems | | +1,000,000 |
| To more effectively administer the existing and expanded planning, evaluation and research activities (personal services, $788,800; nonlabor, $268,700) | +87 | +1,057,500 |
| To provide more effective financial and management support to manpower programs (personal services, $389,800; nonlabor, $330,100) | +49 | +719,900 |
| To strengthen support of regional manpower administrators for the coordination of manpower programs at the State and local levels (personal services, $132,200; nonlabor, $45,000) | +10 | +177,200 |
| Subtotal, program items | +146 | +2,954,600 |
| Total change | +146 | −1,061,194 |

[1] Proposed transfer for pay increases to:

| | |
|---|---|
| Bureau of Apprenticeship and Training | $142,000 |
| Bureau of Employment Security | 42,000 |
| Labor-Management Services Administration | 25,000 |
| Wage and Hour Division | 73,000 |
| Women's Bureau | 9,000 |
| Bureau of Employee's Compensation | 17,000 |
| Bureau of Labor Statistics | 54,000 |
| Office of the Solicitor | 18,000 |
| Office of the Secretary | 45,000 |
| Office of Federal Contract Compliance | 3,000 |

MANDATORY AND FINANCING CHANGES BY ACTIVITY

| Type of change | Activity 1 | | Activity 2 | | Activity 3 | | Activity 4 | | Total | |
|---|---|---|---|---|---|---|---|---|---|---|
| | Positions | Amount | Positions | Amount | Positions | Amount | Positions | Amount | Positions | Amount |
| Mandatory items: | | | | | | | | | | |
| Net additional pay increase costs | | | | +$74,700 | | +$25,100 | | +$14,500 | | +$114,300 |
| Net additional cost of within-grade promotions effective for part year in 1968 | | | | +28,600 | | +11,900 | | +4,400 | | +44,900 |
| Net within-grade promotion costs initially effective in 1969 | | | | +35,500 | | +12,900 | | +5,900 | | +54,300 |
| To provide for 1 extra day of pay in 1969 for current-year staff | | | | +13,500 | | +5,000 | | +2,400 | | +20,900 |
| Authority to conduct labor mobility demonstration program expires in 1968 in accordance with the amendments to the Manpower Development and Training Act of 1962, as amended (Public Law 87-415) | | −$3,866,000 | | | | | | | | −3,866,000 |
| Authority to conduct placement assistance (bonding) demonstration program expires in 1968 | | −200,000 | | | | | | | | −200,000 |
| Nonrecurring 1967 funds available for obligations in 1968 | | −198,555 | | −16,639 | | | | | | −215,194 |
| Subtotal, mandatory items | | −4,264,555 | | +135,661 | | +54,900 | | +27,200 | | −4,046,794 |
| Financing items: Cost of centralized services | | | | +19,700 | | +11,300 | | | | +31,000 |
| Total | | −4,264,555 | | +155,361 | | +66,200 | | +27,200 | | −4,015,794 |

## Mandatory and Financing Changes for 1969

### MANDATORY ITEMS

| | |
|---|---|
| Increases: | |
| To provide for full year cost of pay increases effective Oct. 8, 1967, and to provide full funding of part-year cost | +$114,300 |
| Within-grade promotion costs: | |
| 1969 net additional cost of within-grade promotions effective for part-year in 1968 | 44,900 |
| Personnel compensation | 49,205 |
| Deduct lapse | —1,663 |
| Deduct savings due to turnover | —5,742 |
| Personnel benefits | 3,100 |
| Net cost | 44,900 |
| Net cost of within-grade promotions becoming effective during 1969 | +54,300 |
| Personnel compensation | 61,916 |
| Deduct lapse | —2,161 |
| Deduct savings due to turnover | —9,255 |
| Personnel benefits | 3,800 |
| Net cost | 54,300 |
| To provide for 1 extra day of pay in 1969 for current year staff | +20,900 |
| Decreases: | |
| Authority to conduct labor mobility demonstration program expires in 1968 in accordance with the 1966 amendments to the Manpower Development and Training Act of 1962, as amended (Public Law 87–415) | —3,866,000 |
| Authority to conduct placement assistance (bonding) demonstration program expires in 1968 in accordance with the 1966 amendment to the Manpower Development and Training Act of 1962, as amended (Public Law 87–415) | —200,000 |
| Nonrecurring 1967 funds available for obligations in 1968 | —215,194 |
| Total, mandatory items | —4,046,794 |

### FINANCING ITEMS

| | |
|---|---|
| Amount originally in base budget | +316,000 |
| Amount currently required in base budget | +347,000 |
| Changed financing required | +31,000 |

Note.—Changes in fees charged for centralized services (such as visual exhibits or reproduction) and changes in anticipated services rendered by the working capital fund require adjustments to the funds provided in the base budget.

## PROGRAM CHANGES BY ACTIVITY

| Type of change | Activity 1 | | Activity 2 | | Activity 3 | | Activity 4 | | Total | |
|---|---|---|---|---|---|---|---|---|---|---|
| | Positions | Amount | Positions | Amount | Positions | Amount | Positions | Amount | Positions | Amount |
| 11 Personnel compensation | | | +87 | +$734,100 | +49 | +$363,400 | +10 | +$123,200 | +146 | +$1,220,700 |
| 12 Personnel benefits | | | | 54,700 | | 26,400 | | 9,000 | | 90,100 |
| 21 Travel and transportation of persons | | | | 48,000 | | 6,000 | | 9,000 | | 63,000 |
| 22 Transportation of things | | | | 8,700 | | 4,900 | | 1,400 | | 15,000 |
| 23 Rent, communications, and utilities | | | | 60,900 | | 34,300 | | 8,200 | | 103,400 |
| 24 Printing and reproduction | | | | 26,100 | | 14,700 | | 5,400 | | 46,200 |
| 25 Other services | | +$1,000,000 | | 64,200 | | 236,000 | | 12,000 | | 1,312,200 |
| 26 Supplies and materials | | | | 17,300 | | 9,700 | | 2,800 | | 29,800 |
| 31 Equipment | | | | 43,500 | | 24,500 | | 6,200 | | 74,200 |
| Total | | +1,000,000 | +87 | +1,057,500 | +49 | +719,900 | +10 | +177,200 | +146 | +2,954,600 |

*Activity 1. Experimental, demonstration, and research programs*

| | |
|---|---|
| 1968 (positions, 0) | $23,064,555 |
| 1969 (positions, 0) | 19,800,000 |

NARRATIVE DESCRIPTION OF PROGRAM

This activity provides for the direct program costs of the research, experimental and demonstration projects called for under Title I of the Manpower Development and Training Act of 1962, as amended. Program emphasis is directed to continued support of the Concentrated Employment Program. Research and Experimention and Demonstration will be designed to provide guidance and direction to the operation of the broad manpower programs planned for fiscal year 1969. The need for further research into the basic manpower problems of poverty areas is great. Experimentation is necessary to move research findings into operational procedures. The Concentrated Employment Program and the strengthened on-the-job training program are still evolving concepts and much support is needed to bring them to their full potential.

Only the direct contract and/or grant costs are included in this activity. Federal staff and administrative costs related to these programs are included under Activity 2, Planning, Research and Evaluation, and Activity 3, Financial and Management Services.

Under Title I of the Act, the Secretary of Labor is directed to establish a comprehensive manpower research program, conducted through contracts or grants with universities, individuals, nonprofit and governmental organizations, to develop the additional information and insight needed to guide effective improvement in manpower policies and programs.

Title I also calls upon the Secretary of Labor to "establish a program of experimental, developmental, demonstration, and pilot projects, through grants to or contracts with public or private nonprofit organizations, for the purpose of improving techniques and demonstrating the effectiveness of specialized methods in meeting the manpower, employment, and training problems of particularly disadvantaged worker groups."

*Research program*

| | |
|---|---|
| 1968 (positions, 0) | $3,800,000 |
| 1969 (positions, 0) | 4,800,000 |

NARRATIVE DESCRIPTION OF PROGRAM

The program of contract and grant research administered by the Department of Labor emphasizes studies that can be applied directly to make manpower programs more effective or, with the approval of the Congress, in instituting new programs where need is demonstrated. Hence, the research encompasses both practical problems in current programs and emerging problems which require timely action to prevent them from becoming chronic. A longer-range objective is to obtain information that can guide our society in closing the gap between its aspirations and its achievements with respect to the utilization of manpower.

Priority is given to studies which appear to offer a superior chance for finding solutions to the most important problems. Key considerations in the research design are the balance between the immediate and the longer-range problems and the time lag between the initiation of research and the production of findings.

The current research design has evolved over the past several years. Thus, at the outset of the Manpower Development and Training Activities program 5 years ago, when the training efforts focused on workers who were unemployed because their skills were no longer in demand in the area where they lived or because they lacked marketable skills, the research concentrated on training needs, workers' attitudes toward training, their mobility, and the effects of automation and technological change on job content and employment.

As the Nation has assigned more urgent priorities to the alleviation of urban and rural poverty, this aspect of the research program has been emphasized. Currently, a variety of employment problems centered in urban slums, generated largely by migration from the farms to the cities, are a major research focus.

*In 1967*, accomplishments included the completion of thirty one research projects. A total of seventy research projects have been completed during the first five years of the program.

Some of the significant findings from two of these 1967 reports are given in this section to suggest the thrust of the underlying research.

1. *Negro Participation in Apprenticeship Programs* by Drs. F. Ray Marshall and Vernon M. Briggs, Jr., of the University of Texas. Drs. Marshall and Briggs were asked to do an independent study of the approaches used to promote Negro participation in apprenticeship,, to determine why some succeeded while others failed. They investigated apprenticeship programs in ten large cities, concentrating on trades in which few Negroes were employed.

While they found very few Negroes in most of the programs they studied and none in some, they concluded that the relative importance of racial discrimination has declined in recent years and that measures to recruit, train, and counsel qualified applicants currently are much more important. Accordingly, they suggested specific steps that might be taken by educators, employers, unions, civil rights groups, and various levels of government and as a result the Department of Labor and other Federal agencies have taken a number of actions along the recommended lines. The most significant of these came in February 1967, when the Labor Department contracted with the Workers Defense League and the A. Philip Randolph Educational Trust to extend the League's activities to recruit and prepare minority youth for apprenticeship in Buffalo, Cleveland, and Westchester County, N. Y., and to step up its program in New York City. The goal of this project is to place 375 disadvantaged youths in apprenticeship. Similar contracts have been signed with other groups, including the Urban League in Baltimore and Milwaukee and the Trade Union Leadership Conference in Detroit.

2. *Restoration of Youth Through Training* by Wakoff Research Center, Staten Island Mental Health Society. Although the final report on this study was received in late June, preliminary findings figured in congressional approval last year of an experimental program for training inmates of correctional institutions. In this study of a training program for young men at Rikers Island jail in New York City, the finding that weighed most heavily was the fact that 48% of the trainees returned to jail during the year following their release, in comparison to 66% of a matched group of men who followed ordinary jail routine.

The study discloses impressive economic gains should elicit enthusiastic cooperation in the new program from correctional authorities and the communities which they serve. It costs New York City $4,360 a year to keep an inmate at Rikers Island, including the cost of capital outlays, depreciation, and fringe benefits for operating personnel, and the average term is about 1 year. Since the training, placement, and supporting services cost only about $210 per trainee, the City of New York in effect saved some $4,150 for each youth who was helped by the training to stay out of jail in the year following his release. Moreover. a substantially larger proportion of trainees than of the controls held jobs paying over $60 a week—enough to lift their families out of poverty.

As a result of this pioneering research program, many correctional institutions have introduced similar training programs as one of the tools for rehabilitating prisoners and improving their ability to secure jobs and become productive citizens.

During 1967, several books based on Manpower Administration contract research studies were published, and articles on other studies appeared in a number of periodicals. A brief listing of publications emanating from the Research programs include: (1) *Farm Labor in the United States*, edited by C. E. Bishop (New York, Columbia University Press), part of which was reprinted for use at an October 1967 conference on rural youth; (2) *Manpower and the Public Employment Service in Europe—A Study of Programs and Operations*, by Alfred L. Green; (3) "*Symposium on Manpower Theory*," which constituted the Spring 1967 issue of the *Journal of Human Resources;* (4) *The Negro and Apprenticeship*, by F. Ray Marshall and Vernon M. Briggs, Jr. (Baltimore, The John Hopkins Press) ; (5) *The Middle-Class Negro in the White Man's World*. by Eli Ginzberg and others (New York, Columbia University Press). (6) *Negro College Graduates' Attitudes*, by Father Joseph H. Fichter (Washington, Government Printing Office, for the sponsors—The National Institutes of Health, the National Science Foundation, and the Department of Labor) ; (7) *Scientific and Managerial Manpower for Nuclear Industry*, by James W. Kuhn, (New York, Columbia University Press) ; (8) *Manpower and the Growth of Producer Services*, by Harry I. Greenfield, (New York, Columbia University Press). (9) *The Mobile Professor* by Daniel J. Brown, American Council on Education.

*Contracts.* Among contracts funded in 1967, two-thirds of the total costs went for projects undertaken on the initiative of the Research Office, based on its

priority design for the research program. The remainder was used for grants to individuals and institutions to conduct research in the Manpower area. A brief description of some of the studies initiated by the Research Office follows.

A study conducted by Penn State University will investigate the effects of providing job seekers with supplementary labor market information.

The research office arranged with the Department of Defense to make a number of substantive changes in the semi-annual Defense survey, "Economic Impact of Defense Programs." The changes, in the June and December 1967 surveys, will provide "early warning" of the specific industries, occupations, and geographic areas that would be affected by defense expenditure levels.

The development in recent years of new approaches, such as operations research and systems analysis, to the solution of a wide variety of problems in both the physical and social sciences has prompted the Department together with the Office of Education, The National Science Foundation and the National Bureau of Standards to sponsor two projects. The purpose of these studies, using different approaches, is to explore the feasibility of applying these new analytic techniques in the development of various manpower models in order to better understand manpower adjustment processes in the United States.

The research office contracted with the University of California at Berkeley for a major study of the effects of various employer practices on the operation of the job market in the San Francisco Bay area. The study will cover recruitment, compensation, promotion and retirement policies, and other aspects of employer policy and programs that influence the employment opportunities of different groups of workers. Such information should support more effective policies and programs for matching workers and jobs.

The Vocational Education Act of 1963 directs the Employment Service to provide occupational and employment information to vocational educators so that the vocational education system will be more responsive to current and changing job market requirements. In order to assist the Employment Service to carry out its responsibilities under the Act, the Office of Manpower Research has asked the Wisconsin State Employment Service to develop a model information system for occupational and employment data which can be used by vocational educators and Employment Service personnel throughout the country. Particular effort will be made to develop low-cost techniques and procedures for the effective exchange of information between the Employment Service and vocational education authorities at all levels of government.

*Institutional Grants Program.* In June, 1967, seven colleges and universities rounded out their first year of operation under 3-year institutional grants from the Labor Department. The purpose of these grants which average about $75,000 each annually, is to build research capabilities in these small institutions. The terms of the grants were purposely flexible, to encourage each school to develop a program suited to its capabilities and its region. During the first year, a number of research projects were undertaken, fellowships were awarded to graduate students, curriculums were expanded, and qualified faculty members were recruited for the manpower program.

About 50 research projects were in progress at the end of the year. Many of the projects bear upon local or regional problems and can be expected to contribute to their solution. For example, Virgina State College in Norfolk is exploring the manpower situation in Tidewater, Virginia, with special attention to underutilization of the labor force, and a pilot study is underway at Iowa State University to estimate health manpower requirements, changes in job content, and the adequacy of training facilities for health occupations in Iowa.

Twenty-one graduate students were awarded fellowships during the 1966–67 academic year, and 16 research positions were provided for graduate students. For the 12 students awarded Manpower Fellowships under its grant, Oklahoma State University has arranged various "internship" activities involving work or research projects during the academic year and special work situations during the summer.

Substantial changes have been made in curriculums in grantee schools. For example, the University of Maine has initiated a graduate seminar in Manpower Resources which covers the concept of work, labor force definitions and measures, trends in migration, and other basic manpower issues and Temple University began a new seminar in Manpower Outlook.

Because the support for manpower research has been limited, there is not a vast pool of college-level teachers who are experts in the field. Yet each school has put together an interdisciplinary staff, with representatives from economics,

sociology, industrial relations, psychology, education, and other departments. At the end of the year, the total number of professors participating in the programs stood at 75.

Each of the manpower centers has taken the initiative in setting up extensive contracts with relevant organizations and individuals outside the university, including State and local governments, other research groups, and other universities. For example, Atlanta University has established an Inter-Community Advisory Council which will work to identify community needs that can be met by the manpower studies group and hopes to conduct a Regional Institute on Manpower for a group of high school and college teachers. Such cooperation can only serve to create the network of involvement in manpower problems which is essential for progress in the field.

*Small Grants Program.* Under this program, which was designed to encourage more researchers to devote their efforts to the manpower field, support was provided to 23 doctoral candidates for the research incident to their dissertations and to 20 established scholars for innovative research and the development of research designs on manpower problems.

Reports on grants completed during the year include: (1) a dissertation on the relationship between the employment of skilled workers and unemployment among unskilled workers; (2) a study of the development of a computer-based national information system for matching workers and jobs; (3) an exploration of the employability and the capability for self-support among recipients of Aid to the Families of Dependent Children; (4) a methodological study of ways of training personnel interviewers to put aside their prejudices and make realistic evaluations of the capabilities of disadvantaged job applicants; and (5) a survey of published research on the working poor. All five of these studies have been useful in one or another of the Department's programs.

New grants awarded during fiscal 1967 included: (1) a study of the adjustments in occupation, housing, and personal life made by families who move from depressed areas in eastern Kentucky to Kenton County, the nearest industrialized area; (2) a study of the mobility and other experiences of southern Negroes in migrant labor camps in New York State; (3) a study of changing skill requirements for carpenters in the homebuilding industry; (4) a study in western Maryland of productivity and adjustments to economic and technological change on farms, off-farm employment, and the feasibility of mechanization of certain types of farm operations; (5) an evaluation of vocational training for American Indians through the Muskogee, Oklahoma, Area Office of Indian Affairs; (6) exploration of the extent and nature of manpower planning and forecasting in the firm, the techniques employed, and the corporate uses to which planning data are applied.

*In 1968 and 1969,* it is planned that several important studies will be completed. A few of those with exceptional promise are outlined below:

*A Study of the Need for Educational and Training Adjustments in the Apprenticeship Programs for Selected Craft Occupations,* by the Purdue Research Foundation. This study attempts to see how apprenticeship can be improved and modified to better serve current manpower training needs.

*An Evaluation of the Training of Tool and Die Makers,* by Northeastern University. In a preliminary report on this study, the authors present the findings of the first intensive investigation of the means by which workers in a highly skilled occupation (tool and die maker) achieve journeyman competence. They also attempt to assess the effectiveness of the different methods of the basis of performance ratings by the workers' foremen and the length of time required to reach journeyman status.

*Decision Process and Determinants in Occupational Choice,* by Stanford University Institute for the Study of Human Resources. This study is an attempt to determine how students in a 2-year State college and in a 4-year university decide on their occupation and what factors affect the decision.

*Occupational Adjustment of Recent Low-Income Southern Immigrants to Cleveland,* by the Bureau of Social Science Research, Inc. The first aim of this three-phase study is to develop ways of identifying new arrivals in a slum area and of ascertaining what services they need to make a satisfactory occupational adjustment.

*The Mexican-American Migrant Farmworker in Transition,* by Rural Manpower Center, Michigan State University. In this study, Mexican American migrant farmworkers and community leaders will be interviewed to obtain information about the process by which the workers drop out of the migrant stream and adjust to new job requirements and opportunities in the northern communities

where they settle. Factors which influence their stability in the new community will also be analyzed.

*Study of the Transferability of Military Trained Medical Personnel*, by Robert R. Nathan Associates, Inc. The objective of this study is to determine whether more of the 60,000 military personnel with specialized training in health occupations who are releaseed from the service each year might be persuaded and prepared to enter civilian medical occupations.

*New Research.* New contracts and grants for research to be initiated during 1968–69 will continue to emphasize three major approaches to the solution of manpower problems: (1) improving the productive potential of our human resources; (2) making more effective the services, programs, and institutions concerned with manpower; and (3) assessing major economic and social influences on the work force.

Based on current knowledge, the complex manpower problems encompassed within these three research areas, and their relative urgency, are as follows:

*Current Issues*

1. Slum employment problems
2. The transition from school to work and the employment problems of youth
3. Racial discrimination in employment and advancement
4. Special employment problems:
a. Employability of minority groups
b. Older workers
c. Women workers
d. Persons with arrest or conviction records
e. Welfare recipients
f. Debt and garnishment
5. Rural to urban migration
6. Employment in low-wage industries
7. Agriculture employment:
a. The supply and demand for farm labor
b. Problems of migrating farm workers
8. The problems of shortage occupations

*Emerging or Expanding Issues*

1. Improving job market processes and institutions
2. The distribution of jobs and incomes
3. Nonparticipation in the labor force
4. The manpower implications of labor-management agreements
5. The problems of "exit from work" and early retirement in light of greater life expectancy and rising productivity
6. Post-Viet Nam adjustment problems
7. Seasonal unemployment
8. Improving training and upgrading in industry
9. Transportation to work
10. Improvement of manpower projections and models

*Continuing or Long-Range Issues*

1. The location of job opportunities in rural areas
2. Implications of changes in rate of population growth
3. The career development process
4. The economic and social impact of military service
5. The quality and meaning of work
6. Emerging quasi-work activities
7. Problems of manpower data gathering and analysis techniques

Given the 25 issues on which research is currently needed, it is apparent that choices will have to be made. The major determinant of the research projects that can be undertaken is, of course, the amount of funds made available for the purpose. The Department is requesting $4.8 million for the research program in 1969, an increase of $1.0 million over 1968. The amounts for 1968 and 1969 would permit some research on all of the current issues and on some of the emerging issues.

The following table shows a comparison of the 1968 and 1969 programs:

| Unit | 1968 | 1969 | Change |
|---|---|---|---|
| Contractual research | $2,600,000 | $3,100,000 | +$500,000 |
| Grants for research: Projects and doctoral dissertations | 700,000 | 900,000 | +200,000 |
| Manpower research institutional grants | 500,000 | 800,000 | +300,000 |
| Total | 3,800,000 | 4,800,000 | +1,000,000 |

*Experimental and demonstration program*

1968 (positions, 0) ..... $15,000,000
1969 (positions, 0) ..... 15,000,000

NARRATIVE DESCRIPTION OF PROGRAM

The experimental and demonstration program seeks to develop, through actual project operation, new ideas and techniques to meet manpower problems more effectively—particularly the problems of disadvantaged groups. Projects focus on distinctive needs of the unemployed and underemployed who are not being aided effectively by established manpower service programs and try to meet such needs through new techniques and new types of organizational arrangements to "reach" and help make such workers trainable, provide them with employable skills, and place them effectively in jobs.

Such groups have been primarily unemployed urban-slum-area youth; minority groups with cultural, emotional and other handicaps to employment; low-income rural residents; the mentally and physically handicapped; and older workers with limited education.

Because each project is specially designed, experimental and demonstration projects are not readily categorized. They differ widely, not alone by group or problem focused upon, but by technique or combination of techniques tried and, of great importance, by type of institution or combination of institutions enlisted to conduct the effort. About three quarters of experimental and demonstration projects are operational activities, while the others are developmental (undertaken to plan and initiate specific efforts) or analytical assessments of project operations.

The impact of these projects, particularly those concentrating on disadvantaged youth, has been examined by several studies which trace in detail the contributions such projects have made to improving of manpower programs. For example, a recently completed study by the Human Interaction Research Institute, "Impact on Community Organizations and Institutions made by Manpower Development and Training Activities Experimental and Demonstration Projects for Disadvantaged Youth," reports that many techniques and methods first used in these projects have since been adopted and are being utilized widely by established agencies as new elements of their manpower service activities. Other studies of this programs accomplishments report specifically on advances developed in outreach, conseling and testing, basic education, training, use of professionals, and job placement. The following paragraphs briefly summarize such major accomplishments.

*In 1967*, the following are notable examples of significant expanding practices which the experimental and demonstration projects clearly have stimulated and helped guide:

Outreach activities, including use of nonprofessional local residents, to identify, attract and gain participation of those in disadvantaged neighborhoods and isolated rural areas who need but cannot or do not seek manpower services (now reflected in the major Human Resources Development efforts of the Employment Service system and the neighborhood centers of community action programs).

Linking of different needed services through comprehensive multi-service programs and through neighborhood or one-stop, multi-service centers.

Work sampling and work tryouts to appraise potential of those with limited education and to build confidence of those with limited communication skills.

Prevocational training and providing of basic education, work orientation, and other preparation needed by many under-educated and limited-work-experience persons as a precondition for effective skill training and employment.

Use of nonprofessional, and "indigenous worker", staff, group counseling, and other involvement of peer and family groups to provide needed re-orientation, encouragement and continuing stimulus to improve motivation.

Work crews as a device to orient youth to work settings (now embodied in Neighborhood Youth Corps program).

Development of new occupations and wider employment of disadvantaged workers as subprofessional aides in human service fields (now embodied in the New Careers program provided by the Economic Opportunity Act).

Overcoming of barriers to entry by minority groups to skilled and professional occupations.

Development of on-the-job training on sizeable scale through use of private and civic organizations as administering agents.

Post-placement follow-up and assistance to assure continuing employment and upgrading. The idea of a "coach" to provide support to newly hired workers and their employers in the first few months after placement, to help overcome problems jeopardizing job retention, is an experimental and demonstration program concept gaining increasing attention.

New organizational approaches have also been developed significantly by the experimental and demonstration program. These projects have looked beyond established public agencies to involve or develop new types or combinations of private and public institutions for manpower development efforts; they have provided notable examples of effective use of community, minority, private employer, and academic groups to bring fresh capabilities and ingenuity to the tackling of manpower problems.

Self-help and community organizations fostered by these projects have been prototypes for wide reproduction. Perhaps the best-known example is the Opportunity Industrialization Center of Reverend Leon Sullivan in Philadelphia, first developed with this program's support and now serving as the model for Opportunity Industrialization Centers in dozens of other cities which similarly emphasize minority group (primarily Negro) leadership, self-help efforts, motivational training programs, and industry cooperation.

Guidance for legislative action has been provided by these projects which have probed beyond regular program's statutory bounds. Key 1966 amendments to the Manpower Development and Training Act, for example, were based on experience developed in the experimental and demonstration projects:

1. One amendment (Sec. 202k) authorized physical examinations and minor medical treatment for trainees who cannot afford to obtain it on their own. These projects had demonstrated that such assistance could aid in reducing dropout during training for reasons of health and enable passing of company physical examination requirements after completion of training.

2. Another amendment (Sec. 202j) authorized training in basic education, communications and employment skills (such as work habits, expected standards of employee behavior, job finding, and work attitudes). This reflects demonstration project findings that such training, apart from occupational skills training, is often the necessary and effective key to developing employability of many persons who, as the Senate Labor Committee report noted, have "learned to communicate in a substantially different way" than that of prospective employers or others with whom they may have to work.

3. Another amendment (Sec. 251) authorized initation of training in correctional institutions to prepare prisoners for employment after release.

Key objectives of the experimental and demonstration program are to stimulate innovation and to provide examples of new methods to guide improvement of established programs, rather than directly to provide services to the participants in these projects. However, the projects do in fact provide substantial needed manpower services to literally tens of thousands of disadvantaged workers.

The approximately 75 operating projects in action in July 1967 had during the preceding year directly provided distinctive and significant services to over 55,000 individuals, the great majority of whom would not otherwise have received such assistance through established manpower programs.

Of the total number of participants reached by these projects, some 80 percent were from minority groups; nearly 70 percent were Negro, about 10 percent were Spanish-background (Mexican-American and Puerto Rican), and some 2 percent were Indian or of oriental background.

Limited education is another common characteristic. Some 80 percent of the participants in this program did not complete high school, and nearly a third did not even complete elementary school.

*In 1968*, it is planned to invest the $15,000,000 available for the experimental and demonstration program in some 75 projects in the five general categories summarized below. Roughly about 40 percent of the funds will be used to carry forward about 30 projects initiated earlier, with 60 percent going for new projects.

(1) *Employer Involvement.* A principal emphasis during the year is on ways to stimulate private employer sponsorship and direct involvement to meet employment problems of the disadvantaged. Some 30 to 35 percent of the available funds have been allocated for such projects.

The largest such investment is in refinement and broadening of the JOBS NOW demonstration project conducted in Chicago by the YMCA and Illinois Employment Service in cooperation with major employers and community organizations.

A second employer-oriented program is pioneering employer development of intensive in-plant training to upgrade unskilled workers from traditionally dead-end jobs to higher-level jobs which the employer might not otherwise fill. The great potential of this demonstration program has already been shown by a pilot effort conducted in New York City in 1967 by Skill Advancement, Inc., a nonprofit organization sponsored by the Urban League, the Puerto Rican Forum, and Cornell University.

(2) *Minority group self-help.* A second major emphasis of the 1968 Experimental and Demonstration program is on direct involvement of minority groups to organize and direct training and employment programs. Over 25 percent of the funds are being allocated for such projects.

The great bulk of this investment is in a multi-city demonstration of the Opportunity Industrialization Center system. These projects emphasize minority group (primarily Negro, often clergymen) leadership and extensive use of volunteer and industry assistance to recruit unemployed workers to provide them with motivational and basic work preparation in a "feeder" center and occupational training in skill development centers, and to arrange placement with cooperating employers. Initial operation of these centers in 17 cities has resulted.

Spanish-American minority programs are being developed in the Southwest through Operation, which is directed by major Spanish-American organizations, most notably by the League of Latin American Citizens and the American GI Forum.

Both of the above two projects are funded jointly with Manpower Development and Training Activity and Experimental and Demonstration funds and by the Office of Economic Opportunity.

Another notable experiment in "self-help" is the Pride, Inc. project initiated in Washington this summer. It relied on youth leaders to organize and conduct a large-scale program to employ jobless youth, nearly all nonwhite, in community cleanup and rat control activities.

(3) *Other special techniques for specific groups.* A third major category of projects is a variety of efforts to develop new approaches to meet stubborn problems barring employment of specific disadvantaged groups. Neary 25 percent of the experimental and demonstration program funds are allocated for these projects. The principal examples of such varied projects are:

(a) Development of training and employment for arrested persons as an alternative to criminal prosecution and imprisonment, to be run by the Vera Institute of Justice.

(b) Basic occupational language training to equip Spanish-speaking workers with English necessary to perform specific jobs, to be conducted by the Puerto Rican Forum.

(c) "Work hardening" to enable emotionally and socially handicapped unemployed workers to prepare for steady employment.

(d) "Residential services" to youth whose unstable home and family environment prevent effective training or job retention, conducted by Yale University and the community action agency (Community Progress, Inc.) in New Haven.

(4) *New opportunities in major occupations.* Several projects will seek to redesign or develop new means of entry to occupations with large potential for substantial new employment opportunities for the disadvantaged. Some 10 percent of the funds are allocated for this purpose.

(5) *Formal experimentation-analysis and other.* Many of the projects cited earlier are designed to provide specific measurement of the impact of their experimental efforts. In addition, nearly 10 percent of these funds are being devoted to controlled measurement of regular manpower programs to determine effectiveness and relative value of alternative approaches and utilization efforts

to stimulate wider awareness, understanding, and use of improved techniques developed by demonstration projects.

*In 1969*, it is planned that the $15,000,000 requested for experimental and demonstration projects will be invested in approximately 75 projects, of which some 50 will be new projects, with the remainder being refundings of new phases of current projects.

In 1969 this program will stress increasingly the measurement and analysis of effectiveness of manpower development techniques. At least two more experimental manpower laboratories will be developed. The program will also emphasize development of (1) new types of private industry manpower development programs, (2) improved minority group self-help efforts, (3) more effective ways of meeting job needs of rural migrants to urban areas, and (4) new ways of strengthening coordinated "concentrated employment programs". Each of these priority areas are outlined more fully below.

(1) *Experimental manpower laboratories.* The initial laboratory established in 1968. to measure effectiveness of specific manpower services on a systematic, controlled, long-term basis, will be expanded to at least three in 1969. An estimated 10 percent of the experimental and demonstration budget would be invested in these laboratories.

Such laboratories—facilities combining operating programs and action-research competence—are necessary to obtain continuity, scope and depth of formal experimentation which are often not attainable in ad hoc short-term demonstration efforts.

Prime candidates being considered for laboratories are (a) a mental health hospital and cooperating university which have conducted a notable demonstration project on employment problems of the mentally ill, (b) a prison system with an associated research foundation which have done outstanding work in preparing inmates for employment after release, (c) a community action agency which has operated a comprehensive urban manpower program and a university in the same city which has joined in measurement of the impact of that program, and (d) a private community service agency which has led multi-agency efforts to develop new ways to solve employment needs of problem youth and is developing research staff and studies in cooperation with other organizations.

(2) *Private industry manpower programs.* A series of demonstration projects will seek to develop with industry leaders effective examples of how employers (a) can train, hire, and employ effectively the "hardcore unemployed" and (b) meet skill shortages through upgrading programs to develop potential and provide upward mobility of employed workers customarily confirmed to low-level jobs.

Although still in their early stages, several such projects already initiated with experimental and demonstration funds have generated considerable positive interest in the management community. This is true most notably of the Chicago Jobs Now project, in which leading employers are setting aside their hiring standards to experiment with employment and training of problem youth, the Newark Business and Industrial Coordinating Council project, in which key firms are contributing training staff, equipment, and other resources, as well as job opportunities, for minority group and other disadvantaged workers, and the Skill Advancement project, in which employers are training and promoting workers from unskilled jobs which formerly were dead-end jobs.

The proposed new direct-employer-involvement demonstrations would focus on workers with limited education, little or no occupational skills, often from minority groups with cultural differences creating communication and employment difficulties, and usually with employment records marked by instability or confinement to low-level, low-skill jobs.

(3) *Improvement of minority group self-help.* The experimental and demonstration program will continue to seek improved ways of gaining the benefits of participation by minority organizations in manpower programs directed to minority groups.

Particular attention will be given to devising more effective ways of meshing such organizations's activities with those of programs run directly by public agencies, so that they become, not competitive efforts, but complements to each others' strengths. This program will also explore more systematically the usefulness of a period of *partial* support, of *gradual* movement from demonstration funding to regular program funding, as a means of developing more effective

movement from the demonstration phase into the continuing-service operations as part of regular program funding.

(4) *Rural migrants to urban areas.* A significant part of the unemployment problem in many cities is rooted in the lack of preparation of many newcomers from rural areas for life and work in the city. Several projects have been trying new ways to prepare rural people for urban employment. The expanded program will give more attention to methods of identifying and providing at strategic times and places the skill development, job-seeking, and urban orientation aid needed by many rural migrants to urban areas, both in out-migration and in-migration areas.

(5) *Improvement of "Concentrated Employment Programs."* As the concentrated employment programs initiated in major urban ghetto areas gain their first year's experience in linking together different manpower development tools in a comprehensive and coordinated program, they will provide rich opportunities (and needs) for further innovation.

The experimental and demonstration program will utilize the more effective programs as a base for special projects (a) to determine how better to meet apparent gaps and emerging shortcomings and (b) to do pilot probing of new approaches which such program directors believe are promising but which are beyond their current statutory authority. An estimated 10 percent of the budget would be devoted expressly to this purpose.

*Labor mobility demonstration program*

| | |
|---|---|
| 1968 (positions, 0) | $3,866,000 |
| 1969 (positions, 0) | 0 |

Authority to conduct labor mobility demonstration program expires in 1968 in accordance with the 1966 amendments to the Manpower Development and Training Act of 1962, as amended (P.L. 87–415). It is anticipated that extension of this pilot program will be proposed as an amendment to the Manpower Development and Training Act.

*Placement assistance (bonding) demonstration program*

| | |
|---|---|
| 1968 (positions, 0) | $200,000 |
| 1969 (positions, 0) | 0 |

Authority to conduct Placement Assistance (Bonding) Demonstration Program expires in 1968 in accordance with the 1966 amendments to the Manpower Development and Training Act of 1962, as amended (P.L. 87–415). Extension of the pilot program will be proposed under amendments to the Manpower Development and Training Act.

*Changes for 1969*

| | |
|---|---|
| Mandatory changes amount | −$4,264,555 |
| Financing changes amount | None |
| Program changes amount | +1,000,000 |
| Positions | None |

The following is a summary of the changes requested in 1969:

| | Appropriation, 1968 | Request, 1969 | Change |
|---|---|---|---|
| Research program | $3,800,000 | $4,800,000 | +$1,000,000 |
| Experimental and demonstration program | 15,000,000 | 15,000,000 | 0 |
| Labor mobility demonstration program | 3,866,000 | 0 | −3,866,000 |
| Trainee bonding program | 200,000 | 0 | −200,000 |
| Unobligated fiscal year 1967 funds carries into 1968 | 198,555 | 0 | −198,555 |
| Total | 23,064,555 | 19,800,000 | −3,264,555 |

The change for 1969 reflects a net decrease of $3,264,555, made up of $1,000,000 program increase for Title I Research programs, offset by mandatory decreases due to the expiration in 1968 of authority to conduct labor mobility demonstration program ($3,866,000 revised amount available in 1968), and the bonding demonstration assistance program ($200,000) and a non-recurring decrease of $198,555.

BASIS FOR THE ESTIMATE

The estimates of financial resources for the Manpower Development and Training Activities Title I Research and Experimental and Demonstration programs are based on the anticipated numbers and types of projects which should be initiated or maintained in fiscal year 1969. While costs of individual research and experimental and demonstration projects vary widely, the estimates are based on past experience with similar types of projects. The estimates identify the various areas in which research and experimental and demonstration are needed. Increased program levels are based on projects needed to give full support to the evolving manpower programs.

*Activity 2. Planning, Research and Evaluation*

| | |
|---|---|
| 1968 (positions, 282) | $5,155,239 |
| 1969 (positions, 369) | 6,368,100 |

NARRATIVE DESCRIPTION OF PROGRAM

This program provides for the Federal administration costs of the policy planning, cost effectiveness, manpower data system, research and evaluation activities of the Manpower Administration in planning, developing and implementing a comprehensive manpower program. It coordinates and provides leadership for the activities of many agencies, public and private, concerned with the motivation and development of human resources through training programs. It provides continuous review and appraisal of approved programs and identifies and develops solutions, through research, experimental and demonstration programs, for the special manpower problems and needs of various groups of potential trainees. Techniques, methodology, and solutions to problems developed through such programs are injected into the mainstream of the manpower development programs of the Nation.

This program provides for the staff services required in the preparation of the reports of the Secretary of Labor to Congress contained in the *Manpower Report of the President* which the Manpower Development and Training Act requires, and which contains reports that include evaluation of the training programs, number of employed and underemployed persons who have secured full-time employment as a result of such training and the nature of such employment, need for continuing such programs, and recommendations for program improvement. Also provided by this activity is the direction and promotion of programs of information and communication required to achieve the purposes of the Act, as well as for staff support and service to the National Advisory Committee created by the Act.

*Associate Manpower Administrator's Office*

The Associate Manpower Administrator provides executive direction, coordination and guidance to the staff and program functions included in this activity. The office serves as the focal point through which the policy planning, research, experimental, demonstration and evaluation findings are integrated into a cohesive pattern and brought to bear on current manpower program issues. The office also organizes and disseminates technical manpower information and houses the Secretariat of the National Advisory Committee.

*Planning and Policy Development*

The planning and policy staff are concerned with the formulation and development of the basic policies and plans for the comprehensive nationwide manpower program. It provides staff support in synthesizing the results of research, experimentation and evaluation into the fabric of the national manpower program, in forging a coordinated Federal manpower development and utilization effort, in appraising the need for and effectiveness of the Federal manpower program efforts, and in developing the factual basis for management decisions covering the entire, broad spectrum of manpower program activities.

It is the principal planning and policy instrumentality of the Manpower Administration. It is charged with developing both short- and long-range plans and policies for a comprehensive manpower program through which to achieve the most efficient development, distribution, and utilization of the Nation's manpower resources. It (1) analyzes and identifies the socio-economic needs related to manpower; (2) defines and refines manpower program goals and objectives; (3) designs and articulates the overall array of Federally supported manpower programs, weighing and appraising programming alternatives for reaching established goals and analyzing the marginal contribution and cost effectiveness of resources applied in the various programs to maximize attainment of objectives; (4) formulates legislative proposals and coordinates legislative affairs; (5) develops policies for and plans specific program applications for new undertakings as well as modifications of existing activities; and (6) develops annual national manpower development planning guidance through which to steer operating programs.

*In 1967*, a wide range of activities were carried out. The Cooperative Area Manpower Planning System was invented, the details were worked out with an agreement reached by four Executive Departments and one independent agency, and area and State comprehensive manpower planning was successfully initiated. A proposal to provide skill training to inmates of correctional institutions was completed and following enactment of Section 251, an amendment to the Manpower Development and Training Act, the program and administrative design for the pilot inmate training program was developed. The Department of Labor manpower program relationships with the Department of Housing and Urban Development Model Cities program was established and representation was provided on the Model Cities Task Force, the multi-agency Neighborhood Center Pilot Program, and other interagency planning coordination activities.

Considerable progress was made in initiating a comprehensive cost-benefit analysis program within the Manpower Administration, with the assistance of an outside contractor (Planning Research Corporation). A draft Cost-Benefit Analysis Handbook was prepared laying out three study methodologies appropriate for application to various kinds of manpower programs and varying prospective policy alternatives. Specific studies were undertaken using each of the methodologies; one was completed, one completed in draft, and one gotten well started. The completed study showed, within the limitations of available data, that both institutional type and on-the-job training under the Manpower Development and Training Act have very good benefit-to-cost characteristics. Institutional training returns in total $1.78 for each $1 of Federal investment during only the first year following training, while on-the-job training returns $3.28 per Federal investment dollar in a similar period. In neither case did the calculated returns include the increase in taxes which could be expected from the increased trainee earnings.

Manpower program and financial data required for cost-benefit analysis purposes were identified. The complexities and expenses of continually collecting all the detailed data needed, for the entire populations served, for such analytical purposes necessitates critical assessment of the extent to which sample surveys, or routine data collection on a sample of the program populations may suffice for Cost-Benefit Analysis.

The first nationwide interagency tele-conference on Federal manpower program plans and policies (Labor, Health, Education, and Welfare, and Office of Economic Opportunity) was conducted. Staff focused activity on professional and technical aspects of testing the disadvantaged. The work of the Interagency Task Force on Counseling was concluded and a substantial part of the final report, with recommendations concerning strengthening of counseling services, was completed. Guidelines for development and operation of the Concentrated Employment Program were prepared and Project Transition was planned in cooperation with Department of Defense.

Staff successfully completed work culminating in the 1966 Amendments to Manpower Development and Training Act, prepared the Manpower Administration's legislative program for the 90th Congress, 1st session, including specific legislative proposals, and various materials relating to proposed legislation under consideration by the Congress were prepared, i.e., a recommendation for funding the Veteran's Employment Service activities under the Cold War GI Bill. The office recommended disposition of approximately 10 Manpower Development and Training Act trainee appeals and led a work group on procedures for new programs delegated to the Department of Labor by the Office of Economic Opportunity.

The office provided overall staff leadership coordination and direction for the initiation of the Department of Labor system of planning and fund control for all Manpower Administration program categories—Manpower Development Assistance, Employment Assistance and Income Maintenance. The staff also provided guidance, consultation and technical assistance to all elements of the Manpower Administration in the installation of the system. The staff provided review of goals, objectives and production schedules for all components of Manpower Administration, modification of the system where necessary and development and monitoring of an overall Special Studies program. Another important phase of the departmental system of fund control is the quarterly review and analysis of all three Manpower Administration program categories.

*In 1968*, the Cooperative Area Manpower Planning System was broadened to include two more Executive departments and another independent agency. Cooperative Area Manpower Planning System provides for a continuous working relationship among several agencies in the coordinated planning and implementation of manpower and related programs. Agencies cooperating with the Manpower Administration and actively participating in Cooperative Area Manpower Planning System include the Office of Education and the Social and Rehabilitation Service of the Department of Health, Education, and Welfare; the Economic Development Administration, Department of Commerce; the Department of Housing and Urban Development; Department of Agriculture; the Water Pollution Administration and the Bureau of Indian Affairs of the Department of Interior; the Office of Economic Opportunity and the Civil Service Commission. Further refinement and improvement of the system to achieve greater efficiency, program effectiveness and operating economies are well underway, broadening its scope to almost 100 job market areas as well as the 54 States and territories, and providing for more influential roles for governors and mayors.

As part of the continued cost-effectiveness-study program, an illustrative cost-goals study of the U.S. Employment service will be completed. In it are developed methodologies for estimating the benefits in terms of increases in gross national product which would result from additional investment in Employment Service activities, and for assessing the differences in benefits which would result from putting the investment increments into one or another of the battery of services provided by the Employment Service System. An illustrative cost-constraint study on the unemployment insurance program, already partially completed, attempts to assess the increase in automatic anti-cyclical effects of extending Unemployment Insurance and increasing benefits, at an assumed constant total level of benefits.

Plans were completed for establishing a new Department of Labor advisory committee on counseling. This office will provide professional and technical assistance as needed, in the areas of counseling, testing, and supportive services, to components of the Manpower Administration. A position paper has been prepared on the stimulation of employment in urban slum areas.

Staff is preparing the Manpower Administration's legislative program for the 90th Congress, 2nd session, including development of specific legislative proposals and coordination of all proposals recommended by various constituent elements of the Manpower Administration. Recommendations are prepared on approximately 125 legislative proposals originating outside the Manpower Administration such as proposals to increase participation by the private sector in the Nation's manpower development and training efforts. Staff papers analyzing significant manpower implications of various legislative measures are underway. Policy recommendations for disposition of about 12 Manpower Development and Training Act trainee appeals will be made. Other activities planned include: Implementation of the health services provisions of the Manpower Development and Training Act; preparation of an inter-agency standard on fringe benefits for poverty program employees and writing a compendium of Manpower Administration criteria for development, review, and approval of these projects to be used at national, State, and local levels. In 1968, this office was assigned responsibility to oversee and coordinate within Manpower Administration referral of certain issuances to the Advisory Commission on Intergovernmental Relations.

Staff recommendations have been prepared for restructuring the Manpower Administration's top planning, programming operations, monitoring machinery, substituting a Management Committee for the earlier Planning Council. With the increasing size of the Manpower program, there will be further modification in program structures of the Manpower Administration system of planning and fund control, and other system design and installation work. As a result of new programs, quarterly review and analysis will be more complex.

*In 1969*, further development and improvements in the Cooperative Area Manpower Planning System will be introduced. Staffing will be made available on a grant or contract basis, to State and designated area Manpower Coordinating Committees; more detailed guidance and assistance will be provided for developing State and local manpower information on which to base operating plans.

More staff time will be devoted to conducting detailed aggregate and specific studies of particular manpower areas and problems, e.g., the universe of need, migrant workers, urban slum residents, welfare recipients, to support the conception and design of both the overall manpower program and specific program proposals. In order to have an adequate basis for program proposals, and the factual basis for identifying and eliminating programs which have low payoffs and/or have outlived their usefulness, it is essential that program studies of greater depth be undertaken on a much greater variety of subject matter areas.

Increased emphasis will be put on cost-effectiveness analysis of manpower programs including: (1) developing an overall plan for the undertaking of specific cost-benefit studies on a systematic basis, within a set of priorities which focuses the scarce analytical resources on the most urgent and fruitful studies; (2) developing methodologies and specifications (and data requirements) for increasingly sophisticated cost-benefit analysis; (3) guiding and monitoring contractors assisting the Manpower Administration in this field; (4) conducting cost-benefit studies; and (5) monitoring progress of the Manpower Administration cost-effectiveness analysis program and assuring that its outputs are built in to program planning documents, e.g., Program Memoranda.

The fiscal year 1969 increases are to provide the minimum capacity for conducting and guiding the bureaus in the conduct of cost-effectiveness studies on a meaningful, if still fairly small, scale. The increase will also permit a reasonable number of high priority studies to be undertaken. Chief among these will be studies of new programs and administrative arrangements, such as cost-effectiveness studies of the Work Incentive Program, the Concentrated Employment Program, and other interagency integrated operating activities in addition to the following major study areas: (1) Further investigation of on-the-job—institutional training comparisons, by type of trainee, particularly the disadvantaged; (2) An in-depth survey and analysis of the United States Employment Service at the local level, both to explore the possibilities of better data and to develop a model analytical system with an adequate built-in information system; (3) Development of a simulation model to indicate how the Manpower Administration can determine the optimum investment in a particular individual, given his characteristics (age, sex, education, skills, attitudes, etc.); (4) Formulation of a consistent goal and subgoal structure for programs directed to the disadvantaged, devising a cost-goal study to explore the optimum mix of manpower services for the disadvantaged, and actually calculating the cost-goal curve insofar as data permit; (5) Attempt to devise a more meaningful cost-effectiveness analysis in the unemployment insurance area than was possible in the first illustrative study; (6) Interprogram comparisons to appraise the relative cost-effectiveness the various program components in the overall Federal manpower development effort.

Additionally, it is likely that as experience is gained in applying study methodologies, modifications and even basic revisions may be indicated. Some adaptations are almost certainly to be expected to accommodate study designs to data which can be developed reasonably economically, as contrasted with data "ideal" for cost-benefit purposes. Thus, a substantial undertaking in fiscal year 1969 will be the improvement and further elaboration of cost-effectiveness study methodologies and the development of ways to bring the whole range of systems analysis techniques to bear on manpower program planning.

Additional professional and technical assistance will be provided to the many and growing facets of Manpower Administration programs relating to the fields of counseling and related supportive services such as (a) counseling, assessment, and occupational information, and (b) the supply, demand, preparation and utilization of counselors and personnel in supportive services. In future staff must provide such assistance for all Manpower Administration programs, (previously limited merely to the Manpower Development and Training Act), and to meet the continuing interagency and intraorganizational liaison in this field.

An increasing amount of policy and standards development work is implicit in innovative manpower programs being earmarked. A continuing review of their

effectiveness and adequacy is necessary (a) in instituting new programs or undertaking substantial redirection of current programs, (b) to tie together all elements of manpower programs for consistency with total Manpower Administration objectives and to assure conformity with stated policy, (c) to incorporate experimental and research findings and results obtained from operational experience in the formulation of policy, (d) to develop innovative techniques for dealing with old problems and adjust, through issuance of orders and guidelines, manpower programs to meet changing conditions, and (e) to provide technical assistance in continuing review of new programs and approaches to achieve timely implementation. This requires constant liaison and viable working relations with technical experts in the fields of experimental research, program administrators and evaluators, members of inter-agency or special task forces, advisory committees and others involved in manpower activities. Staff will review all instructions issued by each organization element responsible for program operation for conformance with established policies and standards. Program operations will be reviewed regularly to assure that prescribed policy is adequate to achieve the desired results and that new policies are timely implemented.

Expiration of Title II of the Manpower Development and Training Act in fiscal year 1969 will require staff work to develop needed legislation for manpower development through extension and modification of the existing Act or by wholly new legislation. Drawing upon knowledge of requirements, and shifts in program needs, such as finding ways to secure greater involvement of the private sector in providing training at entry levels, poses a formidable task. Careful scrutiny of an increasing number of legislative proposals is required to keep the Manpower Administrator fully advised for decision making purposes, for participation in hearings, etc. To perform these staff functions adequately it will be necessary to establish a comprehensive source of reference material pertinent to the growing array of legislative considerations.

Administration of any program of the size and diversity of the Manpower Administration, requires the use of a management system through which decisions based on program requirements are made and communicated throughout the organization, and program performance is continually monitored. The existing system must be improved and adapted to the unique requirements of all manpower program configurations and accepted as the primary tool of management at all levels of management in the Manpower Administration. Accordingly, there is an urgent necessity to build a staff arm capability for the Assistant Secretary for Manpower, commensurate with the magnitude of the manpower program. In fiscal year 1969, the systems cost of the manpower program will amount to almost $1.7 billion exclusive of benefits paid under State Unemployment Insurance laws from trust funds which may run another $2.5 billion. With the increasing size of the manpower program have come modifications in program concept and administrative structures, such as the adult work-training programs under the Economic Opportunity Act, and Concentrated Employment Program, the new Work Incentive Program for welfare recipients and other new program concepts and funding configurations, such as "maximum employer involvement in on-the-job training," and the President's new Job Opportunities in the Business Sector (JOBS) program.

It is necessary to involve State agencies, both employment security and apprenticeship, and emerging local manpower institutions in the departmental system of planning and fund control advance planning process. Preliminary work in this direction was initiated in fiscal year 1967, but it has been delayed because of lack of staff to develop it. Installation of a compatible management system in the State agency and local sectors of manpower program operations will require significant additional "systems design" work. It will also multiply the review/reconciliation of planning and programming documents work-load.

As greater control is gained over management of individual sectors of the overall manpower program, through continuing rationalization and better articulation of the program structures, opportunities will grow to achieve meaningful administrative direction of truly comprehensive community manpower programs. In fact, this can only be done through application of an integrated management system. Additional staff resources in fiscal year 1969 will facilitate closer scrutiny of planning and programming proposals, including budget submittals, with emphasis on building State and local participation into the planning-budgeting process.

BASE

Positions: 51. Estimated cost: $762,700.

ADDITIONAL COSTS

Positions: 37. Estimated cost: $458,600.

*Manpower Data Systems*

Better organized reports on current progress and results of federal manpower programs-work, training and related education are essential for effective management. The serious inadequacies of manpower data systems were described in the report of a Task Force of the President's Committee on Manpower late in 1966. Although a number of improvements have been made in 1967, much remains to be done to organize truly comprehensive, coordinated data systems to fill gaps, to improve timeliness, to assure consistency and avoid duplication among various systems in use in the several agencies.

*In 1967*, five indepth analytical studies of the Manpower Development and Training Activities program were prepared. A total of 540 special reports were completed in response to requests from the Secretary of Labor, the Manpower Administrator, other Department of Labor officials, Congress, and the general public. Some of these reports were relatively simple while others, such as the joint request from the Senate Subcommittee on Employment, Manpower and Poverty and the House Select Subcommittee on Labor were very complex and required substantial amounts of staff and computer time.

A monthly publication, Key Manpower Facts, was initiated to summarize the progress of the Manpower Development and Training Activities program. However, the basic data reporting system proved to be too cumbersome, and not sufficiently detailed or current for most effective program and fiscal management.

The need for a more comprehensive manpower information system to provide data on project status, trainee characteristics, by cities etc. became acute in the summer of 1967.

*In 1968*, a new data reporting system for management purposes was developed to provide prompt current information on the status of all ongoing projects by city, county and State, on an interim basis. At the same time, the regular reports are being maintained.

The new reports include: (1) Monthly status reports on all ongoing projects showing authorized funds and enrollments, enrollments to date, current enrollment, early terminations and positions still available. These include about 12,500 projects. Reports will be provided to State and local administrators of institutional and on-the-job training projects; (2) An interim reporting system for the Concentrated Employment Program was developed and was in operation in 20 cities and two rural areas by October 1967. It is now being revised and will be extended to additional cities as the Concentrated Employment Program is expanded; (3) A new current report by quarters for calendar 1967 on the characteristics of Manpower Development and Training Activities enrollees, to identify the trends in enrolling the disadvantaged, is now in operation; (4) Summary reports by city, State and county on all Manpower Administration programs are being prepared for use in planning the new JOBS summer youth programs and for appraising the Cooperative Area Manpower Planning System programs; (5) Reporting systems and analyses are being organized on a preliminary basis for the new on-the-job programs (JOBS), and (6) Initial steps have been taken to organize inter-agency reports on manpower programs.

The extensive reorganization and redesign of the Department of Labor's own reporting system, together with the new inter-agency responsibility, will require additional supporting technical, professional and clerical staff in fiscal 1969. A total of 20 positions is requested, 10 in the professional area and 10 for clerical support.

The combination of expanded program responsibilities, recurring demands for new and unplanned informational data, and the constant need for improvement and refinement of data gathering as the Manpower Administration's program parameters become more extended make this increase in staff mandatory if responsibilities are to be adequately and properly fulfilled.

*In 1969 plans include:*

1. *New reporting systems must be developed for the several new programs for the disadvantaged in the central cities—and coordinated among several agencies.* Some of these reports—like the Department of Labor's Concentrated Employment Program, the Neighborhood Centers, etc., have already begun on an interim

basis in fiscal 1968. As these programs are extended in fiscal 1969, automatic data processing will be required. At the same time, reports for the new Work Incentive Program, Model Cities, etc., now being designed, must be put into operation and merged with existing reports in such a way as to minimize the already heavy burden of reports on local agencies.

2. *Design and initial operation of a comprehensive automated management data system for all manpower work and training programs of the Department of Labor.* This will yield: (a) *Current* status reports on all projects *by program*—i.e., monthly within about a month—on total enrollment, completions, current enrollment, positions vacant; expenditures etc., to compare with authorized positions and funds. These data are already available for programs and are actually operating on an interim basis for the Manpower Development and Training Activities and the Concentrated Employment Program. These systems will be further improved and integrated in fiscal 1968 and 1969, and should be fully operational by the end of fiscal 1969; (b) City, county and State summaries of these data. These data, though available in the records, have not been regularly tabulated. Listings of individual projects will also be made available to management at Federal, State and local levels for better management and planning.

BASE

Positions: 33. Estimated cost: $750,300.

ADDITIONAL COSTS

Positions: 20. Estimated cost: $213,600.

*Evaluation of Manpower Programs*

*In 1967*, a total of 15 evaluation studies were initiated (7 during the fourth quarter), and 9 studies were completed. In each study completed, the strengths and shortcomings, the problems and obstacles were pointed up and recommendations for improving the program were developed and submitted to Department of Labor officials for consideration and action.

*In 1968*, a comprehensive work program has been developed. The plans summarize evaluation activities currently in progress and describe proposed evaluation studies and other activities to be conducted during the fiscal year.

The following evaluation studies have been planned for fiscal year 1968:

A. Series of evaluation studies concerning the progress and effectiveness of the Concentrated Employment Program.

B. Evaluation studies of manpower programs in assisting members of special worker groups.

C. Evaluation studies of the program and effectiveness of the Work Incentive Program under Title IV of the Social Security Act.

D. A series of studies relating to the progress and effectiveness of the Manpower Development Training Activities institutional and on-the-job training program.

E. An evaluation of experimental and demonstration programs under Manpower Development Training Activities.

F. An evaluation of a pilot nationwide study of training of inmates in correctional institutions.

G. A series of evaluation activities concerning various antipoverty programs administered by the Department of Labor.

H. An evaluation of the total manpower effort in selected cities.

I. Evaluation studies of other special programs including those interdepartmental in nature.

Already under way or completed since the beginning of fiscal year 1968 are evaluations of the Concentrated Employment Program; pilot studies of manpower programs assisting urban Negroes and mainstream Puerto Ricans; evaluation of service to older workers; evaluation of State and local advisory committee; evaluation of the use of consultants in Experimental and Demonstration projects; the study of the CBS TV program entitled, "Opportunity Line"; and an evaluation of a special project called Manpower Improvement Through Community Effort, in which there is considerable interest because of its unique nature.

The demand for evaluation services has been increasing at a very rapid pace because of the many new programs being installed and partly because of the mounting realization of the importance of evaluation.

*In 1969*, it is intended to move into a deeper more comprehensive kind of evaluation which would use all available indicators combined with special field studies to provide the basis for an overall assessment of the value of the programs. In addition to the kind of evaluation studies we have been doing, we should be making determinations about which programs should be continued, modified, combined, or terminated. Some 22 evaluation studies are planned for 1969, an increase of seven more over the previous year.

The urgent necessity for evaluating thoroughly the Concentrated Employment Program, on which so much depends; the manpower components of the Model Cities program, and the new Work Incentive Program are the most recent examples of the demand.

In addition to new programs and new evaluation objectives, there is an increasing number of crises, critical situations, and requests for information from Congress, the White House, and the Secretary. These arise particularly from high priority antipoverty programs, but may occur in any manpower area. They present a pressing need for quick evaluations and fast reporting. The need for this kind of evaluation is expected to rise in the future.

The rapidly increasing demand is put in perspective by the staff required for the 15 major evaluation studies now in process, divided about evenly between studies made by our own staff and contracted studies. A typical staff study involves visits to 20 locations and 200 man-days in planning, field work, and analysis of data, writing of the report, conferences with national office officials, and the clerical work incident to the whole process. A typical contracted study requires 70 man-days in planning, negotiating, corresponding, monitoring, analysis of results, and conferences with officials. Thus the present load of ongoing studies represents more than 2,000 man-days of work. Since the results of the studies are needed immediately, we attempt to have them performed expeditiously, if possible within six months of the initiation of active planning.

Meeting these growing needs for evaluation of program operations will require a minimum of 7 additional professional staff and one additional clerical person.

This office also has the responsibility under the departmental system of planning and fund control for the quarterly review and analysis, in which actual performance during each quarter is measured against planned activities, problems are identified, quality and quantity of performance are assessed and recommendations are made for program improvement. Although this staff has responsibility for conducting the quarterly review and analysis for all three Manpower Administration program categories, no additional staff has been made available for this activity. Thus, it has been necessary to divert staff from other important functions in order to accomplish the quarterly review and analysis. Three additional positions are required for this purpose.

BASE

Positions: 23. Estimated cost: $924,800.

ADDITIONAL COSTS

Positions: 11. Estimated cost: $136,000.

*Research*

This program also provides leadership and direction in the planning, coordination, conduct, and evaluation of Departmental manpower research. It develops plans and assigns priorities for research that will produce the factual basis for programs and policies to assure the fullest development and utilization of all of this Nation's manpower resources, and maintains an inventory of current research on manpower. Based on its analysis and syntheses of research finding, it recommends needed changes in manpower policies and programs. It not only plans and administers the contractual and grant research programs described in the preceding section of this statement, but it also conducts a staff research program and provides specialized and technical services to officials of the Department and other agencies. Finally, it prepares and disseminates publications based on research findings, undertakes to assure the effective utilization of its research, and systematically canvasses users of manpower research to determine what use is made of research and how the program can be made more responsive to users' needs.

The research staff is responsible for planning the external research program; for reviewing and negotiating contract and grant proposals, for monitoring, ad-

ministering and evaluating research projects under grant and contract support, and for the utilization and translation of research findings into manpower policy and program terms for Departmental executives, the research community, manpower policymakers and administrators at all levels and the general public.

The program of internal staff research encompasses a variety of activities that include meeting informational and analytical needs of top level Department officials; identifying and defining research needed in specific areas and specific operating programs; translating research findings into policy and program recommendations; developing and publishing special reports on manpower problems of current interest; and carrying out primary responsibilities in the preparation of the Manpower Report of the President.

The research coordination function that is performed by the research staff is of critical importance in defining research needs, avoiding duplication and establishing research priorities in order that the research informaton and manpower data requirements necessary to make informed policy and program decisions associated with expanding operating programs and particularly the Concentrated Employment Program are met.

Insight into the nature of the organizational structure; the practices, procedures, operating programs and staffing patterns of both successful and unsuccessful sponsor organizations is urgently required to increase the effectiveness of these projects. Research studies must be conducted to discover optimum patterns and successful methods of integrating the various welfare training, education and social service activities of autonomous local and regional agenices and institutions. Information and feedback is needed on the client population before, during and after enrollment in Concentrated Employment Program projects that will permit the continuation of special services needed during the course of an individual's work career. Information is required that assesses net individual and social gains from this and other manpower programs employing a wide variety of techniques including cost-benefit analysis. Now knowledge is needed about the motivation and attitudes of potential and actual enrollees as a basis for reaching, enrolling and assisting individuals through these services.

*In 1967*, accomplishments of the research staff included the completion of thirty-one research projects. Among contracts funded, two-thirds of the total costs went for projects undertaken on the initiative of the research staff. The remainder was used for grants to individuals and institutions to conduct research in the Manpower area. A detailed description of studies, publications and other research accomplishments is included in the Narrative for Activity 1.

*In 1968*, it is planned that several important studies will be undertaken. The details of research activities planned for fiscal 1968 are described under Activity 1.

The present minimal staff levels have permitted the research staff to provide leadership and direction within the Department and to other agencies and organizations in the planning, evaluation, coordination and conduct of manpower research at the fiscal year 1968 contract and grants research program level.

In 1969, to meet the research and information needs of an expanded Concentrated Employment Program, as well as to provide the staff necessary to effectively conduct the contract and grants research program that would increase in size from $3.8 million in fiscal year 1968 to $4.8 million in fiscal year 1969, it is estimated that a total of 10 new positions will be required. A description of the functions of the additional staff follows.

Five additional positions in the internal research activity are required primarily to provide the substantive research services to an enlarged manpower research contract and grants program required to support a major Departmental programmatic expansion. The growth of external research program, the expanded wealth of information on manpower that it is expected to produce, and the program and policy implications stemming from it will have direct implications for internal research and will act to enlarge the scope of staff research. However, it is believed that the earlier organizational realignment of the research staff, by providing for specialized staff in specific research areas, will permit efficiencies sufficient to offset additional workload in such functions.

Research strategy must be developed and carefully keyed to present and emerging priority manpower problems and information requirements. This is particularly important to effectively utilize internal research capability and external contract and grant resource in order to provide urgently needed information on the Concentrated Employment Program and other operating programs to Department administrators. Research findings and recommendations must be quickly and effectively communicated to key Departmental

decision-makers, other agencies, the research community and to manpower and program administrators at all levels so that utilization is made of new information as soon as it becomes available. An increase of two positions in fiscal year 1969 in the planning, evaluation and coordination activity and the clearinghouse and utilization function of the research office is needed to meet the expansion in the scope of these activities and to keep abreast of the flow of information.

The workload requirements of the contract program, calling for an increase in funds of $500,000 in 1969, will increase significantly as the carryover of multiyear projects from previous years will also require continuing staff support. Similarly the number of academic institutions requiring administration under the Manpower Research Institutional Grants Program will increase from the current 7 to about 9. The number of small grants in process will increase by 10 over the 64 initiated in 1968.

Administrative improvements will permit the accomplishment of these expansions in program workload with less than a proportionate increase in staff. Nevertheless, the effective accomplishment of these programs and the efficient use of funds for the contracts and grants activities require a minimum of 2 additional positions.

The contracts program, in more than 5 years of operation, has already effected many efficiencies. Present staff is minimal; the request for 1969 will permit only the same minimal administration of contract research as in 1968.

The increase for the research program is far less than proportionate to the growth in the program. Some of the difference may be realized, as it was in the earlier years of the contract program, through efficiencies resulting from administrative innovations and refinements and continued experience with the program. If these estimates prove to be too low, the degree of administrative effectiveness of both the contracts and grants programs may be reduced to less than desired levels.

In order to assure effective application of the departmental system of planning and fund control to research investment, which are expected to involve some $6 million during fiscal year 1969, the research staff will require one additional position to work with the planning group. This additional position will have the responsibility for the required planning, execution and monitoring of the research program in connection with the departmental system of planning and fund control.

BASE

Positions: 92. Estimated cost: $1,352,500.

ADDITIONAL COSTS

Positions: 10. Estimated cost: $134,000.

*Experimental and Demonstration Programs*

The experimental and demonstration program seeks to develop new ideas and techniques to meet manpower problems more effectively—particularly the problems of disadvantaged groups. This program provides for staff services to carry out the planning, development, monitoring and utilization of findings of the program. The accomplishments in fiscal year 1967 are summarized under Activity 1.

*In 1968* it is planned that the staff will develop planning, monitoring and evaluations in connection with some 75 projects in five general categories—employer involvement, minority group self-help, other special techniques for specific groups, new opportunities in major occupations and formal experimentation-analysis. Details of the program plans for 1968 are summarized under Activity 1.

*In 1969* major emphasis will be placed on improvement in the planning, development and monitoring of experimental and demonstration programs. Improvement in utilization of the findings of such programs will require an increase of 9 positions, 4 for the Division of Experimentation, 3 for the Division of Utilization and 2 for the Division of Demonstration. This additional staffing is vital for the following basic reasons: (a) Monitoring of experimental and demonstration projects has been too skimpy. Evaluators of such projects have stressed that additional time devoted to each project, particularly through visits to project sites, would increase severalfold the returns from such projects. Additional staff resources would enable the desired improvement in guidance of project personnel on experimental objectives and methods, solving of professional and administrative problems that cannot be met adequately by long-distance communication, and timeliness and reliability of judgments on need for revision,

curtailment or expansion of projects or major components. (b) Newer areas of innovation require more exploratory and developmental effort. Capable staff must search out guides already available from experience, check on capability of potential sponsors and appropriateness of settings for initiating projects, and conduct other pre-project preparation particularly crucial in new fields of exploration. (c) Formal experimentation requires more staff time per project. As the experimental and demonstration program focuses more on formally structured specific measurement of the value of various techniques, it needs to devote more time to design, pre-testing monitoring, and analyses than in the case of the less sophisticated feasibility—demonstration efforts. (d) Successful demonstrations are increasing the demand for aid in utilizing demonstration project findings. As demonstration projects develop effective prototypes, the special program staff is called on to help in development of comparable efforts elsewhere, even though no further demonstration financial investment is sought. Additional personnel are necessary to meet such manpower agencies' requests for assistance in applying new techniques.

BASE

Positions: 43. Estimated cost: $746,339.

ADDITIONAL COSTS

Positions: 9. Estimated cost: $115,300.

*Changes for 1969*

| | |
|---|---|
| Mandatory changes amount to | +$135,661 |
| Financing changes amount to | +19,700 |
| Program changes amount to | +1,057,500 |
| Positions | +87 |

SUMMARY STAFFING PATTERN

| | 1968 | 1969 | Program increases | |
|---|---|---|---|---|
| | | | Positions | Amount |
| Associate Manpower Administrator's Office | 40 | 40 | | |
| Planning and policy development | 51 | 88 | +37 | $458,600 |
| Manpower data systems | 33 | 53 | +20 | 213,600 |
| Evaluation and reports | 23 | 34 | +11 | 136,000 |
| Research | 92 | 102 | +10 | 134,000 |
| Special manpower programs | 43 | 52 | +9 | 115,300 |
| Total | 282 | 369 | +87 | +1,057,500 |

In summary, an increase of 87 positions as shown organizationally on the above table and $1,212,861 is requested for this activity over the 1968 base of 282 positions and $5,155,239. Of the increase $135,661 is a mandatory increase made up of $74,700 for net additional pay increase costs, $64,100 for within-grade increases and $13,500 for an extra day of pay in fiscal year 1969 offset by a decrease of $16,639 unobligated fiscal year 1967 funds. There is also a financing change of $19,700 for increased costs of the Departmental Working Capital Fund. The balance of $1,057,500 represents proposed program increases.

BASIS FOR ESTIMATE

Staff and financial resources for this Activity are based on past experience in providing planning, research and evaluation services to the Manpower Administration's programs, plus estimates of resources needed to implement the needed improvement to provide support to the expanding manpower programs with particular emphasis on the Cooperative Area Manpower Planning System and the Concentrated Employment Programs.

*Activity 3. Financial and management services*

| | |
|---|---|
| 1968 (positions, 110) | $1,536,200 |
| 1969 (positions, 159) | 2,322,300 |

NARRATIVE DESCRIPTION OF PROGRAM

This program provides for the administrative staff support provided by the Office of Financial and Management Services to the Manpower Administrator to assist him in the achievement of an integrated, national manpower program. It furnishes administrative staff support services to the Office of the Manpower Administrator and the Office of the Associate Manpower Administrator in the budget, fiscal management, and administrative service areas, and provides centralized personnel services to all bureaus and offices of the Manpower Administration.

This program also provides for budget, accounting and financial management, contracting and administrative support services to the research, experimental and demonstration programs under Title I of the Manpower Development and Training Act, the training programs under Title II of the Act and the Concentrated Employment programs. Among these services are the negotiation and administration of contracts and grants, including the establishment of contracting policies and procedures, review of contract and grant proposals, establishing obligations and maintaining fiscal controls, and the audit, certification and processing of periodic payments to contractors. Under the provisions of the Act, contracts are entered into in three basic categories: (1) contracts and grants for research; (2) contracts with employers and other organizations for providing on-the-job training; (3) contracts and grants for experimental and demonstration projects; and, (4) contracts in connection with the Concentrated Employment program which includes various training components authorized under the Manpower Development and Training Act in one contract.

In addition to contracting services, also included are services to contractors in the location, acquisition, control and disposition of equipment provided to contractors from excess or surplus Federal property or purchase through the General Services Administration or other sources of such equipment. Technical financial assistance also is provided to contractors in the establishment and maintenance of appropriate accounting and financing management systems.

The 1967 actual and 1968 planned accomplishments are shown on the Workload Statistics table.

*Changes for 1969*

| | |
|---|---|
| Mandatory changes amount to | +$54,900 |
| Financing changes amount to | +11,300 |
| Program changes amount to | +719,900 |
| Positions | +49 |

In 1969, the full implementation of the Concentrated Employment Program will have a substantial impact on the workload of the Office of Financial and Management Services. The Program which was initiated in fiscal year 1967 with projects in some 20 cities and two rural areas will be expanded to approximately 146 geographic locations by the end of fiscal year 1969. The Office of Financial and Management Services, as the administrative staff arm of the Manpower Administrator, will be called upon to provide services in support of this greatly expanded program. A brief summary of the plans for fiscal year 1969, follows.

*Contracting services*

A key characteristic of the Concentrated Employment Program is its bringing together resources from the several manpower programs thus providing the fullest range of services to the disadvantaged in the selected poverty areas. It accomplishes this by means of a single contract which is funded from several appropriations and as many as six allotments. This pulling together of formerly separate contractual actions has great merit from the program point of view but the negotiation and administration as well as the funding, reporting and control are far more complex than are similar actions relating to a single program funded from one source.

The Office of Financial and Management Services will be required to lend assistance to contractors participating in the program and to technical or program personnel of the Manpower Administration. In this program it is the responsibility of the Office of Financial and Management Services to actually negotiate and prepare the contract documents and all supporting documentation for the contract. Once the contract is negotiated and signed it becomes the responsibility of the Office of Financial and Management Services to provide for its administration through to its final settlement including the processing of payments to the contractor under the terms of the contract.

The Job Opportunities in the Business Sector Program as outlined in the President's Manpower Message and in the respective Manpower Administration budget estimate will place a similar type workload increase on the contracting operations of the Office of Financial and Management Services.

Under this new program contracts will be negotiated with private employers for an intensive on-the-job training program for the disadvantaged. As outlined above for the Concentrated Employment Program, contracting for this type of program is a complex and time-consuming process. Funding for this program can also be made from several appropriations and allotments. Contracting under this program is even more complex however in that contracts are granted on the basis of competitive procurement among private firms rather than the local Community Action Agency or Employment Service office as in the Concentrated Employment Program.

Dealing with private firms also is more complex in that the contracting staff must work with the private firm to help it to meet the contracting requirements peculiar to this type of program. Contracts must be tailored to the individual situation requiring that contracting staff be cognizant of the project requirements so as to insure proper inclusion of such requirements in the contract itself. The contract likewise must be followed through to provide proper administration and payments.

The workload resulting from these new concepts in the Manpower programs of the Department are not clearly reflected in quantity workload measurements. Nevertheless, additional staff will be needed to meet these added requirements. For all these contracting activities, 11 additional positions will be required. (See Workload Statistics Table)

BASE

Positions: 29. Estimated cost: $341,600.

ADDITIONAL COSTS

Positions: +11. Estimated cost: +$127,600.

*Finance and Accounting*

*In 1969*, the expansion of the program in the accounting and financial management area will require additional resources to maintain accurate obligation and expenditure data for each project in total and in detail for each of the individual program and appropriation components of the over-all contract. Initial experience in the program also has demonstrated a need for providing technical assistance to sponsors concerning the development and installation of accounting and financial management reporting systems. These activities will require an additional 11 positions. (See Workload Statistics Table)

In addition, an increase of $150,000 will be required for automatic data processing services to provide for the establishment of a cost-accounting system and the greater detail of financial data under the expanded program.

BASE

Positions: 16. Estimated cost: $368,200.

ADDITIONAL COSTS

Positions: +11. Estimated cost: +$277,600.

*Administrative Services*

Another area of program support is that of providing assistance to sponsors in the acquisition and disposition of excess and surplus Federal government property. Space and property management specialists will work directly with Departmental program staff and sponsor staff to secure office space and to obtain equipment and other property for use in such projects. To the extent that Federal equipment and property is used, the cost to the Federal government is thereby reduced. It is estimated that $2.5 million can be saved during fiscal year 1969 by utilizing such equipment. In 1969, one additional position will be required to provide adequate space and property services to sponsors of the expanded program. In addition, three added positions will also be required to provide administrative services to the added 414 Federal positions requested by the salaries and expenses budgets of the Manpower Administration. The implementation of new procedures and methods in the Administrative Services area is continuing and will result in more efficient operation. (See Workload Statistics Table)

BASE

Positions: 11. Estimated cost: $110,400.

ADDITIONAL COSTS

Positions: +4. Estimated cost: +$40,300.

*Budget*

*In 1969*, it is planned that the departmental system of planning and fund control will be fully implemented in the Manpower Administration. The Office of Financial and Management Services will play a major role in this area. The departmental system of planning is heavily dependent on budgetary support. The budget staff must provide assistance in all phases of the cycle from the five-year plans to the program accomplishment schedules, providing revisions at each stage of budget action. It translates program levels approved in the appropriations into operating budgets or production schedules. It collects the data needed for the quarterly review and analysis process and provides analysis of the financial data. No additional budget staff has ever been provided for this support and it has become clear that added staff is essential to effective operation of the program. Three additional positions are needed in fiscal year 1969 to provide necessary services. (See Workload Statistics Table)

BASE

Positions: 13. Estimated cost: $175,600.

ADDITIONAL COSTS

Positions: +3. Estimated cost: $34,800.

*Management Analysis*

*In 1969*, the broadened application of this system of planning and fund control in the Manpower Administration will also demand increased organization and management services. This is particularly true in the area of management improvement and cost reduction. As more and more emphasis is placed on cost benefit and cost reduction, program officials will require assistance in identifying and implementing projects in this area, two additional professional positions will be needed. (See Workload Statistics Table)

BASE

Positions: 7. Estimated cost: $111,500.

ADDITIONAL COSTS

Positions: +2. Estimated cost: +$23,700.

*Personnel Management*

The Office of Financial and Management Services provides personnel services to all operating bureaus and staff offices of the Manpower Administration. Over the past several years it has become increasingly apparent that the staff which has been provided for providing personnel services has been grossly inadequate to meet effectively the needs of the expanding manpower programs.

*In 1969*, in order to provide the resources necessary for a more adequate personnel program an increase of 18 positions is requested. This increase of 18 additional positions will increase the ratio of personnel staff to population served from 1: 05 to 1: 63.

In recent years, there have been a number of significant developments which have changed drastically the nature of personnel services to be provided within the Manpower Administration:

First, there has been a significant growth in the nature and scope of manpower programs themselves and in the number of employees necessary to implement them. The Manpower Development and Training programs, research and experimental programs have grown from initial pilot programs into significant operating programs and have been expanded into the Concentrated Employment Program which consolidates into a single contract all manpower services.

Second, the manpower programs have continued to be reshaped and reoriented in order to meet more adequately the pressing social and economic needs of the Nation. This has resulted in the redesigning of organizational arrangements

within the Manpower Administration and the consequent revision and reclassification of position descriptions.

Third, there is an urgent need for the establishment of closer, continuing relationships between the professional staff of the personnel office and operating officials in both the national and regional offices for the purpose of establishing better supervisory and management techniques in the handling of complaints and grievances.

Fourth, there has been a substantial increase in time devoted to labor-management relations, with the institution of new grievance procedures, and the negotiation of two agreements with employer unions, one for national office employees and one for field employees.

In fiscal year 1968, 27 positions are authorized to provide personnel services to 2,850 employees in the Manpower Administration, excluding the Bureau of Work Programs since positions for providing prsonnel services for the Office of Economic Opportunity programs are provided by funds allocated by that agency to the Department. The present ratio provides for one personnel *position to each 105 employees which is totally inadequate.* Following a survey by a management consultant firm, the Department established criteria for the staffing of personnel offices. This criteria provides as a minimum a ratio of one personnel position to each 75 employees and as a maximum of one to 50.

While it would be desirable to provide enough positions for a ratio of one to 50, the Manpower Administration is requesting 18 additional positions at this time to provide for a ratio of one to each 63 employees. If this staff level continues to prove inadequate a request will be made in the 1970 budget to provide for a ratio of one to 50. (See Workload Statistics Table.)

BASE

Positions: 27. Estimated cost: $325,400.

ADDITIONAL COSTS

Positions: +18. Estimated cost: +$215,900.

In summary, the Office of Financial and Management Services will require an estimated 49 additional positions and $786,100 in fiscal year 1969 over the base level of 110 positions and $1,536,200 for a total of 159 positions and $2,322,300. Of the increase $719,900 will be needed to finance the 49 position program increase; $54,900 is for mandatory increases including $25,100 for additional pay raise costs; $24,800 for within-grade increases; and $5,000 for an extra day of pay in 1969. In addition, $11,300 represents a financing change to meet increased costs of Working Capital Fund services.

BASIS FOR THE ESTIMATE

The estimate for this activity is based on past experience in providing financial and management services to the Manpower Administration program. Increases are proposed for fiscal year 1969 in the Manpower Development and Training Act programs both under the Title I Research program and in Title II training programs which will increase administration workload by the greater degree of complexity of this program under the Concentrated Employment Program concept. In addition, the implementation of the Departmental system of planning and fund control and the improvement of personnel services give rise to needs for increased staff resources in this activity. The following table indicates past workload and projections for fiscal year 1969.

| Unit | Workload measure | 1967 actual | 1968 estimate | 1969 estimate |
|---|---|---|---|---|
| Contracting | Contracts reviewed and negotiated | 1,624 | 1,800 | 2,000 |
| | Desk audits and payments to contractors | 23,188 | 35,000 | 40,000 |
| | Contract/agreement closeout actions processed | 472 | 3,900 | 5,000 |
| Finance | Accounts serviced | 16,532 | 17,700 | 19,000 |
| Budget | Budgets prepared | 18 | 20 | 20 |
| Management analysis | Organizational analyses performed | 15 | 17 | 20 |
| | Special studies and reports | 51 | 60 | 70 |
| Personnel | Personnel actions processed | 5,234 | 5,500 | 6,000 |
| Administrative services | Contracts serviced | 11,090 | 13,000 | 14,000 |
| | Equipment, supply, and printing requisitions processed. | 2,020 | 2,300 | 2,500 |

*Activity 4. Executive direction*

1968 (positions, 40) ..... $727,200
1969 (positions, 50) ..... 931,600

NARRATIVE DESCRIPTION OF PROGRAM

This activity provides for the executive direction, supervision, and coordination of the manpower programs of the Department of Labor by the immediate Office of the Manpower Administrator. The Office of the Manpower Administrator is responsible for the supervision and direction of the Bureau of Employment Security, the Bureau of Apprenticeship and Training, and the Bureau of Work Training Programs which administers the Youth and Adult training programs authorized by the Economic Opportunity Act and which have been delegated by the Office of Economic Opportunity to the Department of Labor. Likewise, the 1967 Amendments to the Social Security Act placed the responsibility for administering the Work Incentive Program in the Manpower Administration.

In addition to the immediate direction, supervision, and coordination of the staff offices and operating bureaus with the Manpower Administration at the headquarters level, this activity also provides for the coordination of manpower programs at the State and local levels by Regional Manpower Administrators located in the field.

In fiscal year 1968, the Manpower Administration established Regional Manpower Administrators in eight regional locations. A total of 22 positions was authorized by the 1968 appropriation for these Regional Manpower Administrators and staff.

*Changes for 1969*

Mandatory changes amount to ..... +$27,200
Financing changes amount to ..... None
Program changes amount to ..... +177,200
Positions ..... +10

In 1969, it is proposed that for these Regional Manpower Administrators to more effectively carry out their duties, four positions will be needed in each regional office: a Regional Manpower Administrator, a Manpower Officer and two secretaries. This would require a total of 32 positions in contrast to the 22 positions authorized by the 1968 appropriations.

BASE

Positions: 40. Estimated cost: $727,200.

ADDITIONAL COSTS

Positions: 10. Estimated cost: $177,200.

In summary, an increase of 10 positions and $204,400 is requested for this activity over the 1968 base of 40 positions and $727,200. Of the increase $27,200 is a mandatory increase made up of $14,500 for net additional pay increase costs, $10,300 for within-grade increases and $2,400 for an extra day of pay in FY 1969. The balance of $177,200 represents program increases.

DISTRIBUTION OF FIELD STAFF

| Supervising offices | 1968 | | | 1969 | | |
|---|---|---|---|---|---|---|
| | Professional | Clerical | Total | Professional | Clerical | Total |
| Atlanta, Ga | 1 | 1 | 2 | 2 | 2 | 4 |
| Boston, Mass | 1 | 1 | 2 | 2 | 2 | 4 |
| Washingron, D.C | 1 | 1 | 2 | 2 | 2 | 4 |
| Chicago, Ill | 2 | 2 | 4 | 2 | 2 | 4 |
| Dallas, Tex | 1 | 1 | 2 | 2 | 2 | 4 |
| Kansas City, Mo | 2 | 2 | 4 | 2 | 2 | 4 |
| New York City, N.Y | 1 | 1 | 2 | 2 | 2 | 4 |
| San Francisco, Calif | 2 | 2 | 4 | 2 | 2 | 4 |
| Total field staff | 11 | 11 | 22 | 16 | 16 | 32 |

EXPLANATION OF ESTIMATE BY OBJECT

*Personnel compensation, $6,270,400*

The estimate for 1969 of $6,270,400 provides for 578 positions and 532.8 net man-years of employment, of which $104,700 represents costs of 3.8 man-years of temporary and intermittent employment.

The increase of $1,435,500 over 1968 includes: $103,100 for net additional pay increase costs not completely funded in 1968; $92,300 for mandatory net additional cost of within-grade promotions becoming effective during 1969 or effective on only a post-year basis for base man-years staff in 1968; and $19,400 for the cost of one extra day of pay in 1969. There is a program increase of $1,220,700 for 146 additional full-time positions representing a net of 124.7 man-years of employment, including $7,500 for temporary and intermittent employment.

*Personnel benefits $466,400*

The estimate of $466,400 provides for an increase of $106,700, of which $15,100 is for mandatory increases including $8,200 for net additional pay increase costs not completely funded in 1968; $6,900 for mandatory within-grade promotion costs; and $1,500 for the cost of one extra day of pay in 1969. The program increase related to the 146 new positions requested for 1969 is $90,100.

The breakdown of costs is as follows:

| | 1968 | 1969 | Change |
|---|---|---|---|
| Retirement | $308,300 | $393,300 | +$85,000 |
| Group life insurance | 15,000 | 21,600 | +6,600 |
| Health benefits | 22,000 | 28,200 | +6,200 |
| FICA | 8,400 | 10,300 | +1,900 |
| Incentive awards | 1,000 | 1,000 | |
| Subsistence, temporary expenses, and real estate allowances due to Public Law 89-516 | 5,000 | 12,000 | +7,000 |
| Total | 359,700 | 466,400 | +106,700 |

*Travel and transportation of persons, $340,100*

The estimate of $340,100 for 1969 provides a program increase of $63,000. A detailed breakdown is as follows:

| | 1968 | 1969 | Change |
|---|---|---|---|
| Number of travelers: | | | |
| Departmental and field | 157 | 210 | +53 |
| Committees and consultants | 150 | 150 | |
| Total number of travelers | 307 | 360 | +53 |
| Number of days traveled: | | | |
| Departmental and field | 4,240 | 5,502 | 1,262 |
| Committees and consultants | 1,180 | 1,180 | |
| Total number of days traveled | 5,420 | 6,682 | 1,262 |
| Estimated cost: | | | |
| Departmental and field | $212,100 | $275,100 | $63,000 |
| Committees and consultants | 65,000 | 65,000 | |
| Total estimated cost | 277,100 | 340,100 | 63,000 |

*Transportation of things, $33,600*

The estimate of $33,600 for 1969 provides a program increase of $15,000. There are 9 household goods moves estimated for 1968. The estimate for 1969 includes an increase of $9,100 for an estimated 13 household goods moves at an average cost of $700, related to filling the 146 new positions requested estimated to involve official station transfers. A detailed breakdown is as follows:

| | 1968 | 1969 | Change |
|---|---|---|---|
| Rental of trucks and other transportation equipment | $6,000 | $8,000 | +$2,000 |
| Shipments of publications, exhibits, supplies and materials | 6,000 | 9,900 | +3,900 |
| Movement of household goods | 6,600 | 15,700 | +9,100 |
| Total | 18,600 | 33,600 | +15,000 |

*Rent, communications, and utilities, $251,300*

There is an increase of $107,400 of which $103,400 represents program increases for 146 new positions requested in 1969 and $4,000 represents financing change for costs of Working Capital Fund services. The breakdown is as follows:

| | 1968 | 1969 | Change |
|---|---|---|---|
| Rental of space (146 new positions) | | $87,200 | +$87,200 |
| Rental of equipment | $48,000 | 48,000 | |
| Communication services, including telephone toll calls, teletype and telegrams | 15,900 | 19,200 | +3,300 |
| Federal telecommunications services | 15,500 | 17,900 | +2,400 |
| Paid official mail | 16,500 | 21,000 | +4,500 |
| Working capital fund | 48,000 | 58,000 | +10,000 |
| Total | 143,900 | 251,300 | +107,400 |

*Printing and reproduction, $285,300*

The estimate of $285,300 for 1969 provides an increase of $54,200 of which $46,200 is program increase and $8,000 is financing change for costs of Working Capital Fund services. The breakdown is as follows:

| | 1968 | 1969 | Change |
|---|---|---|---|
| Forms and schedules | $14,000 | $15,500 | +$1,500 |
| Envelopes and letterheads | 8,000 | 9,000 | +1,000 |
| Publications and reports | 115,100 | 127,800 | +12,700 |
| Working Capital Fund | 94,000 | 133,000 | +39,000 |
| Total | 231,100 | 285,300 | +54,200 |

*Other services, $1,737,000*

The estimate of $1,737,000 provides an increase of $313,561 of which $312,200 is program increase, $15,000 represents financing change for costs of Working Capital Fund services, and $3,000 relates to additional pay increase costs for Working Capital Fund services not completely funded in 1968. There is also a mandatory non-recurring decrease of $16,639 of unobligated Federal Salary and Expense funds carried into 1968. The breakdown is as follows:

| | 1968 | 1969 | Change |
|---|---|---|---|
| Presidental committees | $75,000 | $75,000 | |
| Nationwide training projects and evaluation studies | 535,000 | 560,000 | +$25,000 |
| Machine tabulations, automatic data processing and accounting services | 495,000 | 645,000 | +150,000 |
| Miscellaneous services, including moving, maintenance, machine repairs, expenses for employee training, etc. | 163,800 | 235,000 | +71,200 |
| Working Capital Fund | 138,000 | 222,000 | +84,000 |
| Unobligated fiscal year 1967 Federal salaries and expenses fund | 16,639 | | −16,639 |
| Total | 1,423,439 | 1,737,000 | 313,561 |

*Services of other agencies, $19,800,000*

The estimate of $19,800,000 provides for a net decrease of $3,264,555, which provides a program increase of $1,000,000 for the research program. This is offset by a mandatory program decrease of $4,066,000 due to expiration in 1968 of authority to conduct labor mobility demonstration program ($3,866,000), and the bonding demonstration assistance program ($200,000), and a non-recurring decrease of $198,555 of unobligated funds for Title I program carried into 1968. The breakdown is as follows:

| | 1968 | 1969 | Change |
|---|---|---|---|
| Experimental and demonstration projects | $15,000,000 | $15,000,000 | |
| Labor mobility projects | 3,866,000 | | −$3,866,000 |
| Trainee bonding projects | 200,000 | | −200,000 |
| Manpower research program | 3,800,000 | 4,800,000 | +1,000,000 |
| Unobligated fiscal year 1967 funds for title I programs carried into fiscal year 1968 | 198,555 | | −198,555 |
| Total | 23,064,555 | 19,800,000 | −3,264,555 |

*Supplies and materials, $107,300*

The estimate of $107,300 provides an increase of $33,800 of which $29,800 is for program increase and $4,000 represents financing change for costs of Working Capital Fund services. The breakdown is as follows:

| | 1968 | 1969 | Change |
|---|---|---|---|
| Desk top supplies, subscriptions, envelopes and duplicating supplies | $31,500 | $49,300 | +$17,800 |
| Working capital fund | 42,000 | 58,000 | +16,000 |
| Total | 73,500 | 107,300 | +33,800 |

*Equipment, $130,600*

The estimate of $130,600 provides for a program increase of $74,200 to provide equipment for 146 new positions in 1969, at an average cost of approximately $508 per position.

SUMMARY OF NEW POSITIONS

| | Number | Grade | Amount |
|---|---|---|---|
| ACTIVITY 2 | | | |
| Departmental: | | | |
| Labor Economist | 1 | GS–14 | $15,841 |
| Program analyst | 1 | GS–14 | 15,841 |
| Manpower analysts | 4 | GS–14 | 63,364 |
| Manpower development specialist | 1 | GS–14 | 15,841 |
| Manpower analysts | 8 | GS–13 | 108,056 |
| Labor economists | 2 | GS–13 | 27,014 |
| Program analysts | 3 | GS–13 | 40,521 |
| Digital computer systems analyst | 1 | GS–13 | 13,507 |
| Manpower development specialists | 2 | GS–13 | 27,014 |
| Manpower analysts | 7 | GS–12 | 80,227 |
| Labor economists | 3 | GS–12 | 34,383 |
| Program analysts | 3 | GS–12 | 34,383 |
| Manpower devlepoment specialist | 1 | GS–12 | 11,461 |
| Statistician | 1 | GS–12 | 11,461 |
| Management analyst | 1 | GS–12 | 11,461 |
| Manpower analysts | 5 | GS–11 | 48,285 |
| Labor economist | 1 | GS–11 | 9,657 |
| Program analyst | 6 | GS–11 | 57,942 |
| Statistician | 2 | GS–11 | 19,314 |
| Manpower analysts | 2 | GS–9 | 16,108 |
| Labor economist | 1 | GS–9 | 8,054 |
| Secretary | 1 | GS–7 | 6,734 |
| Statistical assistant | 1 | GS–7 | 6,734 |
| Digital computer programer | 1 | GS–7 | 6,734 |
| Supervisory statistical clerk | 1 | GS–6 | 6,137 |
| Secretary | 1 | GS–6 | 6,137 |
| Clerk-stenographers | 14 | GS–5 | 77,910 |
| Secretaries | 7 | GS–5 | 38,955 |
| Statistical clerks | 4 | GS–5 | 22,260 |
| Clerk-typist | 1 | GS–4 | 4,995 |
| Total | 87 | | 846,331 |

SUMMARY OF NEW POSITIONS—Continued

| | Number | Grade | Amount |
|---|---|---|---|
| ACTIVITY 3 | | | |
| Departmental: | | | |
| Deputy personnel officer | 1 | GS–14 | $15,841 |
| Budget analyst | 1 | GS–13 | 13,507 |
| Classification specialist | 1 | GS–13 | 13,507 |
| Employment development specialist | 1 | GS–13 | 13,507 |
| Contracting price analyst | 1 | GS–13 | 13,507 |
| Contract specialist | 1 | GS–13 | 13,507 |
| Procurement analyst | 1 | GS–13 | 13,507 |
| Management analyst | 1 | GS–13 | 13,507 |
| Budget analyst | 1 | GS–12 | 11,461 |
| Operating accountants | 3 | GS–12 | 34,383 |
| Standards and procurement specialist | 1 | GS–12 | 11,461 |
| Do | 1 | GS–12 | 11,461 |
| Classification specialist | 1 | GS–12 | 11,461 |
| Do | 1 | GS–12 | 11,461 |
| Employment development specialist | 1 | GS–12 | 11,461 |
| Contract specialist | 1 | GS–12 | 11,461 |
| Management analyst | 1 | GS–12 | 11,461 |
| Operating accountants | 2 | GS–11 | 19,314 |
| Management intern | 1 | GS–11 | 9,657 |
| Contract specialist | 1 | GS–11 | 9,657 |
| Operating accountants | 2 | GS–9 | 16,108 |
| Accounting technician | 1 | GS–7 | 6,734 |
| Supply clerk | 1 | GS–7 | 6,734 |
| Supervisory personnel assistant | 1 | GS–7 | 6,734 |
| Voucher examiner | 1 | GS–7 | 6,734 |
| Clerk-stenographers | 4 | GS–5 | 22,260 |
| Accounting technicians | 3 | GS–5 | 16,695 |
| Staffing clerks | 3 | GS–5 | 16,695 |
| Voucher examiner | 1 | GS–5 | 5,565 |
| Clerk-typist | 1 | GS–4 | 4,995 |
| Clerk-stenographers | 2 | GS–4 | 9,990 |
| Clerk-stenographer | 1 | GS–4 | 4,995 |
| Clerk-typists | 5 | GS–3 | 22,330 |
| Total | 49 | | 421,658 |
| ACTIVITY 4 | | | |
| Field offices: | | | |
| Deputy regional manpower administrators | 5 | GS–15 | 32,020 |
| Administrative assistants | 5 | GS–9 | 40,270 |
| Total | 10 | | 132,290 |
| Grand total | 146 | | 1,400,279 |

PREPARED STATEMENT

Mr. RUTTENBERG. The next statement deals with the Office of Manpower Administrator, "Salaries and expenses."

(The statement follows:)

I am pleased to appear before you today on the Office of the Manpower Administrator. Salaries and Expenses, 1969 appropriation estimate. This appropriation provides for the direct program costs of the experimental, demonstration and research programs authorized under Title I of the Manpower Development and Training Act. It also provides for the administrative costs of executive direction, supervision and coordination of all of the Department's manpower programs, for the administrative and management staff support services including budget, financial management, contracting services, and personnel services to the Manpower Development and Training program and the Manpower Administration; and for the Federal administration of the policy planning, experimental, demonstration and research programs and the over-all reporting and evaluation activities of the Manpower Administration.

The 1969 estimate for this appropriation is for $29,422,000 and 578 positions. This is a net decrease of $1,061,194 from the 1968 level of $30,483,194. Of the

$29,422,000, $19,800,000 is for direct program costs and $9,622,000 is for salaries and expenses. The decrease results from a $4,066,000 decrease due to the expiration of the mobility and bonding programs and nonrecurring carry over of 1967 funds of $215,194 which is partially offset by program and staff increases totalling $3,220,000.

The increases for 1969 consist of 1) a program increase of $1,000,000 for expansion of the Manpower research program, 2) $1,954,600 for the addition of 146 Federal positions and 3) $265,400 for mandatory and financing increases.

An increase of $1,000,000 over the base for 1968 of $3,800,000 is requested for the manpower research program. This increase is essential if we are to continue toward the needed level of understanding of the difficult and complex manpower problems facing the Nation today and in the years ahead. We need immediate research into pressing current problems but we must also develop and improve the resources of our colleges and universities to carry out continuing investigation of the longer range implications of the manpower problems. Of the one million dollar increase, $500,000 will be for specific research projects to be accomplished on a contractual basis, $500,000 will be for grants to colleges and universities and to individuals in these institutions to actually conduct needed research and simultaneously to develop and stimulate interest and competence in the area of manpower problems.

The other area of major need is for 146 additional Federal staff to support the operation of the increasingly complex programs administered by the Manpower Administration. As the President indicated in his Manpower Message to the Congress, it is "the planning, the management and administration—which turns these programs into action and carries them to the people who need them." Staff is needed if we are to realize the full benefits to be gained from our investments in these manpower programs. This is true not only in our training programs but also in our research and experimental and demonstration programs.

As I mentioned in my general statement, these 146 positions are needed to bolster the basic executive direction and staff services function for the whole of the Manpower Administration programs. These positions will be in the policy, planning, management and administration, the program evaluation, and the data gathering functions which support the total manpower programs. Through these staffs we get the coordinated planning, organization, direction, reporting and management capabilities which permits the several separate programs to be combined to assure maximum effectiveness in serving those in need of manpower services. These people must look at the overall manpower situation in the Nation. They must determine the basic manpower needs—how many disadvantaged persons are there who need help in getting jobs? where are they? what help do they need? what programs are available to meet these needs? what jobs are available? where?

These staffs must provide the long-range planning to meet the Nation's manpower needs. They must conduct research to bring new ideas and concepts to the manpower programs and they must conduct experimental and demonstration programs to try them out. Policies and procedures must be developed to translate those of the new ideas and concepts which have proved valuable into the ongoing programs. Proposals for new legislation must be developed where new legislation is required. The operating programs must be provided with the necessary financial and management services. Funds must be allocated and controlled. Staff must be recruited and serviced. Finally, the programs must be evaluated to determine if they are efficiently and effectively accomplishing their objectives. This requires the collection and analysis of data, the first-hand evaluation of projects and the feedback of the results of this evaluation to program managers to permit them to make needed changes.

The growing complexity and sophistication of manpower programs places greater and greater demands on this central staff. The 146 positions requested are needed to insure that these wide ranges of essential staff services are provided.

This concludes my statement, Mr. Chairman. I shall be happy to answer any questions.

APPROPRIATION COMPONENTS

Mr. RUTTENBERG. This appropriation deals with the administrative cost and the executive direction and supervision and coordination of the Department's manpower program.

It includes the Associate Manpower Administrator's responsibility, for the field of policy planning, program evaluation, experimentation, and demonstration in manpower research.

It also includes the activities of the Assistant Manpower Administrator for Administration for the budget preparation, financial management, contracting services, personnel activities, and administrative management staff support.

In addition, it supports the Office of the Manpower Administrator and the regional manpower administrators that have just been established within the past year.

BUDGET REQUEST: NET REDUCTION

The budget calls for $29.4 million and 578 positions for fiscal 1969.

Senator HILL. That is a reduction; is it not?

Mr. RUTTENBERG. That is a reduction, Mr. Chairman. I might quickly point out to you a reduction which really grows out of a termination in the legislative authority to continue to do experimental work in the field of labor mobility and bonding programs for individuals who have trouble getting employment because employers won't hire them.

Those two programs terminate and, therefore, $4 million which was spent for that program in fiscal 1968 will not be spent in fiscal 1969 because there is no authorization.

INCREASES

But the total decrease in the budget is not by that total amount. The total decrease in the budget is only $1.1 million, and that is because we are asking for an increase in programs amounting to $3.2 million, an increase in 1969 of $1 million for expansion of manpower research and $1.9 million for an additional 146 Federal positions and then a small amount, $265,000, for mandatory and financing increases.

The research increase of $1 million is tremendously important in terms of our looking at the expenditure—through the Manpower Administration—of over $2 billion a year.

We must keep up on the research and keep up on new techniques, so that we are sure each succeeding year that we spend the money for the right thing based upon our experience in the past.

In addition, we have asked for expansion of positions in the policy and planning arena, as well as in the budget and administrative management arena, and also for the development of a more adequate data management system to put together the information which is essential to the running of programs which must coordinate with other Government agencies—Office of Economic Opportunity, HUD, and HEW.

The necessity of pulling together from an administrative point of view these programs is terribly important and, therefore, this budget calls for an increase in positions of 146 for these activities.

That, Mr. Chairman, is the budget of the Office of Manpower Administrator which is $29.4 million, and which represents literally a decrease of $1 million from the previous year.

Thank you, Mr. Chairman.

Sentaor HILL. Mr. Murphy.

## Bureau of Apprenticeship and Training

**STATEMENT OF HUGH C. MURPHY, ADMINISTRATOR**
**ACCOMPANIED BY:**
**GEORGE SABO, DEPUTY ADMINISTRATOR**
**RALPH E. FRENCH, DIRECTOR, OFFICE OF ADMINISTRATION**
**JOSEPH J. McNULTY, CHIEF, DIVISION OF BUDGET**
**STANLEY RUTTENBERG, ASSISTANT SECRETARY FOR MANPOWER**
**RICHARD E. MILLER, DIRECTOR, OFFICE OF PROGRAM AND BUDGET REVIEW**

### Appropriation Estimate

"Bureau of Apprenticeship and Training, Salaries and Expenses

"For necessary expenses for encouraging apprentice training programs, as authorized by the Acts of March 4, 1913 and August 16, 1937 (37 Stat. 736, as amended, 29 U.S.C. 50), and for performing functions under the Manpower Development and Training Act of 1962, as amended, [$8,267,000] *$9,262,000.*"

AMOUNTS AVAILABLE FOR OBLIGATION

| | 1968 | 1969 |
|---|---|---|
| Appropriation or estimate | $8,267,000 | $9,262,00 |
| Proposed transfer from "Office of Manpower Administrator, salaries and expenses" for pay increases (Public Law 90–206 effective Oct. 8, 1967) | +142,000 | |
| Nonrecurring rental costs transferred to GSA | −7,700 | |
| Appropriation or estimate, revised | 8,401,300 | 9,262,000 |

OBLIGATIONS BY ACTIVITY

| Description | Appropriation revised, 1968 | | Estimate 1969 | | 1969 Change | |
|---|---|---|---|---|---|---|
| | Positions | Amount | Positions | Amount | Positions | Amount |
| 1. Training promotion and service to industry | 512 | $6,094,700 | 512 | $6,358,500 | | +$263,800 |
| 2. On-the-job training | 133 | 1,888,100 | 173 | 2,468,400 | +40 | +580,300 |
| 3. Administration and management services | 29 | 418,500 | 29 | 435,100 | | +16,600 |
| Total obligations | 674 | 8,401,300 | 714 | 9,262,000 | +40 | +860,700 |

OBLIGATIONS BY OBJECT

| | Appropriation revised, 1968 | Estimate, 1969 | 1969 change |
|---|---|---|---|
| Total number of permanent positions | 674 | 714 | +40 |
| Average number of all employees | 643 | 679 | +36 |
| 11 Personnel compensation | $6,550,300 | $7,207,300 | +$657,000 |
| 12 Personnel benefits | 494,500 | 548,000 | +53,500 |
| 21 Travel and transportation of persons | 588,400 | 605,200 | +16,800 |
| 22 Transportation of things | 30,900 | 39,600 | +8,700 |
| 23 Rent, communications, and utilities | 210,600 | 244,400 | +33,800 |
| 24 Printing and reproduction | 128,800 | 147,000 | +18,200 |
| 25 Other services | 298,700 | 343,800 | +45,100 |
| Services of other agencies | 12,500 | 13,300 | +800 |
| 26 Supplies and materials | 61,500 | 69,300 | +7,800 |
| 31 Equipment | 25,100 | 44,100 | +19,000 |
| Total obligations | 8,401,300 | 9,262,000 | +860,700 |
| Working capital fund items included above | (274,500) | (337,800) | (+63,300) |

SUMMARY OF CHANGES

| | Positions | Amount |
|---|---|---|
| 1968 enacted appropriation | 674 | $8,267,000 |
| Proposed transfer from "Office of Manpower Administrator, salaries and expenses" for pay increases (Public Law 90-206 effective Oct. 8, 1967) | | +142,000 |
| Nonrecurring rental costs transferred to GSA | | −7,700 |
| 1968 appropriation, revised | 674 | 8,401,300 |
| 1969 estimate | 714 | 9,262,000 |
| Total change | +40 | +860,700 |
| Mandatory items: | | |
| Increases: | | |
| Net additional pay increase costs not completely funded in 1968 | | +173,900 |
| Net additional cost of within-grade promotions effective for part year in 1968 | | +49,100 |
| Net cost of within-grade promotions becoming effective in 1969 | | +45,900 |
| To provide for 1 extra day of pay in 1969 for current year staff | | +29,500 |
| To provide for a net increase in contributions to the Federal employees' compensation fund | | +7,700 |
| Total, mandatory items | | +306,100 |
| Financing item: To provide for full cost of centralized services purchased from the Working capital fund | | +48,000 |
| Program item—Increase: To provide for a redirection in and enrichment of the on-the job training program to enlist greater participation of private employers in manpower training and development of the disadvantaged ($407,500 personal services; $99,100 nonlabor) | +40 | +506,600 |
| Total change | +40 | +860,700 |

MANDATORY AND FINANCING CHANGES BY ACTIVITY

| Type of change | Activity 1 | | Activity 2 | | Activity 3 | | Total | |
|---|---|---|---|---|---|---|---|---|
| | Positions | Amount | Positions | Amount | Positions | Amount | Positions | Amount |
| Mandatory Items: | | | | | | | | |
| Net additional pay increase costs | | +$131,100 | | +$35,000 | | +$7,800 | | +$173,900 |
| Net additional cost of within-grade promotions effective for part year in 1968 | | +39,500 | | +8,700 | | +900 | | +49,100 |
| Net within-grade promotion costs initially effective in 1969 | | +27,800 | | +14,900 | | +3,200 | | +45,900 |
| Contributions to Federal employees' compensation fund | | +7,700 | | | | | | +7,700 |
| To provide for 1 extra day of pay in 1969 for current year staff | | +22,200 | | +6,000 | | +1,300 | | +29,500 |
| Total, mandatory items | | +228,300 | | +64,600 | | +13,200 | | +306,100 |
| Financing item: Cost of centralized services | | +35,500 | | +9,100 | | +3,400 | | +48,00 |
| Total | | +263,800 | | +73,700 | | +16,600 | | +354,100 |

*Mandatory and financing changes for 1969*

| | |
|---|---|
| Mandatory items: | |
| Increases: To provide for full year cost of pay increases effective Oct. 8, 1967, and to provide full funding of part-year costs | +$173,900 |
| Within-grade promotion costs: | |
| 1969 net additional cost of within-grade promotions effective for part-year in 1968 | +49,100 |
| Personnel compensation | 79,575 |
| Deduct lapse | 2,775 |
| Deduct savings due to turnover | 31,100 |
| Personnel benefits | 3,400 |
| Net cost | 49,100 |

*Mandatory and financing changes for 1969—Continued*

| | |
|---|---|
| Mandatory items—Continued | |
| Adjusted net additional cost of within-grade promotions effective for part year in 1968 | +$49,100 |
| Net cost of within-grade promotions becoming effective during 1969 | +45,900 |
| Personnel compensation | 74,421 |
| Deduct lapse | 2,621 |
| Deduct savings due to turnover | 29,100 |
| Personnel benefits | 3,200 |
| Net cost | 45,900 |
| Adjusted net cost of within-grade promotions becoming effective during 1969 | +45,900 |
| To provide a net increase in contributions to the Federal Employees' Compensation Fund | +7,700 |
| To provide for 1 extra day of pay for current year staff | +29,500 |
| Total, mandatory items | +306,100 |
| Financing items: | |
| Amount originally in base budget | 268,500 |
| Amount currently required in base budget | 316,500 |
| Changed financing required | +48,000 |

Changes in fees charged for centralized services (such as visual exhibits or reproduction) and changes in anticipated services rendered by the Working Capital Fund require adjustments to the funds provided in the base budget.

PROGRAM CHANGES BY ACTIVITY

| Object classification | Activity 1 | | Activity 2 | | Activity 3 | | Total | |
|---|---|---|---|---|---|---|---|---|
| | Positions | Amount | Positions | Amount | Positions | Amount | Positions | Amount |
| 11 Personnel compensation | | | +40 | +$379,100 | | | +40 | +$379,100 |
| 12 Personnel benefits | | | | +28,400 | | | | +28,400 |
| 21 Travel and transportation of persons | | | | +16,800 | | | | +16,800 |
| 22 Transportation of things | | | | +8,700 | | | | +8,700 |
| 23 Rent, communications, and utilities | | | | +31,300 | | | | +31,300 |
| 24 Printing and reproduction | | | | +8,100 | | | | +8,100 |
| 25 Other services | | | | +12,000 | | | | +12,000 |
| 26 Supplies and materials | | | | +3,200 | | | | +3,200 |
| 31 Equipment | | | | +19,000 | | | | +19,000 |
| Total | | | +40 | +506,600 | | | +40 | +506,600 |

*Activity 1. Training promotion and service to industry*

| | |
|---|---|
| 1968 (positions, 512) | $6,094,700 |
| 1969 (positions, 512) | 6,358,500 |

NARRATIVE DESCRIPTION OF PROGRAM

Private enterprise is encouraged and assisted in the development, expansion and improvement of apprenticeship and other forms of training in industry. Assistance is given to management and unions in identification of need for apprenticeship and in development of programs tailored to meet skill requirements. Technical information on training methods, public training facilities, and successful systems are made available to companies throughout all industries. Guidance is also provided on establishing in-plant training organizations, staffs and budgets. Advisory services on solving problems of apprenticeship administration are also

provided. Where collective bargaining is practiced, management and unions are brought together jointly to install and sponsor skill development.

The National Apprenticeship Program is advanced primarily by direct contact at the local level with employers, management and trade associations, and local unions. This is achieved through a network of 174 field offices, located in each of the 50 States. This local effort is supported by promotion with national organizations of management or labor. Nationally adopted apprenticeship standards and policy statements foster programs among affiliated local chapters, member employers and local unions.

Technical assistance is provided community planning groups to plan skill development as an essential element of over-all community economic planning. In selected metropolitan areas Apprenticeship Information Centers are promoted as a source of applicants and extend apprenticeship career opportunities to additional youth, particularly minorities and others less likely to be reached through normal recruitment channels. Also, field compliance reviews are conducted to determine conformity with Federal equal employment opportunity standards for apprenticeship and training—Title 29, Code of Federal Regulations, Part 30 (29 CFR Part 30).

This Activity also includes research into the nature and extent of training within industry. Studies are made in selected industries and occupations as to trends and changing training methodology. Reviews and advisory services are provided industry and State Apprenticeship Agencies on basic principles applicable to training in the apprenticeship occupations; promotional aids are developed; and a supporting information program is conducted.

It long has been clear that the private corporation is among the Nation's best equipped vocational educators. However, experience shows that without encouragement and technical assistance, too many employers fail to conduct necessary job training programs; this neglect results in production bottlenecks, skill shortages and denial of career opportunities to the many millions who need such training. The Bureau of Apprenticeship and Training strives to increase private industry's participation in a program that meets the job needs of people and the skill needs of industry. In 1967 one American firm recruited 50 skilled machinists from England. Eighty percent of the 8,500 foreign workers recently certified by the Department of Labor for entry into the United States are in the higher skilled classifications. An effective answer to American industry's skilled needs is formal apprenticeship.

Industry's annual demand for mechanics and repairmen, building trades craftsmen, and foremen increase at about the same rate as employment generally. Completions from Federal and State recognized apprenticeship programs will produce less than one-fourth of the needed new craftsmen if current year program levels are continued.

In working with industry and labor, the Bureau will promote the concept that in the rehabilitation of slum areas there will be thousands of job learning opportunities for slum residents in the construction trades. Efforts will be made to design apprenticeship programs around that concept. This will assist in the success of other programs such as those aimed at housing needs, the establishment of new industries and job opportunities in ghetto areas and the Model Cities projects.

Apprenticeship and skill improvement programs are developed in cooperation with the American Correctional Association, the Federal Bureau of Prisons, and numerous State and Federal prisons and reformatories.

Bureau staff will continue this work through programs such as those, for example, at the following prisons: San Quentin, Soledad, McNeil Island and Draper.

*In 1967*, 2,900 new apprenticeship programs were initiated by the Bureau field staff, while in programs registered by Federal and State agencies 82,000 new apprentices were registered, 28,000 apprentices completed training and there were 278,000 participants, representing a rise of 29,000 over the previous year. These accomplishments reflect a continuation of the 6-year upward swing in the national apprenticeship program. However, the needs for highly skilled craftsmen in a wide variety of essential industries such as construction, aerospace and metal manufacturing and for good jobs, particularly for disadvantaged youth, were only partially met by the year's activities. About 18,000 journeymen and other workers received skill improvement training as a result of Bureau efforts.

Increased understanding of apprenticeship and its requirements was developed through the growing number of Apprenticeship Information Centers established

in 26 cities by the end of 1967. This activity, in cooperation with State employment service agencies, made it possible for 3,222 aspiring applicants, including many minority persons, to enter apprenticeship. Over 22,000 persons registered in the Centers during the year for information and assistance.

The Bureau served 13,000 accounts during 1967 which conduct apprenticeship programs and 900 accounts conducting skill improvement programs. An account is defined as a training facility within a representatives assigned jurisdiction which is conducting or developing one or more training projects under the terms of a given Bureau program area and which is serviceable by that representative.

The Bureau has primary responsibility for administering the equal employment opportunity provisions of 29 CFR Part 30 issued by the Secretary of Labor. The Bureau has emphasized through policy statements, issuance of guidelines, instructions, and compliance reporting requirements, as well as during staff conferences, the need for positive and immediate action of compliance with the Secretary's regulation.

The Bureau maintains the position that the field representative who established or who is servicing the program is the best person to secure compliance with the regulation and open the door for minorities in apprenticeship.

A concerted effort by each field representative is required, employing all powers of persuasion not to open doors to minority groups but to convince program sponsors to reach out through active recruitment to gain the actual as well as formal compliance. The Bureau must lead the way in making certain that program sponsors implement the selection procedures they have adopted.

Bureau recognition is to be withdrawn from those programs which do not adopt acceptable standards or do not demonstrate evidence of nondiscrimination.

To speed up field compliance reviews by the field staff the Bureau re-emphasizes its policy that apprenticeship programs with 5 or more apprentices and all Joint Apprenticeship programs be reviewed on a priority basis.

*In 1968*, the Bureau plans to promote a greater participation of disadvantaged unemployed and underemployed in registered apprenticeship and skill improvement programs. An expansion of apprenticeship to assist in meeting the national need for highly skilled craftsmen will be promoted with an estimated 3,000 new programs initiated. Completions will total about 32,000 in line with the upward trend in apprenticeship as the demand for skilled workers is intensified throughout the economy. Critical defense industry occupational demands will receive special promotional attention. An estimated 294,000 apprentices will participate in Federal and State registered programs throughout the year. The Bureau will develop and install 385 new skill improvement programs.

At the beginning of fiscal year 1968, 22 contracts under the Concentrated Employment Program had already been developed, with 54 more planned during the year. The Bureau will provide technical assistance and perform contract administration for the pre-apprenticeship components of all contracts under this program in the major cities.

Ten new Apprenticeship Information Centers are scheduled for opening during 1968 as follows:

| | |
|---|---|
| Columbus, Ohio | Omaha, Nebraska |
| Des Moines, Iowa | San Antonio, Texas |
| Gary, Indiana | Topeka, Kansas |
| Memphis, Tenn. | Phoenix, Arizona |
| New Orleans, La. | Wichita, Kansas |

Apprenticeship training representatives and industrial training advisors will provide technical assistance to a total of 36 Centers in 1968 in a strong effort to make available to minorities, especially ghetto residents, more apprenticeship opportunities through positive recruitment.

Approximately 6,286 apprenticeship accounts will undergo compliance reviews under the equal opportunity provisions of 29 CFR Part 30.

To maintain and improve the quality of ongoing and newly developed apprenticeship programs, field representatives will serve 9,300 accounts and in addition 965 skill improvement accounts.

The Bureau will respond to increasing requests from private industry for technical assistance on the apprenticeship and job training provisions of the revised Veterans' Pension and Readjustment Assistance Act of 1967 (P.L. 90–77).

As a significant part of its information program, the Bureau will issue two new apprenticeship films during 1968, "Bridge to Skills" and "Skills for Tomorrow." The aim of these films will be to gain greater participation of minorities in

apprenticeship programs. "Bridge to Skills" is aimed at minority youngsters in and of out school, showing the requirements and opportunities inherent in such programs. "Skills for Tomorrow" is aimed at employers, showing the benefits of an apprenticeship program and underlining the "good business" aspect of hiring apprentices without racial or other discriminatory considerations.

"Bridge to Skills" is being reproduced with a Spanish-speaking narrator and Spanish voices to help apprise Mexican-Americans, Puerto Ricans and other Spanish-speaking Americans of the availability and benefits of apprenticeship training.

*In 1969*, the Bureau's program will place the greatest thrust and emphasis on the promotion of a greater number of new apprenticeship opportunities in private industry, particularly for the disadvantaged. Apprenticeship operations will implement and enhance the Concentrated Employment Programs and other major manpower programs in the communities with the greatest needs and problems. Private employers, especially those in or near ghetto areas, will be encouraged to take more of the underprivileged into their training programs.

The Bureau field representatives will be responsible for maintaining effective liaison with related manpower programs and agencies in their areas to being about maximum benefit to the individuals served and in the most economical manner consistent with need. Direct regular contact and coordinative activities with State and local government and other manpower agencies and community groups, including, for example, the "Neighborhood Service Centers" supported by four Federal agencies, will provide improved Bureau services.

Bureau field representatives will be assigned to areas where needs are greatest and most urgent, and where a higher potential for the development of apprenticeship programs—and consequently jobs—exists for ghetto residents. The Bureau will locate several branch offices in locations more convenient to the ghetto communities in selected large cities with co-existing high unemployment and skill shortages.

An estimated 306,000 apprentices will participate in Federal and State registered programs in 1969 and 32,000 will reach completion during the period. New apprentices entering programs will number 86,000, many of them using the training benefits available to veterans under the Veterans' Pension and Readjustment Assistance Act of 1967 (P.L. 90–77). The Department of Defense estimates that 830,000 veterans will be separated from the armed services in 1968 and 850,000 in 1969 with an average age of 22.3 years. The Bureau plans to make available to the veterans knowledge about apprenticeship training opportunities. Industry will require more technical assistance from Bureau staff with regard to the Veterans' Pension and Readjustment Assistance Act of 1967 (P.L. 90–77) with hundreds of small firms requesting developmental services.

An enlarged Apprenticeship Information Center program will almost double the 36 Centers existing in 1968 with a resultant increase in the number of skilled craft training opportunities for youth.

It is anticipated that with the recent reaffirmation in amendments to Selective Service regulations in 1967 of the principle that occupational training for certain high level skills is subject to military service deferment, new apprenticeship programs will be stimulated.

Bureau services will be provided to 9,300 apprenticeship accounts and 965 skill improvement accounts. Improved communication with joint apprenticeship committees and private industry will be emphasized to reach the type of potential applicant likely to be overlooked in normal recruitment practice.

Field reviews of 6,250 apprenticeship programs will be accomplished to check compliance with 29 CFR Part 30, the Secretary of Labor's regulations prohibiting discrimination in selection practices and operation of apprentice programs. Intensive efforts will be directed to working with employers, unions and joint apprenticeship councils to correct conditions which keep minorities from an equal chance to succeed in skilled jobs.

A major program emphasis in fiscal year 1969 will be to strengthen our local committees on apprenticeship. The Bureau works with about 10,000 joint labor-management committees at the local level and these should be expanded to promote the apprenticeship potential in additional communities where the need already exists. These committees are the frontline troops of our efforts to expand apprenticeship opportunities for youth and minorities. Surveys have shown that where effective committees exist, apprenticeship programs grow and increase dramatically.

WORKLOAD STATISTICS
[In thousands]

| | Actual | | | Estimate | |
|---|---|---|---|---|---|
| | 1965 | 1966 | 1967 | 1968 | 1969 |
| New apprenticeship programs installed | 1.3 | 1.4 | 2.9 | 3.0 | 3.0 |
| Apprentice participants | 227.0 | 250.1 | 278.0 | 294.0 | 306.0 |
| Apprentice accessions | 59.9 | 77.0 | 82.0 | 83.0 | 86.0 |
| Apprentice completions | 26.1 | 25.0 | 28.0 | 32.0 | 32.0 |
| Apprentices in training end of year | 173.1 | 196.0 | 211.0 | 220.0 | 230.0 |
| Skill improvement programs installed | .7 | .8 | 1.0 | .4 | 1.0 |
| Skill improvement trainees | 14.0 | 15.0 | 18.0 | 20.0 | 28.0 |

*Changes for 1969*

| | |
|---|---|
| Mandatory changes amount to | +$228,300 |
| Financing changes amount to | +35,500 |
| Program changes | None |

*Activity 2. On-the-job training*

| | |
|---|---|
| 1968 (positions, 133) | $1,888,100 |
| 1969 (positions, 173) | 2,468,400 |

NARRATIVE DESCRIPTION OF PROGRAM

The Manpower Development and Training Act On-the-Job Training program is designed to equip workers with entrance-level skills for immediate and continuing employability; to provide remedial training for underemployed workers and those subject to displacement, special training opportunities for workers from minority groups, disadvantaged youth and others hard to train and place; and to help relieve shortages in occupations particularly critical to defense and the economy. Department of Labor representatives work directly with employers, management associations, labor unions, and groups such as community agencies to prepare training plans, evaluate training facilities, and install training programs. Programs are incorporated in contracts to reimburse employer training costs. Contract proposals are reviewed and negotiated; training in operation is monitored for compliance with training standards and contract terms.

A similar program is conducted to develop prime contracts with national organizations of management, labor and multiple-plant corporations for training projects in their affiliate units. Arrangements are made for State Apprenticeship Agencies to participate in the program under cost reimbursement agreements. This Activity also includes supporting services of research and statistics, planning and evaluating, budget and fiscal services and information.

The following tables give highlights of the program from its inception through December 31, 1967:

MANPOWER DEVELOPMENT AND TRAINING ACT ON-THE-JOB TRAINING

NUMBER AND CHARACTERISTICS OF TRAINEES FISCAL YEARS 1963–1968

TABLE 1.—*Number of trainees approved for on-the-job training projects*

| Fiscal year: | *Trainees* |
|---|---|
| 1968[1] | 58,500 |
| 1967 | 152,700 |
| 1966 | 122,500 |
| 1965 | 64,800 |
| 1964 | 13,300 |
| 1963 | 2,300 |
| Total trainees | 414,100 |

[1] July 1, 1967, through Dec. 31, 1967.

TABLE 2.—*On-the-job training enrollments, completions, placements cumulative August 1962–December 1967*

| *Category* | *Number* |
|---|---|
| Number of trainees enrolled in projects | 237,900 |
| Number of enrollees who completed training | 121,200 |
| Number of completers placed in jobs | 108,100 |
| Percent of those completers employed who are in training related jobs | 94 |

TABLE 3.—*Percent distribution of characteristics of trainees enrolled under the on-the-job-training program cumulative August 1962–December 1967*

| *Characteristic* | *Percentage* [1] |
|---|---|
| Labor force status prior to enrollment: | |
| Unemployed | 62 |
| Family farmworker | (2) |
| Reentrant to labor force | 3 |
| Underemployed | 35 |
| Duration of unemployment: | |
| Less than 5 weeks | 45 |
| 5 to 14 weeks | 22 |
| 15 to 26 weeks | 11 |
| 27 to 52 weeks | 7 |
| Over 52 weeks | 14 |
| Family status: | |
| Head of household | 50 |
| Other | 50 |
| Number of dependents: | |
| 0 | 46 |
| 1 | 18 |
| 2 | 14 |
| 3 | 10 |
| 4 | 6 |
| 5 and over | 7 |
| U. I. Claimant: | |
| Yes | 7 |
| No | 94 |
| Public assistance recipient: | |
| Yes | 3 |
| No | 97 |
| Handicapped: | |
| Yes | 5 |
| No | 96 |

[1] Detail may not add to 100 percent total due to rounding.
[2] Less than 1.5 percent.

*In 1967*, new and creative developments were accomplished in the on-the-job training program. The original 1967 trainee goal of 125,000 was expanded to a final figure of 153,000 opportunities by year's end with a total allocation of $94 million in Manpower Development and Training Activities appropriation. Average cost per trainee was $614. Thousands of workers entered training in vitally needed occupations in the aircraft industry in several States. Under a wide variety of sponsors, mainly the American Hospital Association and the Association of Rehabilitation Centers, training was initiated and stepped-up to help ease the critical shortages of workers in health care occupations in hospitals, nursing homes, and rehabilitation centers. During the first six months of 1967, health care trainees represented 16% of all on-the-job training opportunities. Outstanding among the national contracts negotiated are those with the Food Service Industry Training Project Inc., for training 1,050 cooks, chefs, and waitresses; National Machine Tool Builders Association for 1,400 tool-die makers, machine repairmen and setup men; United Automobile Workers AFL–CIO, for 2,000 trainees, in 20 firms as machine operators, die setters, casting technicians, polishers, grinders and inspectors with pre-job instruction for the severely disadvantaged; United Brotherhood of Carpenters and Joiners of America, for 3,000 trainees to enter carpenter trade or wood industry jobs, and to upgrade journeymen to keep pace with new industry developments; and the National Association for Retarded Children 2,000 retarded to be trained in health, food service and retail occupations in 45 States.

A variety of programs were created to enhance opportunities for the disadvantaged to enter highly skilled career occupations through formal apprenticeship. The Urban League and AFL–CIO construction trades unions started cooperative programs in Baltimore and Dayton to recruit disadvantaged applicants for apprenticeship, to acquaint them with the trades and prepare them for entrance tests. The Trade Union Leadership Council, Inc., Detroit, and the Workers Defense League, New York, are engaged in similar programs. Other Federal and local agencies as well as civil rights organizations are assisting.

Over 3,600 Mexican-Americans living in States on the border between the United States and Mexico will have received training and job opportunities through programs developed during 1967. Additional opportunities are available to them in other on-the-job training programs in communities throughout California, Arizona and Texas. Over 1,200 American Indians are in training or will enter shortly in a variety of programs in nine States.

*In 1968*, it is planned to stress greater program monitoring, cooperation with an involvement in Concentrated Employment Program operations and objectives, and a target of 109,000 training opportunities—62,500 regular on-the-job training and 46,500 coupled with institutional training. Projects involving coupling activities will account for 43% of total on-the-job training opportunities. Prime contractors with subcontracting authority have been given responsibility for executing and monitoring subcontracts. Arrangements are getting underway to permit linkages for the trainees' benefit with the Job Corps and various work-training programs.

The following progress reports on three on-the-job training programs illustrate the concentration on ghetto unemployment and underemployment. The programs are in skilled trades and show heavy minority and disadvantaged enrollment:

Contract #34–7–3008–000. 90 trainees—Skilled Trade: Dental Lab Technician. Of the 90 trainees in this program, 76 completed and are employed as Dental Lab Technician apprentices, 48 of the 76 are from disadvantaged minorities.

Contract #34–7–3001–000. 345 trainees—Trade: Furrier. As of the last OJT–4 report, 217 trainees started, 82 have completed and 81 of the 82 are employed after training. There are at present 22 Negro apprentices and 71 Spanish-speaking apprentices gainfully employed under the program.

Contract #NY–J–498–500. Trade: Meat Cutter. Funded for 350 trainees, of which 313 have started. At present there are 104 in training and 128 completions have occurred with 127 employed after training. 65% of these trainees have been identified as slum dwellers and are now in decently paid jobs offering some hope for the future.

A major step forward in coupled on-the-job training was achieved in fiscal year 1967 and is being continued in fiscal year 1968. This program is designed to provide hard-core unemployed, disadvantaged persons with basic education and prevocational and on-the-job training, through contracts with private firms and non-profit educational training agencies. Diagnostic, supportive, and remedial services designed to lead the way to steady, suitable employment are provided, including counseling, testing, training, placement, and follow-up. Projects are contracted on a cost reimbursement basis for an 18-month period, with number of enrollees ranging from 300 to 800 in each city. The program is progressing under contracts that have been signed with six companies and one public school system for projects in Atlanta, Baltimore, Chicago, Detroit, Houston, Kansas City (Missouri), Los Angeles, Philadelphia, Pittsburgh, and Washington, D.C. The total cost funded from the Manpower Development and Training Activities appropriation is about $14 million from some 6,200 trainees at an average unit cost of about $2,300.

Further efforts are being made to cope with hard-core unemployment during fiscal year 1968. A program to provide employment and training and supportive services for the disadvantaged in Boston, Chicago, Los Angeles, San Antonio, and Washington, D.C. encourages industry to operate plants in and employ the residents of slum areas by offering Federal aid to companies to offset the risks involved. Forward-looking employers realize that such programs are advantageous to themselves, as well as to the communities involved and the Nation as a whole, because (1) the likehood of increasing shortages of workers makes it essential to develop fully and utilize all manpower resources, and (2) among the disadvantaged there are many individuals who can make a real con-

tribution to a company's production if given the encouragement, training and opportunity.

Another innovative approach to obtaining increased participation of private industry in assisting the disadvantaged is being initated to contract with private firms to hire and train a designated number of persons, categorized as "hard-core" disadvantaged, as permanent employees. Each firm undertakes to provide a comprehensive program of supportive education, prevocational and on-the-job training to insure its continued employment of the persons hired. Each project entails the hiring, counseling, testing, training, and follow-up appraisal of from 50 to 800 hard-core unemployed, disadvantaged persons. The program is to be carried out in the cities of Boston, Chicago, Los Angeles, San Antonio, and Washington, D.C. The private firms will coordinate closely with the Concentrated Employment Program, with the State Employment Service expected to be the primary source of recruitment. Contracts are to run for 21 months on a fixed unit cost basis with an incentive award provision. To qualify for an incentive award, a contractor must have all employee-trainees hired and in employment status no later than the end of the ninth month of the contract. The award is granted only for each employee-trainee who is employed for a full year. A key feature of the program is that the participating employer is expected to retain as permanent, full-time employees, those individuals who successfully complete the training.

*Changes for 1969*

| | |
|---|---|
| Mandatory changes amount to | +$64,600 |
| Financing changes amount to | +9,100 |
| Program changes amount to | +506,600 |
| Positions | +40 |

PROPOSAL

To increase the involvement of private industry in manpower training and development of the disadantaged through on-the-job training programs.

THE NEED

The new approach to on-the-job training and related programs will require increased promotional, development, coordination, monitoring and follow-up activities. The increased staff will be needed primarily to help industry design the incomparably complex motivational, remedial, training, and work adjustment sequences on which the success of this new effort depends. Extra staff efforts will be expended in acquainting industry with the objectives of the program, its importance in the public interest, and its advantages to the employer. Success of the program will be dependent upon assuring that prospective contractors have a full understanding of the methods for proposing, developing and executing projects and of the responsibilities to be fulfilled. The comprehensiveness of the program, which encompasses the full range of diagnostic, remedial and supportive services in conjunction with on-the-job training leading to subsequent permanent employment, makes it imperative that adequate field staff be available for all phases of project development, execution and followup.

THE PROGRAM

*Field offices*

The proposed increase will permit the assignment of field representatives to those areas where needs are greatest and where a higher potential for development of programs and job opportunities for slum and ghetto residents exists.

The field representatives will assist in contacting, motivating and effecting the placement of ghetto residents with employers as on-the-job trainees in the numerous cities, and areas within cities, where the need for projects exists.

The field staff will assist prospective sponsors in drafting training proposals; negotiating cost items and training content with contractors; obtaining clearances with appropriate coordinating committees; assisting contractors in initiating training; conducting on-site reviews and evaluations of training projects and contract compliance. Field representatives will be responsible for maintaining necessary liaison between the on-the-job training component of programs and other supporting manpower components.

BASE

Positions: 97. Estimated cost: $1,341,400.

ADDITIONAL COST

Positions: 33. Estimated cost: $410,400.

*Departmental offices*

The proposed increase will strengthen functions of inter-agency manpower development cooperation, and special analytical studies for planning-programming-budgeting.

*Manpower Development Staff.*—Two technical positions and two clerical positions are requested to carry out special activities involving joint task forces, liaison, coordination and cooperation with other government agencies having responsibilities in manpower and related areas. Effective manpower and employment programs are made up of many separate elements requiring multi-agency participation in their planning, development, funding and execution. Outreach, pre-job orientation, pre-apprenticeship, remedial education, related instruction, counseling, health services, vocational rehabilitation, equal employment efforts, apprenticeship, on-the-job training, institutional training, work experience and job placement, for example, as components, singly or combined, form a manpower program.

Meshing of Federal, State and local resources to focus on rural and urban poverty areas through well-designed and coordinated programs requires intensive, continual relationships between responsible manpower and related agencies. Inter and intra-agency committees, standing and ad hoc, are one major instrument by which the agencies effect liaison and working relationships at the Federal level. Policies and procedures cutting across agency lines are developed and implemented by such groups. Inter-agency understanding of the programs and operational methods of other agencies is achieved through the utilization of methods of other agencies. This results in the elimination of duplication of efforts and the development of more effective service to the economically, socially and culturally disadvantaged. Responsible participation in this vital activity will be enhanced by the additional staff proposed.

*Special Analytical Studies.*—Two technical positions and one clerical position will be used to perform special analytical studies concerning reaching the disadvantaged through on-the-job training, obtaining increased involvement of employers in training the disadvantaged, and other aspects of the on-the-job training program.

BASE

Positions: 36. Estimated cost: $546,700.

ADDITIONAL COST

Positions: 7. Estimated cost: $96,200.

The major thrust in fiscal year 1969 will be the intensification of systematic efforts to increase the involvement of private industry in manpower training and development of the disadvantaged. The on-the-job training program has provided the chief avenue of private industry involvement in training. As the program placed more emphasis on assisting the disadvantaged, it was recognized that many employers have been reluctant to participate because:

most disdvantaged persons are not ready for employment and cannot benefit from on-the-job training without basic education and other supportive services;

the payment to the employer is not enough to make it worth his while to assume the extra risks and difficulty in hiring and training the most severely disadvantaged;

of government red tape, auditors, procedures, monitors, inspectors, etc.

Awareness of these factors led to undertaking of programs in which employers are more nearly compensated for the risks and difficulties involved in providing employment and training for the disadvantaged. These efforts to enlist greater participation of private employers in manpower training and development of the disadvantaged will be furthered during fiscal year 1969 through a "full cost on-the-job training program." The full cost on-the-job training program will be carried out through fixed unit cost and incentives contracts with private employers and will place continued emphasis on the "hire-train-retain" approach.

The full range of supportive and remedial services will be provided, including, counseling, testing, basic education, acculturation, employment orientation and coaching in conjunction with on-the-job training. It is estimated that fully compensating private industry for the extra costs of providing the full range of services will require about $3,500 per disadvantaged trainee worker. Plans for fiscal year 1969 provide for full cost on-the-job training for 13,700 of the 40,200 coupled on-the-job training trainees, at a cost of about $48 million in Manpower Development and Training Activities funds.

Of extreme importance is that this program will move us forward in putting manpower training where it can be done most effectively—with the employer who has the jobs and needs the workers. Highest priority will be the poor unemployed, those at or below recognized poverty income levels. The program will be closely coordinated with the Concentrated Employment Program.

Additional efforts to remove barriers which discourage employers from participating in the on-the-job training program will be the development of a readily understood procedure for calculating training costs and reimbursing on-the-job training sponsors by means of a flat unit cost reimbursement formula for all projects, and a general streamlining of the contracting system in favor of a simple agreement form. Somewhat more attractive financial incentives will be made generally available to employers willing to take on higher proportions of disadvantaged trainees.

Multi-occupational contracts with community organizations have proven highly suitable in serving those with only marginal attachment to the labor force. Usually supplemented by various types of related or remedial instruction and allowances, they reach a higher proportion of minorities and other disadvantaged. Consequently, during 1969, community organization contracts will be increased to about one-third of the total on-the-job training program level. To focus upon and meet the needs of ghetto residents, through Concentrated Employment Program and regular activities, more ghetto-based organizations will be contacted to reach, motivate, prepare and bring about the placement of ghetto residents with employers as on-the-job trainees. Opportunities Industrialization Centers, Inc., now functioning in many major cities, furnishes an outstanding example of the type of commuity organization with which more on-the-job training contracts will be promoted. Funding of part-time "outreach" workers, hired directly from target neighborhoods as project staff, under an on-the-job training contract has uncovered a successful method for developing interests in training and jobs among ghetto residents. The staff also reaches small ghetto employers and promotes the employment and training of neighborhood unemployed. On-the-job training contracts with this "outreach" feature will be emphasized in the Concentrated Employment Program effort.

Financial incentives will also be used increasingly in fiscal year 1969 to encourage more pre-apprentice and apprentice-entry training projects in skilled shortage occupations. About 25% of contract funds are expected to be used in support of long-term skill occupational training in 1969, including pre-apprenticeship. Pre-apprenticeship or apprentice-entry training programs will be promoted and assisted in ten major trades in Concentrated Employment Program areas. Many minority youth will benefit from this activity.

To improve the efficiency and quality of training under on-the-job training contracts, field staff will devote much of their time to contract administration, evaluation and review of programs. The relationship of trainee enrollments to training opportunities developed will be examined and compliance with training standards assured. Coupled programs, highly effective in terms of quality, timeliness and economy and designed to prepare disadvantaged persons for employment will involve about 66% of the total on-the-job trainees in 1969.

BASIS FOR THE ESTIMATE

A program level of 102,700 training opportunities is planned for fiscal year 1969 providing an estimated 62,500 training opportunities in regular on-the-job training activities while 40,200 opportunities will be for coupled projects. During 1969 on-the-job training activities will be promoted and made available to a larger number of disadvantaged and slum area residents with approximately 58% of the total on-the-job training program effort directed to this objective.

The program design for fiscal year 1969 was developed to enable a reasonable balance between attention to the disadvantaged and the alleviation of skill shortages within the limitations of available resources.

*Activity 3. Administration and management services*

1968 (positions 29)---------- $418,500
1969 (positions 29)---------- 435,100

NARRATIVE DESCRIPTION OF PROGRAM

This Activity performs the over-all planning, direction, coordination and evaluation of Bureau policies and programs. Also included are the development and implementation of administrative and management plans, policies and procedures in the areas of budget and fiscal administration, organization management, management analysis, and office services.

*Changes for 1969*

Mandatory changes amount to---------- $13,200
Financing changes amount to---------- 3,400
Program changes---------- None

DISTRIBUTION OF FIELD STAFF

| | 1968 | | | 1969 | | |
|---|---|---|---|---|---|---|
| | Professional | Clerical | Total | Professional | Clerical | Total |
| Atlanta, Ga. | 33 | 22 | 55 | 36 | 23 | 59 |
| Boston, Mass. | 24 | 16 | 40 | 27 | 17 | 44 |
| Chambersburg, Pa. | 45 | 30 | 75 | 48 | 30 | 78 |
| Chicago, Ill. | 42 | 26 | 68 | 44 | 27 | 71 |
| Cleveland, Ohio | 39 | 26 | 65 | 41 | 26 | 67 |
| Dallas, Tex. | 37 | 25 | 62 | 39 | 25 | 64 |
| Denver, Colo. | 17 | 11 | 28 | 19 | 12 | 31 |
| Kansas City, Mo. | 29 | 19 | 48 | 32 | 19 | 51 |
| New York, N.Y. | 28 | 18 | 46 | 30 | 19 | 49 |
| San Francisco, Calif. | 21 | 13 | 34 | 23 | 14 | 37 |
| Seattle, Wash. | 18 | 13 | 31 | 21 | 13 | 34 |
| Total | 333 | 219 | 552 | 360 | 225 | 585 |

EXPLANATION OF ESTIMATE BY OBJECT

*Personnel compensation, $7,207,300*

The estimate for 1969 provides for 714 full-time positions and 679 man-years an increase of 40 positions and 36 man-years over 1968. Field offices are allocated 563 man-years and the national office is allocated 116 man-years. The net increase of $657,000 over fiscal year 1968 is comprised of the following: $161,800 net additional pay increase costs not completely funded in 1968; $45,700 net additional cost of within-grade promotions effective for only a portion of FY 1968 for base staff; $42,700 net cost of within-grade promotions in effect in FY 1969 for base staff; $27,700 to provide for one extra day of pay in 1969 for base staff; and $379,100 program increase for the additional 36 man-years.

*Personnel benefits, $548,000*

The estimate is an increase of $53,500 over 1968 and provides for the following: net mandatory increases of $25,100 include $9,000 net additional pay increase costs not completely funded in 1968; $3,400 for within-grade promotions effective for only a portion of 1968 for base staff; $3,200 for within-grade promotions in effect for 1969 for base staff; $1,800 for one extra day of pay in 1969 for base staff; and $7,700 for employee's compensation benefits paid through June 30, 1967 for covered injury and death subsequent to December 1, 1960. Program increases of $28,400 are for the 36 man-years for the expanded program.

| | 1968 | 1969 | Change |
|---|---|---|---|
| Employee's group life insurance | $24,500 | $25,900 | +$1,400 |
| Employee health benefits | 42,000 | 44,400 | +2,400 |
| Contributions to CSC retirement fund | 418,500 | 459,300 | +40,800 |
| Refunds, awards, and indemnities | 4,800 | 4,800 | |
| Contributions to the Federal Insurance Contributions Act | 4,700 | 5,900 | +1,200 |
| Accident compensation | | 7,700 | +7,700 |
| Total | 494,500 | 548,000 | +53,500 |

*Travel and transportation of persons, $605,200*

The estimate for 1969 is an increase of $16,800 over 1968 and provides per diem, transportation, mileage and parking costs for the 24 additional travelers as indicated below:

| | 1968 | 1969 | Change |
|---|---|---|---|
| Number of travelers | 398 | 422 | +24 |
| Number of days traveled | 13,975 | 14,375 | +400 |
| Subsistence and per diem | $223,600 | $230,000 | +$6,400 |
| Mileage and transportation costs | 335,400 | 345,000 | +9,600 |
| All other transportation costs | 29,400 | 30,200 | +800 |
| Total | 588,400 | 605,200 | +16,800 |

*Transportation of things, $39,600*

The estimate for 1969 is an increase of $8,700 over 1968 and provides for an additional $700 for shipment of supplies, printed materials, visual aids and equipment; and an additional $8,000 for movement of household goods for 8 official station changes at $1,000 per move.

| | 1968 | 1969 | Change |
|---|---|---|---|
| Shipment of supplies, etc | $11,100 | $11,800 | +$700 |
| Household moves | 19,800 | 27,800 | +8,000 |
| Total | 30,900 | 39,600 | +8,700 |

*Rent, communications and utilities, $244,400*

The estimate for 1969 is an increase of $33,800 over 1968 and provides for the following: $100 net additional pay increase costs for the Working Capital Fund; $2,400 increase in Working Capital Fund financing; and program increases for the expanded program of $16,400 for rentals; $6,700 for communications services; $7,600 for Federal telecommunications services; and $600 for Working Capital Fund.

| | 1968 | 1969 | Change |
|---|---|---|---|
| Rentals | $49,300 | $65,700 | +$16,400 |
| Communications services including teletypes and telegrams, toll calls, and telephone service | 63,700 | 70,400 | +6,700 |
| Federal telecommunications service | 49,500 | 57,100 | +7,600 |
| Paid official mail | 34,100 | 34,100 | ---------- |
| Working capital fund | 14,000 | 17,100 | +3,100 |
| Total | 210,600 | 244,400 | +33,800 |

*Printing and reproduction, $147,000*

The estimate for 1969 is an increase of $18,200 and provides for $500 net additional pay increase costs for the Working Capital Fund; a $9.600 increase in Working Capital Fund financing and $8,100 program increases for the expanded program.

| | 1968 | 1969 | Change |
|---|---|---|---|
| Administrative forms | $5,000 | $5,000 | ---------- |
| Publications | 69,100 | 74,700 | +$5,600 |
| Working capital fund | 54,700 | 67,300 | +12,600 |
| Total | 128,800 | 147,000 | +18,200 |

*Other services, $357,100*

The estimate for 1969 is an increase of $45,900 over 1968 and covers the following items: $2,200 net additional pay increase costs for the Working Capital

Fund; $31,700 increase in Working Capital Fund financing; and program increases of $12,000 as indicated below:

| | 1968 | 1969 | Change |
|---|---|---|---|
| Contractual services | $85,100 | $85,100 | |
| Repairs and services | 15,000 | 15,000 | |
| Miscellaneous services, including employee training and conference rooms | 17,800 | 21,000 | +$3,200 |
| Working capital fund | 180,800 | 222,700 | +41,900 |
| Services of other agencies: | | | |
| Bureau of Labor Statistics | 10,000 | 10,000 | |
| U.S. Civil Service Commission and Public Health Service | 2,500 | 3,300 | +800 |
| Total | 311,200 | 357,100 | +45,900 |

*Supplies and materials, $69,300*

The estimate for 1969 is an increase of $7,800 over 1968 and provides an additional $300 pay increase costs for the Working Capital Fund; $4,300 to cover an increase in Working Capital Fund financing; and $3,200 for program increases as shown below:

| | 1968 | 1969 | Change |
|---|---|---|---|
| Desk top supplies, subscriptions, envelopes, and duplicating supplies | $36,500 | $38,600 | +$2,100 |
| Working capital fund | 25,000 | 30,700 | +5,700 |
| Total | 61,500 | 69,300 | +7,800 |

*Equipment, $44,100*

The estimate for 1969 is an increase of $19,000 over 1968 and covers purchase of equipment for the new positions at an average of $475 per position.

| | 1968 | 1969 | Change |
|---|---|---|---|
| Necessary visual aid training equipment, replacement of wornout equipment | $25,100 | $25,100 | |
| Equipment for new positions | | 19,000 | +$19,000 |
| Total | 25,100 | 44,100 | +19,000 |

SUMMARY OF NEW POSITIONS

| ACTIVITY 2 | Number | Grade | Amount |
|---|---|---|---|
| Departmental: | | | |
| Manpower development officer | 1 | GS–15 | $18,404 |
| Do | 2 | GS–14 | 31,682 |
| Manpower development specialist | 1 | GS–13 | 13,507 |
| Secretary | 1 | GS–6 | 6,137 |
| Do | 2 | GS–5 | 11,130 |
| Total | 7 | | 80,860 |
| Field offices: | | | |
| Manpower development specialist | 15 | GS–13 | 202,605 |
| Do | 5 | GS–12 | 57,305 |
| Administrative assistant | 7 | GS–7 | 47,138 |
| Secretary | 6 | GS–5 | 33,390 |
| Total | 33 | | 340,438 |
| Grand total | 40 | | 421,298 |

PREPARED STATEMENT

Mr. MURPHY. Good morning, Mr. Chairman. My statement deals with the salaries and expenses for the Bureau of Apprenticeship and Training.

(The statement follows:)

As Administrator of the Bureau of Apprenticeship and Training, I appreciate this opportunity to present our 1969 appropriation request.

The total request for the three activities is $9,262,000 and 714 positions. These activities have two main thrusts towards the goal of training workers for jobs—the National Apprenticeship and Training Program and On-the-Job Training Program under the Manpower Development and Training Act. In each case the activities under this appropriation provide for the salaries and expenses for the staff necessary for the promotion and development of training projects. Heretofore the Bureau of Apprenticeship and Training has had responsibility for both programs. I would like to take this opportunity to underscore my support of the action taken by the Secretary to realign functions and responsibilities within the Manpower Administration.

The Apprenticeship program in this country is a distinctively private program, offering one of the best—if not the best—approach to bridging the gap between school and a solid work career in the skilled trades. With the responsibility which we have had for the on-the-job training program in addition to the apprenticeship program, the apprenticeship program often took a back seat. This will no longer be the case. The Bureau of Apprenticeship and Training can now devote full time to an apprenticeship program—and I am in agreement with the recent actions that make it possible for us to do that.

I would like to discuss first the request for Activities 1 and 3 which provide for the National Apprenticeship and Training Program. The total for these activities amount to $6,793,600 and 541 positions, $280,400 above the estimated revised 1968 appropriation, but the same number of positions. The increase is solely attributable to pay increases, extra days pay, and centralized services.

President Johnson's 1967 Manpower Report stressed that the task of manpower development cannot be a Federal task alone and that as the demand increases for workers with special skills "we should take positive steps particularly to encourage private job training efforts". Apprenticeship is a major private industry training program for highly skilled occupations and serves as a key element in the foundation upon which a national manpower development program rests.

We plan to promote a greater number of new apprenticeship opportunities in private industry, particularly for the disadvantaged, with the 541 positions requested for the National Apprenticeship and Training program. The number of apprentices participating in Federal and State registered programs continues the upward trend of the past several years. From a total of 249,000 in fiscal 1966, we expect the 1968 total will be 294,000, while for 1969 we anticipate a further rise to 306,000.

The number of veterans separating from the armed services, 850,000 in 1969 according to a Department of Defense estimate, will create the need for more training opportunities especially under the GI Bill. Approximately 86,000 apprentices will begin programs during 1969—many of them veterans using the training benefits under the GI Bill.

The demand for highly skilled workers continues to grow, creating job opportunities. The stimulation of sustained economic growth, the needs of defense, space and other vital industries, and an expanding workforce which includes a rapidly growing youth group, all combine to intensify the need for apprenticeship. The Bureau will strive to increase private industry's participation in apprenticeship in 50 States and at the national level by working directly with management and labor in reviewing manpower needs and designing programs to meet them. Industry and labor will be encouraged to employ apprenticeship administration staffs to help enlarge the total effort.

The Apprenticeship Information Center program will double in 1969 as the 36 Centers planned for 1968 grow to 72 Centers. Centers serve as a source of applicants and extend career opportunities to additional youth, particularly disadvantaged minorities and others less likely to be reached through regular channels. In furthering the Federal equal employment opportunity standards for apprenticeship and training, specified under 29 CFR Part 30, BAT staff will conduct a continuing compliance review of registered apprenticeship programs.

Critical to the success of Federal, State and local community employment and training efforts in 1969 and the years ahead will be stronger coordination between agenices and programs. The Bureau will maintain effective liaison with the manpower agencies and programs, and with State Apprenticeship agencies and Voca-

tional Education, so that apprenticeship will serve as a vital and available component of such programs as Concentrated Employment, and Model Cities. We plan to bring apprenticeship much closer to the ghetto and ghetto residents especially in areas where high unemployment and skill shortages exist side by side.

An expanded apprenticeship program will require stronger joint management-labor committees and more of them. The volunteer activities of committee members constitute the backbone of private industry's role in apprenticeship promotion and maintenance and this activity will be further encouraged in 1969. Their cooperation, and commitment to equal opportunity, is a key to the wider involvement of minority youth in apprenticeship programs. This we will nurture in the year ahead.

As the Bureau has emphasized in the past, and reemphasizes today, completing apprentices fill only about one-fourth of journeyman job openings. Despite the growth in the National Apprenticeship Program, the supply-demand gap does not measurably narrow from year to year since the annual demand for skilled workers increases at about the same rate as employment generally. A more intensified apprenticeship promotion effort is necessary to meet the national need for craftsmen.

Since well over 50 per cent of the nation's high school graduates do not go to college, the vocational preparation of this large group is a problem that demands other than quick or easy solutions. As occupational requirements shift with changing technology, it is evident that employment growth will be concentrated at the upper end of the skill ladder where formal training is most important. Casual training is inadequate for such jobs.

Too often, a young person's choice between a white collar job with a limited future and a skilled trade is based on a false concept of "status" which tends to slight the craftsman and artisan. This is highly unfortunate for the individual with technical aptitudes and for the nation. We intend to strengthen that part of our program which explains and extols apprenticeship as the pathway to worthwhile skilled trades careers to parents, counselors, youth, industry and communities.

To assist in the rehabilitation of individuals in prisons and correctional institutions, BAT provides technical assistance to the American Correctional Association, the Federal Bureau of Prisons and numerous State and Federal prisons and reformatories in developing training programs for inmates and providing liaison with industrial training activities. Occupational competency is vital to the prisoner who returns to society. BAT plans to sustain this activity in 1969.

Activity 2 of this appropriation is for the salaries and expenses of staff for the promotion and development of on-the-job training projects under the Manpower Development and Training Act. This staff works directly with employers, management associations, labor unions and other such organizations in the planning, development and implementation of on-the-job training projects. The staff reviews and negotiates training contracts and monitors the projects for compliance with the terms of these contracts. In some cases prime contracts are developed with national organizations which, in turn, contract with subordinate organizations or affiliate units to carry out the training. Agreements of this type with State Apprenticeship agencies are utilized.

Our on-the-job training goal for 1968 is to provide 109,000 such training opportunities. As of February 29, 1968, we had provided a total of 75,800 OJT opportunities, which is 70 per cent of our goal. These training projects are in a wide variety of occupations.

While we are reaching our goals in terms of numbers we have not unfortunately been able to reach them in terms of the types of persons served. This is, we haven't been able to involve the severely disadvantaged in on-the-job training projects to the extent that we should. This is apparent from the statistical data on the characteristics of OJT trainees. Thirty-five per cent of the OJT trainees in the program through December of 1967 were already employed and of the unemployed 45 per cent had been unemployed less than 5 weeks. Sixty-four per cent had only one or no dependents. Only 7 per cent were on unemployment insurance rolls, and only 3 per cent were welfare recipients. Only 5 per cent were handicapped.

In 1968 we are seeking ways to overcome this deficiency. We are participating in the several test programs which are aimed at reaching the hard-core disadvantaged persons whom, thus far, we have been unable to reach. Each of these programs has as its central effort the involvement of private industry in the training of hard-core disadvantaged. This, of course, is the basic goal of the OJT

program. Its success is dependent on getting the private employer to accept the disadvantaged person as a trainee, train him, and then give him a job. This is what we have been unable to do. The test programs have demonstrated that the way to accomplish this is to provide enough funds to meet the employer's additional costs in training these individuals. We need to provide enough money to permit the employer to take the person who perhaps cannot read or write, who doesn't know how to hold a job, who, in other words, is unemployable, and train him not only to perform a specific job but also to train him in the ways of a good worker. This is the essence of the JOBS (Job Opportunities in the Business Sector) program that the President outlined in his Manpower Message to the Congress.

For 1969, $16,225,000 is being requested in the Manpower Development and Training Act budget to permit the OJT program to provide the financial resources needed to reach the disadvantaged through private employers.

We are also requesting in the Bureau of Apprenticeship and Training appropriation 40 additional positions which will cost $506,000. This staff increase will provide the intensified staff input into the OJT program to insure the effective utilization of the increased funds to carry out the objectives of getting disadvantaged persons jobs through on-the-job training.

The staffing objective will be to have representatives of the Manpower Administration serving the 50 major cities for which JOBS programs are planned for Fiscal Year 1969. The 40 positions we are requesting in this appropriation will be used in support of the objective.

This concludes my statement, Mr. Chairman. I would be happy to answer questions you or the committee may have on this appropriation request.

### BUDGET REQUEST

Mr. MURPHY. We in the Bureau of Apprenticeship and Training have two main thoughts. Our appropriation is for $9,262,000 for 714 positions. I don't want to confuse you. We have two programs, on-the-job training program and the apprenticeship program.

### APPRENTICESHIP PROGRAM

Our apprenticeship program is $6,793,600 within that $9,262,000 and this is to maintain 541 positions.

This, as the Secretary pointed out this morning, will reflect the President's stated aim of keeping employment expenses at a minimum and still carry forward his charge that the Federal Government should take positive steps, particularly to encourage private job training programs.

The apprenticeship program in this country is a distinctly private program. We have great hopes, Mr. Chairman, for the number of returning veterans who will look at apprenticeship as a means of livelihood in the days to come. There are about 850,000 dischargees anticipated in 1969 and not all of them will go on to college.

We would hope that many of them will go on into the crafts.

Senator HILL. On-the-job training?

Mr. MURPHY. Yes, and also on-the-job training, Mr. Chairman.

Apprenticeship, we feel, offers a splendid opportunity for many of these. Many of these will be members of the minority groups who have not had an opportunity heretofore.

So, they will have this program to embark upon.

### PRISONER PROGRAM

We have a program that is involving activity with prison inmates. We have been experimenting with this for several years. We have had some fairly fine results.

Senator HILL. It has worked out pretty well.

Mr. MURPHY. Yes. It is in its beginning stage, Mr. Chairman, but certainly in a confined activity such as that, where they can give them concentrated training and instruction, this can help to provide them with opportunities upon their release.

That about sums up my statement, Mr. Chairman. Thank you so very much.

Senator HILL. What is the average length of service of these inmates?

Mr. MURPHY. I could not report on that. I am not that expert, Mr. Chairman.

Senator HILL. It has worked out pretty well?

Mr. MURPHY. Yes, we are delighted. I can cite one prison, McNeil Island Prison. They have worked with industry in the nearby vicinity and as a result they are accepting their discharges. You know the recidivism of felons is sometimes very, very high.

If we can give them meaningful job opportunities, I think we can curtail this.

Thank you very much, Mr. Chairman.

Senator HILL. Have you any idea of how many inmates we have in this country?

Mr. MURPHY. Again, I am awful sorry. We have only embarked on this program for a few years. It would have to be someone who is more expert than I.

Senator HILL. So far, it has worked pretty well?

Mr. MURPHY. Yes. We are hopeful that we can cut down the rate of return to prisons by former inmates.

Senator HILL. Get them interested in a job and give them a job, is that right?

Mr. MURPHY. That is right, sir.

## Bureau of Employment Security

### Grants to States for Unemployment Compensation and Employment Service Administration

STATEMENT OF ROBERT C. GOODWIN, ADMINISTRATOR
ACCOMPANIED BY:
W. R. CURTIS, DEPUTY ADMINISTRATOR
THERON J. WILLIAMS, EXECUTIVE ASSISTANT
CHARLES E. ODELL, DIRECTOR, U.S. EMPLOYMENT SERVICE
FOREST L. MILLER, DIRECTOR, UNEMPLOYMENT INSURANCE SERVICE
JACK S. DONNACHIE, DEPUTY DIRECTOR, OFFICE OF FARM LABOR SERVICE
EDWARD L. OMOHUNDRO, CHIEF, VETERANS EMPLOYMENT SERVICE
PHILIP T. LAWLOR, DIRECTOR, OFFICE OF BUDGET ORGANIZATION AND MANAGEMENT
MICHAEL J. NASTICK, CHIEF, DIVISION OF APPROPRIATIONS AND FEDERAL FISCAL ACTIVITIES
STANLEY H. RUTTENBERG, ASSISTANT SECRETARY FOR MANPOWER
RICHARD E. MILLER, DIRECTOR, OFFICE OF PROGRAM AND BUDGET REVIEW

#### Appropriation Estimate

"Bureau of Employment Security, Limitation on Grants to States for Unemployment Compensation and Employment Service Administration

"For grants in accordance with the provisions of the Act of June 6, 1933, as amended (29 U.S.C. 49–49n), for carrying into effect section 602 of the Servicemen's Readjustment Act of 1944, for grants to the States as authorized in title III of the Social Security Act, as amended (42 U.S.C. 501–503), including, upon the request of any State, the purchase of equipment, and the payment of rental for space made available to such State in lieu of grants for such purpose, and for expenses not otherwise provided for, necessary for carrying out title XV of the Social Security Act, as amended (68 Stat. 1130), [$556,932,000] *$616,573,000* may be expended from the employment security administration account in the Unemployment trust fund, and of which $12,000,000 shall be available only to the extent necessary to meet increased costs of administration resulting from changes in a State law or increases in the number of claims filed and claims paid or increased salary costs resulting from changes in State salary compensation plans embracing employees of the State generally over those upon which the State's basic grant (or the allocation for the District of Columbia) was based, which increased costs of administration cannot be provided for by normal budgetary adjustments: *Provided*, That any portion of the funds granted to a State in the current fiscal year and not obligated by the State in that year shall be returned to the Treasury and credited to the account from which derived: *Provided further*, That such amounts as may be agreed upon by the Department of Labor and the Post Office Department shall be used for the payment, in such manner as said parties may jointly determine, of postage for the transmission of official mail matter in connection with the administration of unemployment compensation systems and employment services by States receiving grants herefrom.

"Grants to States, next succeeding fiscal year: For making, after May 31 of the current fiscal year, payments to States under title III of the Social Security Act, as amended, and under the Act of June 6, 1933, as amended, for the first quarter of the next succeeding fiscal year, such sums as may be necessary, the obligations incurred and the expenditures made thereunder for payments under such title and under such Act of June 6, 1933, to be charged to the appropriation therefor for that fiscal year: *Provided*, That the payments made pursuant to this paragraph shall not exceed the amount obligated by the United States for such purposes for the fourth quarter of the current fiscal year."

*Unemployment trust fund availability—Fiscal year 1969*

| | Total |
|---|---|
| Federal Unemployment Tax Act collections | $652,000,000 |
| Needs for Federal activities: | |
| Bureau salaries and expenses | 20,947,000 |
| Treasury, Office of the Solicitor, Office of the Secretary, Office of Federal Contract Compliance | 10,462,000 |
| Interest | 4,000,000 |
| Grants program (95 percent of receipts, $619,400,000) | 616,573,000 |
| Total | 651,982,000 |
| Surplus/deficit | +18,000 |

AMOUNTS AVAILABLE FOR OBLIGATION

| | 1968 | 1969 |
|---|---|---|
| Limitation on or estimate | $556,932,000 | $616,573,000 |
| Estimated program supplemental | 295,000 | |
| Limitation or estimate, revised | 557,227,000 | 616,573,000 |

OBLIGATIONS BY ACTIVITY

| | Limitation revised, 1968 | 1969 estimate | 1969 change |
|---|---|---|---|
| Description: | | | |
| 1. Unemployment insurance service: | | | |
| (a) State unemployment insurance service | $216,684,000 | $240,449,000 | +$23,765,000 |
| (b) Federal unemployment insurance service | 5,432,000 | 7,256,000 | +1,774,000 |
| (c) Administration and management | 15,732,000 | 17,052,000 | +1,320,000 |
| 2. Employment service: | | | |
| (a) General employment service activities | 174,199,000 | 194,502,000 | +20,303,000 |
| (b) Youth employment services | 68,888,000 | 73,523,000 | +4,635,000 |
| (c) Farm services | 19,105,000 | 20,542,000 | +1,437,000 |
| (d) Administration and management | 22,295,000 | 26,632,000 | +4,337,000 |
| 3. Administration and management | 22,842,000 | 24,617,000 | +1,775,000 |
| 4. Contingency | 12,000,000 | 12,000,000 | |
| Total obligations | 557,227,000 | 616,573,000 | +59,346,000 |

POSITIONS BY ACTIVITY

| | Limitation revised, 1968 | Estimate, 1969 | 1969 change |
|---|---|---|---|
| Description: | | | |
| 1. Unemployment insurance service: | | | |
| (a) State unemployment insurance service | 23,258 | 24,063 | +805 |
| (b) Federal unemployment insurance service | 549 | 755 | +206 |
| (c) Administration and management | 1,688 | 1,688 | |
| 2. Employment service: | | | |
| (a) General employment service activities | 19,489 | 20,069 | +580 |
| (b) Youth employment services | 6,616 | 6,616 | |
| (c) Farm services | 2,051 | 2,051 | |
| (d) Administration and management | 2,392 | 2,570 | +178 |
| 3. Administration and management | 2,447 | 2,447 | |
| Total positions | 58,490 | 60,259 | +1,769 |

OBLIGATIONS BY OBJECT

| | | Appropriation revised, 1968 | Estimate, 1969 | 1969 change |
|---|---|---|---|---|
| District of Columbia Employment Service: | | | | |
| | Total number of permanent positions | 290 | 290 | ---------- |
| | Positions other than permanent | 10 | 10 | ---------- |
| | Average number of all employees | 278 | 278 | ---------- |
| 11 | Personnel compensation | $2,366,200 | $2,455,900 | +$89,700 |
| 12 | Personnel benefits | 176,400 | 184,000 | +7,600 |
| 21 | Travel and transportation of persons | 26,000 | 26,000 | ---------- |
| 23 | Rent, communications, and utilities | 262,400 | 262,100 | −300 |
| 24 | Printing and reproduction | 24,600 | 24,600 | ---------- |
| 25 | Other services | 58,000 | 58,000 | ---------- |
| | Services of other agencies | 184,000 | 184,000 | ---------- |
| 26 | Supplies and materials | 25,400 | 25,400 | ---------- |
| 31 | Equipment | 5,000 | 5,000 | ---------- |
| Other States: 41 | Grants, subsidies and contributions | 554,099,000 | 613,348,000 | +59,249,000 |
| | Total obligations | 557,227,000 | 616,573,000 | +59,346,000 |

SUMMARY OF CHANGES

| | Position | Amount |
|---|---|---|
| 1968 enacted limitation | 290 | $556,932,000 |
| Estimated program supplemental | | 295,000 |
| 1968 limitation, revised | 290 | 557,227,000 |
| 1969 estimate | 290 | 616,573,000 |
| Total change | | 59,346,000 |

MANDATORY ITEMS

| Increases: | *Amount* |
|---|---|
| To provide funds needed to finance the increase in personal services costs resulting from statewide compensation plan changes effective in fiscal year 1968 and increments to be paid in 1969 | +$35,529,000 |
| To provide funds needed for the increased cost of OASI taxes provided by the Social Security Act, and adoption of or increases to State retirement and health benefit plans | +5,565,000 |
| Increase due to growth in unemployment insurance program coverage | +1,170,000 |
| Tax workload is expected to increase because of an estimated growth in the number of subject employers from 2,570,000 in 1968 to 2,610,000 in 1969. | |
| Increase due to higher unemployment insurance workloads | +7,000,000 |
| To provide for growth above the 1968 base appropriation in unemployment insurance workload due to an increase in State insured unemployment to 1,100,000 in 1969 and an increase in number of benefit payments made for former Federal employees and ex-servicemen from 1,466,000 in 1968 to 2,056,500 in 1969 | ---------- |
| To provide funds needed to finance increased postage costs under Public Law 90–206 | +1,500,000 |
| Total, mandatory items | +50,764,000 |

PROGRAM ITEMS

| | |
|---|---|
| Increases: | |
| To provide additional funds to augment resources now being devoted to management improvements to serve all levels of employment security operations through the establishment of an automated reporting system, a State-based evaluation system, the installation of a planning system at the State and local level to provide a means of allocating resources to meet State and local needs; the implementation of an accrual cost accounting system; and further development of automatic data processing techniques | +$8,484,000 |
| To provide funds to cover full year costs of operating the expanded veterans program in fiscal year 1969 | +98,000 |
| Total program items | +8,582,000 |
| Total change | +59,346,000 |

MANDATORY CHANGES BY ACTIVITY

| Type of change | Activity 1, amount | Activity 2, amount | Activity 3, amount | Activity 4, amount | Total, amount |
|---|---|---|---|---|---|
| Mandatory items: | | | | | |
| Increase in personal services and benefits cost | +$17,862,000 | +$21,517,000 | +$1,715,000 | ---------- | +$41,094,000 |
| Growth in unemployment insurance program coverage | +1,170,000 | ---------- | ---------- | ---------- | +1,170,000 |
| Increase in unemployment insurance workload | +7,000,000 | ---------- | ---------- | ---------- | +7,000,000 |
| Increase in postage costs under Public Law 90-206 | +690,000 | +750,000 | +60,000 | ---------- | +1,500,000 |
| Total | +26,722,000 | +22,267,000 | +1,775,000 | ---------- | +50,764,000 |

EXPLANATION OF MANDATORY CHANGES FOR 1969

*Increases: Explanation of mandatory salary increase for 1969, $35,529,000*

It is estimated that the funds required for salary increases in 1969 for positions included in the 1968 appropriation will total $35,529,000. Of this total, $28,766,000 will be required to finance the full year cost in 1969 of changes in statewide compensation plans approved in 1968 and $6,763,000 will be needed to finance within-grade increases that will be payable in 1969.

The average annual salary rate for fiscal year 1968 ($6,816) was derived from staffing patterns of State agency personnel. These staffing patterns show the actual annual salary of all staff included in the State's allocation.

To develop an average annual salary rate for fiscal year 1969, the Bureau asked each State to estimate the added annual cost in 1969 of compensation plan changes that have occurred or will occur in 1968. The States have estimated the full year cost in 1969 for salary changes made in 1968 will total $28,203,655 based on the number of positions allocated to the States at the time the estimates were made. This means the mandatory salary increase per position for 1969 is $490.

The estimates for 1969 salary increase costs for each State are given below as is the derivation of the mandatory salary increase.

1969 FULL-YEAR COST OF SALARY INCREASES PAID FROM CONTINGENCY IN 1968

| | Effective date | Full-year cost in 1969 of salary increases reported in 1968 through Aug. 21, 1967 |
|---|---|---|
| Alabama | Oct. 1, 1967 | $319,333 |
| Alaska | July 1, 1967 | 165,015 |
| Arkansas | Apr. 1, 1968 | 260,000 |
| California | July 1, 1967 | 2,667,330 |
| Colorado | do | 375,818 |
| Connecticut | do | 961,019 |
| District of Columbia | Oct. 1, 1967 | 250,198 |
| Florida | July 1, 1967 | 447,833 |
| Illinois | do | 2,160,000 |
| Indiana | do | 555,745 |
| Iowa | do | 284,124 |
| Louisiana | do | 506,530 |
| Maine | do | 110,784 |
| Maryland | do | 1,000,000 |
| Massachusetts | do | 259,500 |
| Michigan | do | 1,143,000 |
| Minnesota | do | 720,000 |
| Mississippi | do | 130,104 |
| Missouri | Oct. 1, 1967 | 1,468,933 |
| Montana | Sept. 1, 1967 | 111,974 |
| Nebraska | July 1, 1967 | 163,130 |
| Nevada | do | 213,317 |
| New Hampshire | July 14, 1967 | 135,060 |
| New Jersey | July 1, 1967 | 750,000 |
| New Mexico | do | 105,700 |
| New York | Apr. 1, 1967 | 3,660,000 |
| North Carolina | July 1, 1967 | 519,556 |
| Ohio | July 2, 1967 | 1,697,000 |
| Oklahoma | Aug. 1, 1967 | 309,621 |
| Oregon | July 1, 1967 | 517,809 |
| Pennsylvania | Jan. 1, 1968 | 1,503,870 |
| Puerto Rico | July 1, 1967 | 125,000 |
| South Carolina | do | 205,936 |
| South Dakota | Sept. 1, 1967 | 94,080 |
| Tennessee | July 1, 1967 | 283,733 |
| Texas | Sept. 1, 1967 | 3,217,652 |
| Utah | July 1, 1967 | 169,498 |
| Washington | Jan. 1, 1968 | 360,000 |
| West Virginia | July 1, 1967 | 43,000 |
| Wisconsin | do | 210,800 |
| Wyoming | do | 16,653 |
| Total | | 28,203,655 |

*Derivation of 1969 salary rate*

| | |
|---|---|
| Fiscal year 1968 allocated salary rate | $6,816 |
| Estimated increased salary cost per position (based on the base allocation of 57,617 positions and $28,203,655 as described above) | +490 |
| Estimated average within-grade increase per position | +116 |
| Fiscal year 1969 estimated salary rate | 7,422 |
| Mandatory salary increase per position | 606 |
| Base positions included in 1968 appropriation | 58,490 |
| Total mandatory salary increase | 35,529,000 |
| Explanation of mandatory fringe benefit cost increase for 1969 | 5,565,000 |

After reviewing 1968 State budget requests, the amount allocated for personnel benefits in 1968 equals 11.9 percent of personal services. For 1969 it is estimated that personnel benefits will require 12.2 percent of personal services. This will require an increase of $95 per position, a total of $5,565,000.

*Increase due to higher unemployment insurance workloads, $7,000,000*

It is anticipated that the average State insured unemployment will reach 1.1 million per week in fiscal year 1969, slightly higher than the original estimate and base appropriation for 1968. It is also anticipated that the number of weeks compensated for unemployed Federal employees and ex-servicemen will be 2,056,500 for fiscal year 1969, the same level presently estimated for 1968, but higher than the 1,466,000 provided for in the base appropriation for 1968.

It is estimated that 892 positions and $7,000,000 will be required to administer the increase in State insured unemployment from 1.0 million to 1.1 million per week and the increase in weeks compensated for unemployed Federal employees and ex-servicemen from 1,466,000 to 2,056,500.

*Workload increase due to growth in program coverage, $1,170,000*

Tax and wage records workloads are expected to increase because of an estimated normal growth in the number of subject employers from 2,570,000 in 1968 to 2,610,000 in 1969 and in the number of covered workers from 49,800,000 in 1968 to 51,300,000 in 1969. The growth in program coverage will require 119 positions and $1,170,000 to cover tax administration workloads resulting from the growth. Progress in the application of automatic data processing to the wage record function will enable our absorbing the increased workload anticipated in fiscal year 1969.

WORKLOAD STATISTICS

[In thousands]

| | 1966 | 1967 | 1968 | 1969 | Difference | Increase in positions |
|---|---|---|---|---|---|---|
| Subject employers | 2,441 | 2,531 | 2,570 | 2,610 | 40 | 119 |
| Wage items | 154,053 | 167,513 | 174,448 | 179,500 | 5,052 | |
| Total positions | 7,582 | 7,414 | 7,781 | 7,900 | | |
| Total | | | | | | |

*Increase due to higher postage rates, $1,500,000*

It is estimated that $1,500,000 will be needed to meet the costs of postage rates increased in P.L. 90–206.

Total, mandatory items ..... $50,764,000

*Activity 1. Unemployment insurance service*

| | |
|---|---|
| 1968 | $237,898,000 |
| 1969 | 264,757,000 |

NARRATIVE DESCRIPTION OF PROGRAM

This program provides for administration of the State unemployment insurance programs which have been enacted pursuant to the Social Security Act and the Federal Unemployment Tax Act. The program operates through a Federal-State partnership in which the amounts necessary for proper administration of the State laws are borne by the Federal Government; and except for meeting the requirements of limited standards in the Federal laws, the States are responsible for developing their own programs. They are also allowed wide latitude in administering their programs while the Federal partner provides leadership and technical assistance and oversees the use of the funds granted for administration.

The two major functions are the collection of taxes from employers who are subject to State unemployment insurance laws and the payment of unemployment compensation to unemployed workers eligible under State unemployment insurance laws. The State agencies also administer locally the federally enacted

programs for payments of unemployment compensation to ex-servicemen and to former civilian employees of the Federal Government.

Unemployment insurance serves as a counter-cyclical mechanism in the national economy. As such, it builds up funds and dampens inflationary tendencies during periods of high employment and releases them to bolster and maintain purchasing power when unemployment strikes. Even when business is generally good, unemployment insurance serves, at the local level, to restore wage loss due to disruptions in the community's business activity such as floods and factory shutdowns or relocations. The program thus helps to maintain the economic well-being of both the workers and the business community during such emergencies.

The unemployment insurance program is directed at temporarily maintaining a source of income for individuals regularly employed who become unemployed. Loss of a job, particularly if it results in prolonged unemployment, can mean the impoverishment of a worker and his family. By restoring a portion of the wages curtailed by the loss of a job, unemployment insurance helps to prevent this. The program adds support to existing programs designed to increase job opportunities for the disadvantaged in our society. Since, through such jobs, they earn the right to unemployment benefits and a greater chance of maintaining their improved status in the work force when unemployment occurs.

*In 1967*, the direct operating staff required to handle claims processing workloads, the major function of the Unemployment Insurance Service, continued to decrease. Since fiscal year 1963, the number of such positions has declined by 33 percent. In this decrease is reflected the relative rates of change in the four major workloads resulting from unemployment claims which do not all vary in the same proportion to each other (page —). Since fiscal year 1963 initial claims, which are filed at the beginning of a period of unemployment, have decreased by 27 percent; continued claims, which are filed for each week of unemployment, have decreased by 38 percent; contested claims, which represent those when the claimant's eligibility is subject to question on the basis of the reason for his unemployment, decreased by 27 percent; and appeals, which represents formal hearings on issues of claimant's eligibility, decreased by 25 percent.

The charts appearing on pages 22 through 25 reflect indices of the relative changes in workloads and in the number of positions required for each of the major processes for the period fiscal year 1963 through 1969. Despite the normal expectation of higher unit costs at lower output volumes, the reduction in staff has been nearly proportionate to the declines in workload.

The other major function in the program involves the collection of taxes and maintaining of tax accounts of employers and the wage credit of covered workers. These workloads have increased steadily over the years and are expected to increase as the economy grows. The decrease in the number of positions utilized in the tax program for fiscal year 1967 (page —) was due in part to the difficulties in recruiting qualified staff. Many States indicated in their 1968 budget request and tax plans of action that low salary competition with private industry and other problems have causing recruiting difficulties. These same states, however, have indicated that they are taking positive action to recruit and retain qualified personnel by upgrading field auditor positions, increasing salaries, competing with private industry through university and college placement centers and other appropriate steps.

The following table demonstrates how the decrease in utilized tax positions in fiscal year 1967 has affected the tax program, particularly in the field audit area where 22,000 less audits were completed; and in the money delinquency area, where net new delinquency increased by 15% from the previous year and the number of employers delinquent in paying contributions increased by 6,000.

FISCAL YEAR 1966 AND FISCAL YEAR 1967 EXPERIENCE

| | Fiscal year 1966 | Fiscal year 1967 |
|---|---|---|
| Subject employers (at midyear) | 2,441,000 | 2,531,000 |
| Number of audits completed | 251,000 | 229,000 |
| Percent of subject employers audited | 10.3 | 9.0 |
| Net new tax delinquency | $8,042,000 | $9,448,000 |
| Percent increase or decrease from prior year | −13.2 | +14.9 |
| Number of employers delinquent in paying contributions | 180,000 | 186,000 |

*In 1968*, it is planned to make greater use of the claims control center concept and the employment of intermittent personnel. The claims control center concept involves direct-line supervision of the claims function in the local offices and will result in more effective management, improved service to the public, and more economical deployment of limited professional staff. The greater use of intermittent employment will result in trained staff more responsive to changes in workload. This is extremely important since the program processes claims workloads over which it has little control.

Accompanying the above will be efforts to improve the quality of the program by the introduction of quality control techniques and methods and increasing the competence of personnel through continued intensive training. This training complements and bolsters the in-service training regularly received by agency personnel. Plans are to continue and emphasize the out-service and in-service training in 1968.

Problems have recently been encountered in maintaining a tax enforcement staff commensurate with recent and anticipated growth in the number of subject employers. The major difficulty has been a shortage of accounting personnel from which to recruit. Efforts will be made to fill vacancies and the additional positions required due to growth through more intensive recruitment, up-grading of field auditor positions, and increasing salaries. These efforts have been given emphasis and direction by means of the tax plans of actions for 1968 recently submitted by each State to the national office for review and approval.

During 1968, a great deal of time will also be devoted to establishing a management system and an automated reporting system, and designing and installing a uniform accrued cost accounting system. Toward these ends, 332 unemployment insurance positions and $2,777,000 will be diverted in 1968.

This is explained in detail under the Administration and Management Service justification.

*Changes for 1969*

| | |
|---|---|
| Mandatory changes amount to | +$26,722,000 |
| Positions | +1,011 |
| Program changes amount to | $137,000 |

*In 1969*, it is planned to increase efforts in the areas of management system automated reporting, and cost-accounting system. In addition to the 332 positions diverted in 1968, an additional 193 unemployment insurance positions and $1,923,000 will be diverted to this effort in 1969. A program increase of $137,000 will also be used in these areas to finance equipment costs for an automated reporting system. The diversions and program increases are explained in detail under the Administration and Management Service justification.

The total effort to be put forth by the unemployment insurance service on the implementation of integrated management systems, automated reporting, and an accrual cost accounting system is shown in the following table.

| Source | Positions | Estimated cost |
|---|---|---|
| Provided from base: | | |
| In 1968 | 332 | $2,777,000 |
| In 1969 | 193 | 2,060,000 |
| Total from base | 525 | 4,837,000 |
| Provided by program increase: | | |
| In 1969 | | 137,000 |
| Total from all sources | 525 | 4,974,000 |

BASIS FOR THE ESTIMATE

Budget estimates for carrying out the unemployment insurance program in the States are based on economic assumptions and the workloads associated with the assumptions. Workload estimates are translated into position requirements by use of productivity factors (workload per position) derived from a time distribution system. The few functions which do not lend themselves to straight-line correlation with workloads, such as fraud investigation and rate of conversion to automatic data processing are budgeted through program analysis.

The charts appearing on page 21 through page 25 show the positions used and estimated for selected unemployment insurance activities, fiscal year 1963 through fiscal year 1969, and the index for the related workload.

UNEMPLOYMENT INSURANCE SERVICE WORKLOADS

[In thousands—except for number of positions]

| | 1956 actual | 1957 actual | 1958 appropriation | 1959 estimate |
|---|---|---|---|---|
| Initial claims | 11,096 | 11,523 | 10,741 | 11,100 |
| Continued claims | 56,397 | 55,859 | 49,062 | 53,800 |
| Contested claims | 4,697 | 4,340 | 3,991 | 4,220 |
| Appeals | 310 | 286 | 263 | 280 |
| Weeks compensated—State | 50,578 | 49,931 | 43,730 | 48,320 |
| Weeks compensated—Federal | 2,353 | 1,860 | 1,466 | 2,056 |
| Positions related to workloads | 13,857 | 12,768 | 12,005 | 12,704 |

*Activity 2. Employment service*

1958 (positions 290) ..... $284,487,000
1959 (positions 290) ..... 315,199,000

NARRATIVE DESCRIPTION OF PROGRAM

This program provides for the system which comprises the nationwide network of about 2,100 local public employment service offices administered by State agencies under Federal leadership with funds provided by Federal grants. Each local office operates as the manpower service center of the community and is primarily concerned with finding jobs for workers seeking employment, recruiting workers to fill employers' job openings, providing specialized services to job applicants who encounter serious difficulties in the competitive job market, cooperating with other government agencies and with local groups to resolve the manpower problems of the area and providing job market information to all users of such information.

Major emphasis is placed on providing specialized services to those applicants who encounter serious difficulties in the job market. This group comprises the disadvantaged, the long-term unemployed and underemployed, the young and the old, those who are inhibited by lack of education, by lack of experience or skill, by lack of opportunity. It includes those who are discriminated against because of color or race, and those who are hampered by any of a variety of mental, physical or other handicaps.

The services provided to these applicants include reaching out to make contact with those who do not on their own initiative seek employment service assistance; intensive and personalized counseling and testing to determine interests, aptitudes and needs; referral to educational and occupational training programs and other supportive services; individualized job development efforts; referral to jobs; and subsequent follow-up to aid in their adjustment to the world of work.

Special attention also is given to the employment problems of veterans as well as to those who are not accepted either as volunteers for military service or by the Selective Service system.

To provide workers and employers with a basis for making sound employment decisions and to facilitate other basic operations, local offices gather and interpret information regarding current and anticipated employment and turnover data. They prepare estimates of future changes in occupational demand and supply with particular emphasis on the effects of automation, technological change, and other industrial innovations. Job opportunity information is secured to more effectively match men and jobs, and area employment and unemployment information is prepared for use in planning, development, and carrying out action programs, and for area economic analysis.

Local offices also provide other services to employers such as job analysis, aptitude and proficiency testing and assistance in establishing in-plant training. They cooperate with community organizations seeking to expand employment opportunities through the formulation and execution of plans to develop an area's economy and maintain formal arrangements for the exchange of services and employment information with the vocational schools, vocational rehabilitation, antipoverty and other agencies.

In addition, the system of local employment offices provides a special complete placement service to workers and employers in the agricultural and woods industries. Specifically, the local offices: (1) recruit and place year-round farm and woods workers; (2) help farmers meet critical, seasonal labor needs by organizing "day-haul" programs for those normally not in the farm work force,

including college and high school youth, Reservation Indians and Puerto Ricans; (3) recruit and arrange the movement of migratory farm workers from "supply" to "demand" areas and to specific jobs; (4) help migratory farm workers increase their annual, gainful employment by the orderly scheduling of worker groups to successive seasonal farm jobs in different locations; (5) determine the need for training in farm and woods skills, recruit potential trainees and place them on graduation. In addition to the foregoing activities, local offices also cooperate with State and community organizations in programs seeking to improve the welfare of migrant farm workers and their families.

*Employment Service*

| | |
|---|---|
| 1968 | $265,382,000 |
| 1969 | 284,657,000 |

*In 1967*, accomplishments were major shifts in program direction and emphasis, directed primarily toward improving services to the severely disadvantaged, with the ultimate objective of insuring maximum utilization of the Nation's manpower resources.

These changes, which are incorporated in the human resources development concept, made it necessary to regroup and simplify the manner in which allocations are made and utilization of those resources recorded and reported.

A revised budget structure was developed and is based on these two principles:

1. That each State shall prepare a Plan of Service. This plan is to describe the manner, including distribution of resources among program areas and activities, in which the State proposes to meet overall State needs and the needs of areas within the State.

The Plan of Service presents the manner in which the State proposes to use all the resources allocated for employment service activities and the results it expects to achieve. The plan includes a background statement on the economic situation in the State and appraises the total needs which must be met to achieve optimum use of human resources.

It takes into consideration urban and rural economic development, transportation facilities, housing, health facilities, the groups requiring manpower services, the kinds of services required and resources available from other agencies or groups which can assist in alleviating manpower problems.

2. That the Plan of Service cover four program areas, with a limited number of activities in each, among which all Employment Service resources are distributed. The four areas consist of two basic programs, a third basic and supporting program and an area of administrative activities necessary to support the first three. These are:

*a.* Employability Development;
*b.* Employer Relations and Placement;
*c.* Manpower and Employment Information; and
*d.* Administration and Technical Support

The above eliminates fragmented allocations for a wide variety of special purposes, including those for services to special applicant groups such as youth, older workers, and the handicapped. Services to such groups will continue to be emphasized. However, they will be reported statistically.

*Employability development*

This basic program area is comprised of all the activities and programs related to identifying and reaching out to the disadvantaged, who are not readily employable for a number of reasons, and providing the kinds of assistance, including intensive counseling, testing, referral to training and other support services necessary for them to become productive members of the workforce and of society. 6,219 positions were devoted to this program area during fiscal year 1967.

Significant among the accomplishments by the Employment Service in the area of Employability Development was the provision of services, including referral to jobs, for an estimated 3.5 million disadvantaged individuals through its own programs and operations or in concert with cooperating agencies. Of this total an estimated 1,765,000 individuals were placed. Also an estimated 40 percent total placements were members of minority groups.

*Employer relations and placement*

This program area is comprised of all activities related to meeting the employment needs of job-ready individuals and the manpower needs of employers.

Our Nation's manpower problems require that Government and industry share the responsibility of remaking jobs to fit people and working with people to enable them to fill jobs. The ultimate objective in the human resources development concept is a job for the unemployed, the disadvantaged and the handicapped.

Business and industry provide the major share of the job opportunities. Job development for people not having the training and/or experience needed for maximum job performance is not easy. Employers must be persuaded to reverse past policy and hire the hard-to-employ. One concrete example of this kind of cooperation is the Plans for Progress organization made up of about 382 major industrial firms.

The Federal-State Employment Service offers guidance and advice on hiring policies and job development and training programs for dealing with those inadequately educated or prepared for employment to an increasing number of employers, both large and small. Local Employment Service offices continue to report increasing employer, union, and community cooperation in the restructuring of jobs and elimination of unrealistic hiring practices.

The number of employers served by the Employment Service has been growing each year. In fiscal year 1967, 851,400 visits to employers were made. In addition 1,161,000 telephone contacts were made.

Placements (nonagricultural) totalled 6,331,000, job referrals 13,165,000, and application interviews and reinterviews 14,000,000. Among the services received by individuals were 2.1 million counseling interviews and nearly 2.1 million tests administered.

Another responsibility of the Employment Service, created by the 1965 Amendments to the Immigration and Nationality Act, is to expedite the entry of aliens possessing skills currently in short supply, or those whose education and talent will be advantageous to the United States, and to prevent adverse effect on resident workers which could result from admission of aliens without usable skills. The number of immigration certifications processed (nonagricultural) in fiscal year 1967 was 107,111. During fiscal year 1967, 13,300 positions were devoted to the Employer Relations and Placement program area.

*Manpower and employment information*

A cornerstone of the Manpower and Employment Information program is the development of labor area information. During fiscal year 1967 data on more than 150 major labor areas and 600 smaller areas were developed and will be reported on a continuous basis. This means that nearly 4,000 complex economic reports were analyzed for this program.

In order to strengthen labor area reporting, program emphasis has been given to training regional staff to provide technical assistance for this work to State agencies. Regional meetings have been held for training State employees.

Cooperation with regional planning groups for systematic analysis of regional labor force data in connection with the Appalachian Regional Development Act was encouraged. Economic data for States and areas within the Cumberland Plateau Region of Appalachia were provided for the Interagency Coordinating Team of the President's Committee on Manpower. In addition, data on States and areas were provided to the Office of Regional Development and Planning and to the Appalachian Regional Development Commission.

The development of occupational information for States and areas has been one of the major areas of emphasis for the Manpower and Employment Information program in the last year. Employment market information relating to occupational shortages and surpluses has been provided quarterly to the Secretary of Labor and has been issued through press releases.

As part of the program to develop occupational data, State agencies conducted 37 area skill surveys.

During fiscal year 1967 it became increasingly evident that the kind of information developed in area skill surveys can be produced in a more efficient and less costly way by the development and use of occupational projection techniques for States and areas. At present, work is underway to develop an interim occupational projection methodology to be published during fiscal year 1968. It is expected that this interim methodology will eliminate some of the shortcomings of the current *Area Skill Survey*. Work will then be undertaken on a more refined version of the projection technique.

Development of special industry studies was undertaken in the Manpower and Employment Information program to provide basic data needed for local man-

power action programs. Eight industries were surveyed as a result of the interest in them for program planning purposes.

During the past fiscal year staff members of the Employment Service have monitored every substantial dislocation of workers resulting from changes in employment in Department of Defense and Atomic Energy Commission installations. Employment Service staff members using available information and data have helped local community groups define manpower problems so that the community itself can encourage new industry to enter the area or take other appropriate measures.

In addition, the Employment Service has provided information from a special analysis of 216 areas on the impact of defense related activities on the economies of the areas to the Department of Defense for planning purposes.

During fiscal year 1967, 1,675 positions were assigned to this program and support area.

*Administrative and Technical Support*

This support area comprises those activities that insure effective planning, direction and execution of programs to achieve Employment Service goals. These activities include management and supervision, staff services of program specialists, career development and training and miscellaneous office services.

A redirection of State employment security agency personnel accomplished important objectives in fiscal year 1967:

Revised Budget Structure and Time Distribution System

During the past fiscal year a complete revision was made of the budget structure and time distribution system for State Employment Service agencies. The principles of the new structure are outlined in the introduction to this section. The States' budget requests, budget allocations and subsequent time distribution reports will be in the same format.

Management System

Developmental work on an integrated management system was initiated in fiscal year 1967 and will continue in fiscal year 1968 to determine the data requirements for such a system and to develop methods for obtaining the data. The system is being designed to provide data on staff utilization, cost of services to various employer and worker groups, and the degree to which program goals and objectives are realized, and to obtain information on alternative methods of rendering services.

*Plans of Service*

The development and use of State Plans of Service already have been described. During fiscal year 1967, work to improve the management of State and local offices was extended and accelerated. This effort, which is being stressed in fiscal year 1968, involves the continuing participation of State agency management specialists, both independently and in cooperation with national and regional office staff, in at least the following three major management improvement areas: (1) providing training and guidance in installing and using local and State office plans of service; (2) field testing and installing other new and improved management and supervisory tools and techniques; and (3) maintaining a program of evaluations of local and State administrative offices, including follow through on recommendations for improvements.

A local office plan of service is an operational plan which: (1) identifies the needs of jobseekers, employers, and the community for manpower services; (2) identifies the agencies and organizations which can provide needed services for jobseekers; (3) develops the service objectives to be accomplished for a fiscal year; (4) provides a basis for the assignment and utilization of staff resources; and (5) provides a basis for appraisal of the results obtained and resources utilized.

During fiscal year 1967, a pilot installation of a plans of service was made in a local office in each of the 11 regions. State agencies participated in these installations for training purposes.

During fiscal year 1967, 4,178 positions were devoted to this management support area.

*In 1968*, it is planned to continue the redirection started in 1967. These plans are described below by Employment Service program area. Also, a start will be

made toward implementing improved information, accounting, budgeting and reporting systems. This will be accomplished through the diversion of 187 positions and $998,200. This is explained in detail under the Administration and Management Service justification (page 51).

*Employability development*

The charts on pages 36 and 37 show the shifts among the four employment service categories between fiscal years 1967 and 1968.

For fiscal year 1968 it is planned to—

(1) Help jobseekers, most of whom are disadvantaged and have serious employability problems, in preparing themselves for jobs.

(2) Provide specialized services to minorities, youth, older workers, and handicapped persons.

(3) Provide employment services to residents of smaller communities and rural areas.

(4) Develop occupational tests and related techniques which will provide the information needed to improve employability development and placement services for disadvantaged jobseekers.

(5) Work more closely with community and other local groups in an effort to provide as coordinated and broad a base of services as possible to those in need of help.

In youth activities emphasis will be placed on reaching and serving actual or potential school dropouts and military rejectees. The older working program will stress improvements in the intensive service units now operating in about 20 areas.

During fiscal year 1968 the number of Apprenticeship Information Centers will be increased from 26 to 36 (see map page 38). These centers are designed to assist youth, particularly minority youth, to gain entry into the skilled trades.

There will be an estimated 7,038 positions assigned to this program area in fiscal year 1968.

*Employer relations and placement*

During fiscal year 1968 it is planned to—

(1) Provide job development and placement services that will effectively assist jobseekers, especially the disadvantaged, in finding employment, and employers in obtaining the workforce they require; and

(2) Meet job-finding needs of the growing numbers of veterans seeking employment service assistance, particularly those who are handicapped, and improve the quality of services provided.

To serve a growing number of applicants during fiscal year 1968 (10.9 million in fiscal year 1968), a great many of whom will have special job finding problems, the Employment Service proposes to—

(1) Concentrate contacts on about 1 million establishments having a wide range and large number of potential jobs, particularly at entry levels; promote cooperative programs with industry and other organizations to (a) hire and train disadvantaged jobseekers, (b) reassess hiring requirements, and (c) modify job content.

(2) Emphasize placement services for jobseekers experiencing difficulty in obtaining employment, the disadvantaged, and individuals completing manpower training, and provide placement assistance for unemployment insurance and welfare clients.

(3) Participate in community employment development activities to (a) minimize unemployment problems due to mass layoffs, plant closings, and cutbacks in defense-related industries, and (b) to assist community manpower planning.

(4) Undertake to meet increased immigration workloads (from 28,000 in fiscal year 1966 and 107,111 in 1967 to 114,000 in 1968).

There will be an estimated 12,540 positions assigned to this program area in fiscal year 1968.

*Manpower and employment information*

For fiscal year 1968 plans call for the development and dissemination of job market information at local, State, and national levels for use in planning employment service operations, developing training programs, implementing community employment, and other manpower development and utilization activities; for manpower planning by employers; and for providing Employment Service

offices with the data needed to serve as community manpower information centers. To achieve this goal, it is planned to—

(1) Continue a program to provide information on current and anticipated job opportunities.

(2) Stress the development of techniques for measuring unemployment and underemployment in small areas and rural poverty districts and improve techniques for estimating unemployment in States, labor areas, cities and counties.

(3) Provide local employment information in forms readily usable by individuals at all educational levels.

(4) Within available resources undertake special research in Occupational Analysis to develop techniques and information needed to identify, restructure and expand job opportunities for persons with limited education and experience; to identify and analyze emerging occupations, changing job duties and employer specifications; and to identify and group job skills and knowledge required for use in developing vocational training and education curricula.

An estimated 1,616 positions will be assigned to this program and support area in fiscal year 1968.

*Administrative and technical support*

In brief, the overriding goal is to modernize management of the Employment Service system. This involves designing, testing and installing a new integrated system for planning and measuring program and office achievement, based upon adequate management information, automatic data processing capability, fiscal management, and evaluation; and, development of management policies which will facilitate decentralization of responsibility. To increase staff capability and reduce costs of turnover, particular emphasis will be given to improving staff recruitment, training and retention.

Specific actions planned include—

(1) Installation of plans of service in all local offices.

(2) Preparation of revised criteria for the establishment and operation of local offices and the development and implementation of new guidelines for organizing State administrative offices to accommodate employment service responsibilities.

(3) Increased evaluation by State agencies of local office operations.

(4) Continued assessment of staff training needs and development of programs to increase staff capability, particularly for those engaged in human resources development activities.

There will be an estimated 4,178 positions assigned to this support area in fiscal year 1968.

*Farm Labor Service*

| | |
|---|---|
| 1968 | $19,105,000 |
| 1969 | $20,542,000 |

*In 1967*, accomplishments included agricultural placements of 4,145,000, youth placements in seasonal farm activities of 1,064,720, and the employment in seasonal agriculture of an additional 2,063,000.

The number of agricultural placements represents a drop of 192,000 below the 1966 level. While 20 States increased their placement services substantially over 1966 levels, the gains were offset by unavoidable losses in other States. In most of these latter States, seasonal employment opportunities were sharply reduced by the effects of widespread, extremely adverse weather conditions in the first and last quarters of the fiscal year. Seasonal job opportunity was further reduced by a 6 per cent decline in planted cotton acreage. In these two periods of the fiscal year (July-September 1966 and April-June 1967) there were 433,000 fewer man-months of available agricultural employment than in same periods of fiscal 1966, mainly because of the foregoing reasons.

There were strong reasons for believing that had it not been for the effects of adverse weather—and regardless of the cut in cotton acreage—the placement goal would have been met. Agencies had strengthened and expanded all recruitment techniques, particularly those directed towards maximum utilization of high school and college youth, and were well organized for a year of significantly improved service to workers and employers. (It is noted that in July 1967, with more favorable employment conditions, placement service increased 7 per cent over July 1966.)

In fiscal year 1967, youth placements in seasonal farm activities numbered 1,064,720 and accounted for 25.7 per cent of all agricultural placements. These activities constituted a major segment of the Bureau's program in the farm area, and were participated in by all States. Summer earnings in the farm youth program were known to contribute significantly toward high school and college expenses, thus making it possible for many to continue their education. In other instances there was evidence of summer employment being strongly motivated by impoverished family circumstances and the need to "help out."

All others employed in seasonal activities, roughly some 2,063,000 adults, were almost wholly from low or extremely low income groups. These included 1,621,000 locally unemployed an underemployed; 351,000 domestic migratory workers, recruited mostly from southeastern and southwestern States, the Ozarks and Appalachian areas; 70,000 Reservation Indians principally Oklahoma, Navajo, Papago and Sioux tribes; and 21,021 Puerto Ricans. It is estimated that about 60 percent of all seasonal workers were recruited on programs initiated by the Bureau. Total agricultural placements in fiscal year 1967 with all groups numbered 4,145,000.

In several instances State agencies cooperated with State mental institutions in arranging farm employment programs for indigent patients capable of working. These actions followed Bureau suggestions for "special assistance programs." While small in terms of worker volume, the projects' were highly successful in achieving their objective—providing employment and income not attainable from any other source.

*In 1968*, it is planned to recruit and place seasonal and year-round employees, expand services to all rural areas and extend support services.

All States will work closely with the Bureau in its new approach to resolving the increasing needs for year-round workers in highly skilled or trained in modern agricultural methods and practices.

Action in 1968 will deal with entire metropolitan milk-shed areas, then extending to major geographic areas specializing in different categories of food and fiber production, including pulpwood.

In the area of seasonal farm employment, all States will continue to strengthen and expand local day-haul operations, particularly as they relate to the employment of high school and college youth during summer months.

State agencies will continue to emphasize the expansion of services to all rural areas, in close coordination with other related manpower and out-reach programs sponsored by other public and private organizations. Demonstration and experimental projects relating to expansion of the Annual Worker Plan (which provides for continuity of employment for migratory workers), now in field test, will provide (a) home-based plans for both intrastate and interstate workers, and (b) annual plans of work which will involve both farm and nonfarm employment.

As defined in their plans of service, State agencies will extend all forms of support services commensurate with their respective needs. These include prevailing wage surveys for intrastate and interstate recruitment use, inspection of worker housing for the same purpose, community services for migratory families, and follow-up retention services directed toward stabilizing the seasonal work force.

*In 1969*, it is planned to continue those activities undertaken in 1968. For fiscal year 1969, each State will submit a plan of service tailored to the needs of agricultural workers and employers. In developing these plans agencies will consider the Bureau's statement of "Program Emphasis" for fiscal year 1968. Without exception the major activity of all States will be recruitment and placement relating to both year-round and seasonal employment, which will consume roughly 65 per cent of the grant allocations in the farm area. With favorable weather conditions, it is expected that placement services will move up to the 5 million mark in 1969.

*Veterans employment service*

Generally, there is at least one Veterans' Employment Representative per local employment service office.

*In 1967*, accomplishments included the taking of applications for employment assistance from 1,762,900 veterans (50.4 per cent more than in 1966); increasing the number of placements from 974,200 in 1966 to 1,182,200 in 1967, an increase of 21.4 per cent, and increasing the number of initial counseling interviews from 106,100 in 1966 to 157,000 in 1967, an increase of 48 per cent. These increases are due primarily to the Veterans' Readjustment Benefits Act of 1966, which includes provision for job finding assistance for post-Korean Conflict veterans.

*In 1968*, it is planned to provide services to post-Korean veterans covered under the Veterans' Readjustment Benefits Act of 1966, to begin implementing the personal contact program announced by the President, and provide increased services to all veterans.

As noted above, the Veterans' Readjustment Benefits Act of 1966 resulted in a greatly increased veteran workload. At the time this law was signed (March 1966) a backlog of 3.8 million post-Korean Conflict ex-servicemen already in civilian life became veterans by law. In addition, the Armed Forces are making an increasing number of separations. During fiscal year 1968 the estimate is 830,000.

Under the program announced by the President on August 14, 1967, every veteran separated from the Armed Services is contacted personally (telephone or visit) by the public employment office nearest his home address. The local office representative, although primarily providing information about jobs and job training, also will inform the veteran about other types of available benefits and refers him when necessary to other governmental agencies.

About 75 per cent of the returning veterans live in urban areas. Substantial numbers are returning to city slums. The personalized contact ordered by the President is particularly important for these individuals, in order to minimize the period of unemployment for those who seek jobs, as well as to help these veterans in their choice of the most promising of other alternatives.

Concurrently with the increased volume of younger veterans, the residual problems of the older Korean Conflict and World War II veterans are becoming more serious. The some 15 million World War II veterans now have an average of 47.8 years, while the average age of the 6 million veterans of the Korean Conflict is now 38 years. Because of the "older worker barrier," war veterans who become unemployed usually experience difficulty in locating jobs. This means that the job placement and counseling efforts of the local office staff often must be of greater duration than would be necessary for more employable applicants.

*Changes for 1969*

| | |
|---|---|
| Mandatory changes amount to | +$22,267,000 |
| Program changes amount to | +8,445,000 |
| Positions | +758 |

*Employment service*

This program increase will provide $8,347,000 and 758 positions to continue the installation of a management information system, an accrual accounting and cost-based budgeting system and an automated employment security reporting system extending from the local offices through the States to the Bureau. This program increase is explained in detail under the Administration and Management Service justification. The program increase will be in addition to efforts included in the basic program. The total effort is illustrated below.

| Source | Positions | Estimated cost |
|---|---|---|
| Provided from base: | | |
| In 1968 | 187 | $998,000 |
| In 1969 | | 1,681,000 |
| Provided by program increase: In 1969 | 758 | 8,347,000 |
| Total from all sources | 945 | 11,026,000 |

*Veterans Employment Service*

This program increase will provide $98,000 to finance the full year 1969 cost of the 1968 supplemental appropriation for the Veterans Employment Service which finances the cost for only a part year. This program increase will allow the Veterans Employment Service to provide full year services to veterans on an individual contact basis and allow for the operation of the newly established United States Veterans Assistance Centers, as provided for in the 1968 supplemental.

BASIS FOR THE ESTIMATE

The increasing population and labor force growth, especially among youth, the dislocations of mature workers resulting from changing technologies and plant relocations, together with pressure for in-depth services to the disad-

vantaged, will result in an increased demand for public employment office services in fiscal 1969. About 10.9 million jobseekers are expected to register with the Employment Service in fiscal 1969. This estimate includes over 1.7 million jobseekers age 45 and over, about 3.8 million youth under age 22, and .5 million handicapped workers.

To maintain service needs within present authorizations, the Employment Service is continuing to review assignments in terms of relative priorities, and is redirecting programs and reassigning resources to areas where the need is greatest.

In round numbers the poor are estimated by the Office of Economic Opportunity at more than 32 million based on a sliding scale of cash incomes related to family size, age of family members and location. A survey of 1965 incomes indicated that non-white people make up a disproportionate share of the poor, 32 per cent versus 12 per cent of the total population. The survey revealed that the poor are disproportionately located in rural areas—39 per cent, compared with 30 per cent of the total population. Clearly, an aggressive and comprehensive action program is required.

There are nearly 3 million employers in areas served by Employment Service local offices. To find the job opportunities with which workers can be matched, the Employment Service local offices must establish effective working relationships with more employers. The offices must keep informed of employers' changing needs, present the qualification of jobseekers currently available or who can be trained, and assist in the modification of job specifications to permit use of their skills or potential. Information on labor supply and demand must also be provided to employers, educators, and other local groups to facilitate community employment efforts to improve utilization of its manpower resources. Compounding job development difficulties has been the movement of many firms to suburban areas, thereby creating additional problems of travel time and costs in job development efforts. The Employment Service must increase the scope of its job-finding efforts if it is to provide adequate assistance to jobseekers residing in the central city ghetto areas.

The basis for the estimate of required Employment Service resources is as broad as the entire national scope of manpower problems. The potential workload cited in this document, the many and varied types of services which can be offered, and the commitment of the Federal-State system to an active manpower policy combine to form a set of circumstances which cannot be reduced to purely quantitative terms. Estimates of resources become a question of alternatives and depend on the level and type of services to be provided.

EMPLOYMENT SERVICE WORKLOADS

[In thousands]

| Basic workload | 1966 actual | 1967 actual | Percent change | 1968 estimate | 1969 estimate |
|---|---|---|---|---|---|
| New applications | 10,442 | 10,604 | +1.6 | 10,900 | 10,900 |
| Counseling interviews | 1,969 | 2,114 | +7.4 | 2,340 | 2,340 |
| Individuals tested | 2,330 | 2,073 | −11.0 | 1,760 | 1,760 |
| Placements, nonagricultural | 6,804 | 6,331 | −7.0 | 5,760 | 5,760 |
| Placements, agricultural | 4,337 | 4,145 | −4.5 | 5,000 | 5,000 |

Cost elements for Farm Labor Service activities are heavily affected by the kinds and extent of recruitment actions taken each year to help provide the Nation's hired farm labor force of roughly 2 million workers. The situation is entirely opposite to that in the non-farm area where the cost structure is affected by the number and types of applicants seeking work.

In the agricultural area, 80 per cent of the hired farm work force is of seasonal character, and each year this army of workers must be recruited anew.

In many States and areas having high labor-using crops, unemployment rates during harvesting months often run from 2 to 3.5 per cent, indicating tight labor-market conditions. Yet, field labor must be found or crops would go unharvested with obvious loss to the growers.

Cultural and harvesting practices that have been mechanized in some "processing" crops, such as tomatoes and green beans, have resulted in some reductions in the total man-weeks per acre. This movement continues strongly. In some cases, however, e.g., tomatoes, the mechanized process merely shortens the

duration of labor need, but has not been accompanied by a reduction in the number of workers. In many crops, mechanization has reduced or even eliminated the need for field labor.

While mechanization is a factor of significance, its effects are often offset by the labor needs of new acreage. In 1968, for example, it is expected that 75,000 additional acres will be put into productivity in the Snake River area of Idaho. Special studies on irrigation and land development have shown that for every 100 acres of land developed, there is created a need for one permanent farm hand. If the land is planted in high labor-using crops such as sugar beets, there is additional need for large amounts of seasonal labor.

Extremes in weather and crop conditions—such as those experienced early in 1966 and early in 1967—have disruptive impacts on harvesting operations and labor needs, hence, on Farm Labor Service activities. As in 1967, replantings occasioned by adverse weather means late harvesting, and this then conflicts with other harvesting labor needs, causing intensive emergency recruitment.

In helping assemble the annual seasonal work force, a wide variety of techniques and methods are used, but all have a common denominator—workers have to be found . . . locally, intrastate, interstate, and if absolutely necessary. imported from other countries. While recruitment is the wellspring for successful harvesting activities, interwoven are a number of correlated responsibilities. Migrant farm housing must be inspected, prevailing wage surveys made to satisfy the needs of interstate recruitment, and arrangements made for the extension of community services to migratory workers and their families.

Although work in the argicultural area is the first-line responsibility of all members of the Farm Labor Service, they must be constantly on the alert to assist farm workers, particularly seasonal workers, into more meaningful, gainful employment. The need for occupational counseling must be recognized. In all such instances—and many occur in rural areas—the farm staff must arrange for the appropriate services to be given.

The map shows the major directions of the northward migratory movement of domestic agricultural workers.

The responsibilities of the Veterans Employment Service are continually expanding. The number of veterans who qualify for employment services increases yearly. More than 800.000 veterans are separated annually from the armed services. The "new GI Bill" provided immediate coverage for 3.8 million post-Korean veterans.

The chart shows total veterans applications for employment, and the number of disabled veterans applying for employment in local offices, fiscal years 1963 through 1969.

In addition to increasing workload, the types of services being provided veterans is expanding. The President has announced a new program for individual contact of each returning veteran by the nearest public employment office. The establishment of Veterans Assistance Centers in twenty large cities to coordinate the activities of Federal, State, and other agencies, at the local level, is another new type of service offered to veterans.

*Activity 3. Administration and management*

| | |
|---|---|
| 1968 | $22, 842, 000 |
| 1969 | 24, 617, 000 |

NARRATIVE DESCRIPTION OF PROGRAM

This program provides the executive leadership and administrative support services for the manpower and income maintenance programs carried out by State agencies. It develops, coordinates, and promulgates plans, policies, and procedures necessary to attain national and State program objectives; executes and administers agreements to carry out Federal programs; prepares and submits budget requests supported by Plans of Service and other appropriate justification; directs and supervises the execution of the approved budget and related programs; identifies the need for legislative authority and develops appropriate proposals; and allocates resources within the agency. It also evaluates performance in the State and local offices; directs the collection and dissemination of economic and statistical data of value in the operation of the program; prepares and transmits required fiscal and statistical reports; maintains relationships with other State agencies, labor, management, and the public; and provides centralized services in such activities as personnel administration, administrative and business management, staff training, and automatic data processing.

*In 1967*, accomplishments by State employment security agencies in the administration and management functions were varied. An assortment of legislative proposals were developed and introduced in State legislatures; organizational structures in a number of States were modified; up-to-date management techniques were applied to improve operating systems; a record number of employees received out-service training; and special studies were made to identify needs and operating problems.

Increased attention was given to programs aimed at the most effective recruitment, development, and retention of employees. State agencies maintained a wide range of on-the-job training programs and offered opportunities for formal instruction at educational institutions to employees needing new or renewed skills.

Federal-State cooperative training programs were emphasized in fiscal year 1967. These programs took such forms as: the Experimental Training Center established at Michigan State University for the development of agency personnel; management training courses; human relations training for Bureau and State agency personnel at the Illinois agency's "Jobs Now" project; and numerous seminars and institutes conducted by leading educational institutions.

To broaden public understanding of employment security programs, State agencies embarked upon new communication programs designed to acquaint the general public with the varied manpower programs and policies which they administer.

The activities of State legislatures during the fiscal year required an outlay of administrative and management time on research, legislative drafting, and legislative review. There were scattered incidents where State legislatures introduced legislation which was not compatible with employment security objectives, or which raised potential conformity questions. In these cases, cooperation between the Bureau and the State agency involved was required to develop constructive alternatives to questionable legislation.

In cooperation with the Bureau, State agencies devoted time to task forces and special efforts to develop new concepts and procedures for evaluating administration and operations, financial management procedures, personnel management practices, automatic data processing programs, and other administrative management functions. Particularly noteworthy during the past fiscal year were the improvements made by State agencies in management capability, made possible by increased allocations of positions for such functions. Considerable progress was made in this vital management area through the establishment of appropriate position classifications, the recruitment of technicians, and the development of internal auditing programs. Bureau sponsored training of management staff was started during the fiscal year, with plans to extend and increase training opportunities in the future.

Fiscal year 1967 also marked the recognition of the need for concentrated effort in three major areas: development and implementation of a management information system, automation of the employment security reporting system and operations, and the installation of a uniform accounting system. Contractors were at work on the management information system and automatic data processing projects during 1967.

*In 1968*, it is planned that State agencies engage in efforts to strengthen administration and management functions by extending the plan of service concept as a part of a management system. Its use is as a management tool to provide (a) systematic planning for the effective use of resources to achieve agency goals, (b) an improved basis for estimating needs and allocating resources, (c) a more rational basis for evaluating State and local office performance and (d) maximum flexibility in the management of resources and efforts in light of changing priorities and objectives. As part of the development and maintenance of an effective information system, States are assisting the Bureau in the testing, application and refinement of a time distribution reporting system as a means of determining personal service costs and as a tool for management. States are beginning internal audit and self-evaluation programs, using predesigned evaluation outlines, tools, techniques and approaches. These were developed as an outgrowth of the advice of a private contractor whose study recommended the exploration and development of an information system as well as the installation of an interim management information system.

Also in fiscal year 1968, a contractor hired to study employment security operations and to submit a plan for applying computer technology to improve program planning, evaluation and administration, finished his work. A plan was

delivered by the contractor in April 1967 for automating employment security operations and reporting systems. Later this year the contract was amended to provide for technical assistance through June 1969 in the development and implementation of automated data processing systems.

In addition, the contract provides for the inclusion of automated data processing requirements in the States and the Bureau that are generated as a result of studies made to develop management information and cost accounting systems.

All work performed by the contractor within the several employment security organizations is closely monitored by a joint Federal-State steering committee and four functional task forces to assure that it is effectively coordinated and directed. Provisions exist in the contract for periodic reviews of the contractor's work to assure that it is in accord with employment security plans and objectives. Periodic reviews are scheduled which aim at achieving automatic systems compatibility throughout the Federal-State employment security program and avoiding any duplication of effort.

The House Committee on Government Operations and the General Accounting Office have been making a concerted effort to get all Federal agencies to comply with the Budgeting and Accounting Procedures Act of 1950 which requires that all Federal agencies establish an accrual accounting and a cost-based budgeting system. During 1968, a contract was awarded for the design and implementation of such a system in the Department of Labor and the State employment security agencies. The system which the contractor is developing will comply with the law and is expected to result in substantially improved fiscal accounting. It will also be designed to provide for each individual State's requirements and the needs of State agency managers.

The contract requires that the system be developed and that it be installed by the contractor in three State agencies. These three agencies are Oregon, Pennsylvania and Rhode Island. The contractor completed the first phase of the contract on November 10, 1967. This phase included collection and organization of data and evaluation of current systems and legal requirements. This evaluation was made at the Federal level and in the three model States. The contractor is now working on the second phase, the design of the system, which is to be completed by June 30, 1968.

The accounting system which is being designed represents a considerable change for the State agencies. It will constitute a common accounting system for all States with formalized methods which will provide for more correct and uniform cost figures. The contract also requires that the system should provide for the maximum use of data processing and/or electrical accounting machines. This will require specific systems analysis and programming. The cost accounting system will provide measures of performance and controls which State agency managers do not now have. The reporting and analysis of this material will require additional resources, but will provide both State and Federal administrators with suitable financial data for effective management of resources and operations.

Also in 1968, this activity was responsible for directing and coordinating the efforts of 519 Employment Service and Unemployment Insurance Service employees who worked for eight months of the year on installation of an interim management information system, the automation of the employment security reporting system, and the design of a uniform accrual cost accounting system. These efforts will be expanded in 1969 and are explained in detail in the section below on plans for 1969.

*Changes for 1969*

| | |
|---|---|
| Mandatory changes amount to | +$1,775,000 |
| Program changes amount to | (+8,484,000) |
| Positions | +(758) |

The program changes appear under this activity because it is from here that they will be directed and coordinated. The amounts and positions appear here as "non-add" items purely for informational purposes. They appear as change items in Activity 1, Unemployment Insurance, and Activity 2, Employment Service.

*Proposal:* To direct continued effort toward the implementation of (1) a comprehensive management information system; (2) an automated employment security reporting system in all State agencies and the Bureau as well as prototype data systems in three "model" State agencies; and (3) a uniform accrual accounting and cost-based budgeting system in State agencies and the

Bureau so that State agencies can do a more efficient job of utilizing resources to the maximum degree.

*The Need:* The growth of and the demand for employment services in the past few years have affected substantially the workload, procedures, organizational alignment, skill requirements, and other administrative factors in affiliated State agencies. In view of this situation a study by a management consultant firm was begun. It pointed up the need for State employment security agencies to develop better planning capability, greater management capacity to utilize resources with optimum efficiency, more proficiency in evaluation and control techniques, and comprehensive management information, including workload measurements and costs.

Increasing workloads and the demand for rapid processing of vast amounts of data and information have made comprehensive automation necessary. Rather than approach such a step haphazardly, the Bureau hired a contractor to prepare a conceptual design of an automated employment security system and to assist selected "model" State agencies to develop automated systems for themselves and for a major metropolitan area.

A uniform accrual accounting system is needed to comply with the Budgeting and Accounting Procedures Act of 1950. When the system is installed it will provide Federal and State managers with comparable cost data on employment security operations.

*The Program:* In management, significant improvements are expected from State agency participation in the three areas for which program increases are requested.

The additional resources for management improvement and a management information system will provide State employment security agencies with the capability to: install effective program and budget planning by objectives described in Plans of Service down to the local office level; develop more sound organizational structures, guided by appropriate policies and procedures set up jointly by the Bureau and State agencies; establish and maintain evaluation systems using performance standards, workload measurements, more sophisticated analyses, and other tools and techniques; manage and utilize more effectively all the human and material resources allocated to the States.

This will mean, for the States agencies, greatly improving their capability in long range and short range planning. This requires defining goals and objectives, and measuring results achieved. These will be responsive but not limited to national goals and objectives. The objectives themselves must treat as nearly as possible both with important end results and with local situations. Performance standards and means to evaluate work performed will also be integral parts of the system. Thus it will be possible to determine the most effective means of meeting objectives.

In order to insure the practicality of the design of the uniform accounting system, and to minimize the difficulties in installing it in all of the States, the system will be thoroughly tested and implemented in the model States. This phase is to be completed by December 30, 1968.

At that time the Bureau will undertake the expansion of the system to other State agencies. An accounting manual and materials will have been developed by the contractor which can be used by all agencies. It is planned that at least three employees from each agency will be schooled in the fundamentals of the system during the last six months of fiscal year 1969. Since each State agency is a distinct entity in that organizations, operations, and requirements differ from State to State, it is necessary to make specific systems analyses in each State before full implementation can be accomplished. Therefore, it is assumed that approximately five additional State agency systems can be converted in the latter half of fiscal year 1969. Implementation in additional States will continue. However, the speed with which the system can be installed will depend on the complexity of each State's operation and the availability of the proper number of qualified State employees.

It should be emphasized that the new accounting system is being introduced to meet requirements of the Federal Government. It is not a substitute for the current "cash and obligation" accounting system, which must be maintained. Instead, it supplements the current system with complex cost and accrual accounting systems, including property accounting.

The implementation of automated reporting systems in State agencies and the automation of employment security operations in several model States will continue in 1969 as a part of the effort to apply computer technology to improve operations, planning, and evaluation. The "model" installations look toward the implementation of an automated reporting system in all States. This will require a complete change from the current State agency manual reporting procedures. Also in 1969, the implementation of an Area Manpower Data System in the New York metropolitan area will continue. That area extends into contiguous communities in New Jersey and Connecticut. Employment Service operations will be automated and tested to determine the extent to which information can be interchanged among manpower support agencies located in a large complex labor market area.

At the same time work will be continuing on developing long-range plans for the expansion and exploration of prototype automated systems to all States and effecting a transition to a fully automated status throughout the Federal-State system; and providing on-site assistance to the California agency in achieving maximum value and efficiency from the Labor Inventory Communication System. The purpose of the California system is to determine the most efficient and effective means for using a computer to support local office placement operations for professional occupations.

Of the $16,000,000 and 1,470 positions to be directed toward the administrative efforts described above, only $8,484,000 and 758 positions are being requested as a program increase. The remaining $7,516,000 and 712 positions will come from redirected resources in operations in 1969 to add to 1968 efforts and to put 1968 efforts on a full-year cost basis.

Of the 712 positions to be derived in 1969 from current operations, 525 will be from the Unemployment Insurance Service and will work on unemployment insurance-related phases of the three projects. The Employment Service will provide 187 positions for its portion of the three projects. The 758 positions requested for a program increase will all concentrate on employment service portions of cost accounting, management information, and automation systems.

All of the positions in 1969 will be at a salary rate of $7,422 plus personnel benefits. A small amount is included in the estimate for unemployment insurance to provide automatic data processing equipment.

A significant portion (519 positions) of the 1969 redirection of staff was accomplished in 1968.

*1968 Redirection*

| | |
|---|---|
| Diversion of 332 unemployment insurance positions for 8 months | $1,772,200 |
| Diversion of 187 employment service positions for 8 months | 998,200 |
| Diversion of savings in nonpersonal services | 1,582,000 |
| Total | 4,352,400 |

The 332 positions diverted from unemployment insurance functions in 1968 for management improvement and data processing purposes are from the wage record and overpayment and fraud detection functions, and became available primarily through more efficient handling of clerical activities. An additional 193 positions will be diverted in 1969, as they become available through automatic data processing conversions of unemployment insurance operations now underway. Thus, in total, 525 unemployment insurance positions will be redirected into more essential activities during fiscal year 1969.

A total of 187 positions are being diverted in fiscal year 1968 from employment service functions closely allied to the management improvement, data processing and accounting-budgeting areas. In addition, a stringent policy concerning upgrading of space resulted in a savings of $1,582,000, which permitted diversion to other critical needs. This amount is scheduled for allocation to States that are automating operations or are upgrading electronic data processing installations in line with long range plans.

The following table shows the distribution of positions and dollars to be expended on these efforts in fiscal year 1969.

| | Derived from base | | Program increase | | Total | |
|---|---|---|---|---|---|---|
| | Positions | Amount | Positions | Amount | Positions | Amount |
| Implementation of management information system: | | | | | | |
| UI | 378 | $3,150,000 | | $98,000 | 378 | $3,248,000 |
| ES | 143 | 1,192,000 | 580 | 6,388,000 | 723 | 7,580,000 |
| Total | 521 | 4,342,000 | 580 | 6,486,000 | 1,101 | 10,828,000 |
| Extension of employment security data processing system: | | | | | | |
| UI | 55 | 920,000 | | 15,000 | 55 | 935,000 |
| ES | 24 | 1,320,000 | 97 | 1,067,000 | 121 | 2,387,000 |
| Total | 79 | 2,240,000 | 97 | 1,082,000 | 176 | 3,322,000 |
| Development and pilot installation of accounting system: | | | | | | |
| UI | 92 | 767,000 | | 24,000 | 92 | 791,000 |
| ES | 20 | 167,000 | 81 | 892,000 | 101 | 1,059,000 |
| Total | 112 | 934,000 | 81 | 916,000 | 193 | 1,850,000 |
| Grand total: | | | | | | |
| UI | 525 | 4,837,000 | | 137,000 | 525 | 4,974,000 |
| ES | 187 | 2,679,000 | 758 | 8,347,000 | 945 | 11,026,000 |
| Total | 712 | 7,516,000 | 758 | 8,484,000 | 1,470 | 16,000,000 |

*Activity 4. Contingency fund*

| | |
|---|---|
| 1968 | $12,000,000 |
| 1969 | 12,000,000 |

NARRATIVE DESCRIPTION OF PROGRAM

The purpose of the contingency fund is to assure that funds will be available to meet increased costs of administration resulting from changes in a State law or increases in the number of claims filed and claims paid or increased salary costs resulting from changes in State salary compensation plans which are applicable to employees of the State, generally.

*Changes for 1969*

| | |
|---|---|
| 1968 | $12,000,000 |
| 1969 | 12,000,000 |
| Amount | |

*Basis for the estimate*

Estimates for the continency fund are based on experience. The following table reflects the contingency earnings in the past year and the estimate for fiscal years 1968 and 1969. In fiscal 1969 these costs are paid from base program funds and are included elsewhere in this estimate. The resulting estimate for the contingency fund is then generally comparable with previous years experience.

| | 1967 actual | 1968 estimate | 1969 estimate |
|---|---|---|---|
| Salary increase | $11,596,001 | $21,239,000 | $15,000,000 |
| State law changes | 1,288,201 | 2,000,000 | 3,000,000 |
| Workload increases | 4,520,414 | 8,911,000 | 1,500,000 |
| Total | 17,404,616 | 32,150,000 | 19,500,000 |
| Financed through normal budgetary adjustments and curtailment of basic programs | −9,181,296 | −20,150,000 | −7,500,000 |
| Appropriation | 8,223,320 | 12,000,000 | 12,000,000 |

COMPARISON OF PERSONAL AND NONPERSONAL SERVICES FOR FISCAL YEARS 1966, 1967, 1968, AND 1969

| | 1966 actual | 1967 actual | 1968 estimate | 1969 estimate | Change between 1968 and 1969 |
|---|---|---|---|---|---|
| Personal services costs | $351,302,000 | $371,060,000 | $398,549,000 | $446,038,000 | +$47,489,000 |
| Retirement and contributions | 38,762,000 | 42,639,000 | 47,428,000 | 54,451,000 | +7,023,000 |
| Total personal services cost | 390,064,000 | 413,699,000 | 445,977,000 | 500,489,000 | +54,512,000 |
| Supplies | 7,735,000 | 7,571,000 | 7,407,000 | 7,640,000 | +233,000 |
| Communications services | 6,947,000 | 7,402,000 | 7,241,000 | 7,347,000 | +106,000 |
| Travel | 8,495,000 | 8,997,000 | 8,881,000 | 9,014,000 | +133,000 |
| Printing and binding | 629,000 | 455,000 | 670,000 | 680,000 | +10,000 |
| Rents, equipment | 7,636,000 | 8,201,000 | 8,229,000 | 9,402,000 | +1,173,000 |
| Repairs and alterations, equipment | 837,000 | 844,000 | 790,000 | 803,000 | +13,000 |
| Rent, premises | 35,553,000 | 37,821,000 | 39,814,000 | 40,412,000 | +598,000 |
| Repairs and alterations, premises | 1,373,000 | 2,193,000 | 701,000 | 711,000 | +10,000 |
| Heat, light and water | 3,479,000 | 3,639,000 | 3,974,000 | 4,032,000 | +58,000 |
| Equipment purchases | 2,945,000 | 4,181,000 | 1,246,000 | 1,264,000 | +18,000 |
| Outservice training | 2,485,000 | 3,425,000 | 2,490,000 | 2,490,000 | |
| Miscellaneous total | 7,452,000 | 12,754,000 | 8,169,000 | 8,291,000 | +122,000 |
| Subtotal | 85,566,000 | 97,483,000 | 89,612,000 | 92,086,000 | +2,474,000 |
| Postage | 8,853,000 | 9,158,000 | 9,638,000 | 11,998,000 | +2,360,000 |
| Total nonpersonal services cost | 94,419,000 | 106,641,000 | 99,250,000 | 104,084,000 | +4,834,000 |
| Unobligated balance | 7,617,000 | 3,660,000 | | | |
| Contingency | | | 12,000,000 | 12,000,000 | |
| Total | 492,100,000 | 524,000,000 | 557,227,000 | 616,573,000 | +59,346,000 |

*Explanation of personal service cost increase for 1969, $47,489,000*

It is estimated that increases for 1969 related to the base positions will be $28,766,000 for Statewide compensation plan changes and $6,763,000 for increment costs for a total mandatory salary increase of $35,529,000. Another $6,245,000 is related to the new Unemployment Insurance workload and growth in program coverage positions. An additional $5,626,000 is related to the program increase for establishing a management information system, and $89,000 is needed to finance the full year costs in 1969 of the Veterans Employment Service supplemental.

*Explanation of fringe benefit cost increase for 1969, $7,023,000*

The estimated increase in fringe benefit costs from the 1968 budgeted rate of 11.9 percent of base personal services to an estimated 12.2 percent in 1969 will require $5,565,000. Another $762,000 is related to the new Unemployment Insurance workload and growth in program coverage positions. An additional $687,000 is related to the program increase for establishing a management information system, an automated reporting system and an accrual cost accounting system. The remaining $9,000 is needed to finance the full year costs in 1969 of the 1968 Veterans Employment Service Supplemental.

*Explanation of nonpersonal service cost increase for 1969, $4,834,000*

There are no new resources for nonpersonal services related to base positions in this request. Of the total, $2,171,000 is related to the new positions included in the program increase. $303,000 is related to the new Unemployment Insurance workload and growth in program coverage positions. The postage increase is related to the new Unemployment Insurance workload and growth in greater program coverage positions ($860,000) and increased postage costs under P.L.

90–206 ($1,500,000) for 1969. The total increase is broken down by category as follows:

| Category: | *Nonpersonal services Cost increase* |
|---|---|
| Supplies | $233,000 |
| Communication services | 106,000 |
| Travel | 133,000 |
| Printing and binding | 10,000 |
| Rents, equipment | 1,173,000 |
| Repairs and alterations, equipment | 13,000 |
| Rents, premises | 598,000 |
| Repairs and alterations, premises | 10,000 |
| Heat, light, and water | 58,000 |
| Equipment purchases | 18,000 |
| Miscellaneous total | 122,000 |
| Postage | 2,360,000 |
| Total nonpersonal services | 4,834,000 |

*Total personal and nonpersonal services increases for fiscal year 1969, $59,346,000*

The 1968 estimate for contingency expenditures of $32,150,000 includes increases in administrative costs due to changes in Statewide compensation plans, changes in State laws and an increase in the claims workload. These expenses become mandatory increases required in the base program and are not paid from contingency funds in 1969. The contingency fund needs for 1969 are estimated to be $12,000,000.

*Total increase for 1969, $59,346,000*

EXPLANATION OF ADMINISTRATIVE ADJUSTMENTS TO FISCAL YEAR 1968 FINAL ACTION

In order to continue the implementation of the recommendations of the Cresap, McCormick and Paget Study on management improvements, 228 Unemployment Insurance Service direct positions were transferred to Unemployment Insurance Administrative and Technical Support for use in management-related functions. This adjustment involves a shift of $2,126,000. In addition, the figures in parentheses indicate resources redirected *within* an activity toward the management, system, automation, and accrual cost accounting effort.

Personnel carrying out the Joint Statistical Program in conjunction with the Bureau of Labor Statistics were transferred from Administrative and Technical Support positions to Employment Service direct positions. This shift involves 212 positions and $1,977,000.

ADMINISTRATIVE ADJUSTMENT TO FISCAL YEAR 1968 FINAL ACTION FOR LIMITATION ON GRANTS TO STATES

| | Fiscal year 1968 final congressional action | | Fiscal year 1968 final action adjusted | | Change | |
|---|---|---|---|---|---|---|
| | Positions | Amount | Positions | Amount | Positions | Amount |
| 1. Unemployment insurance service: | | | | | | |
| a. State unemployment insurance service | 23,486 | $218,810,000 | 23,258 | $216,684,000 | −228 (104) | −$2,126,000 (651,000) |
| b. Federal unemployment insurance service | 549 | 5,482,000 | 549 | 5,482,000 | | |
| c. Administration and management | 1,460 | 13,606,000 | 1,688 | 15,732,000 | +228 | +2,126,000 |
| Total, activity 1 | 25,495 | 237,898,000 | 25,495 | 237,898,000 | | |
| 2. Employment service: | | | | | | |
| a. General employment service activities | 19,227 | 171,927,000 | 19,439 | 173,904,000 | +212 | +1,977,000 |
| b. Youth employment services | 6,616 | 68,888,000 | 6,616 | 68,888,000 | | |
| c. Farm services | 2,051 | 19,105,000 | 2,051 | 19,105,000 | | |
| d. Administration and management | 2,392 | 22,295,000 | 2,392 | 22,295,000 | | |
| Total, activity 2 | 30,286 | 282,215,000 | 30,498 | 284,192,000 | +212 | +1,977,000 |
| 3. Administration and management | 2,659 | 24,819,000 | 2,447 | 22,842,000 | −212 | −1,977,000 |
| 4. Contingency fund | | 12,000,000 | | 12,000,000 | | |
| Total | 58,440 | 556,932,000 | 58,440 | 556,932,000 | | |

PREPARED STATEMENT

Senator HILL. Mr. Goodwin, what do you have to tell us this morning?

Mr. GOODWIN. Mr. Chairman, we have several appropriation requests. We have grants to States, unemployment compensation for Federal employees and ex-servicemen, a small one on the trade adjustment program, our own salaries and expenses, and a final item on the revolving fund.

I would like to take these one by one if it meets with your approval.

Senator HILL. All right, sir, go ahead.

Mr. GOODWIN. May I submit our full grants statement for the record?

Senator HILL. We will have it appear in full in the record. Then you summarize.

(The statement follows:)

The estimate of administrative costs to operate the employment security system in the States is $616,573,000 for fiscal year 1969. This estimate is financed entirely from trust fund revenues. The increase of $59,346,000 over last year's adjusted limitation provides $50,764,000 for mandatory costs, primarily salary increases for State personnel, $98,000 for the full year cost of an expanded Veterans program for which a supplemental is being sought for the remainder of fiscal year 1968, and $8,484,000 to make certain improvements in the management of State operations. This amount will partially fund the implementation of the administrative studies discussed with you last year.

Before I discuss the 1969 increases in detail I would like to make a brief statement on the economic conditions which influence the estimate and to describe the general status of the employment security program.

BUDGET ASSUMPTIONS

The kinds and volumes of services required of State employment security agencies are determined, to a substantial extent, by the Nation's economic conditions. Budget requests for fiscal year 1969 are based on anticipated economic and labor force conditions during that period.

We assume that the steady growth that has characterized the economy in recent years will continue through fiscal year 1969. The anticipated rate of growth, even with rising productivity, will result in an increase in total employment which will more than offset the expected growth in the work force. The volume of total unemployment is expected to edge down to an average of 3.1 million (the fiscal year 1968 average is now assumed at 3.2 million).

The economic outlook is based upon the assumption that the international situation will not change enough, in etiher direction, through fiscal year 1969 to alter either the volume of defense expenditures or the size of the armed forces. In the event that the international situation does change significantly, the basic economic assumption upon which this budget is based will need a thorough review.

Much of the assumed growth in employment will occur in establishments covered by State unemployment insurance laws. Covered employment, therefore, is expected to grow substantially for this reason. Changes in State laws designed to extend coverage will also add to the number of workers covered by State unemployment insurance.

The average weekly volume of insured unemployment per month (seasonally adjusted) in the first eight months of fiscal year 1968 varied between 1.1 million and 1.4 million. The insured jobless rate average 2.5 percent. We assume that insured unemployment for fiscal year 1969 will average 1.1 million per week, which is the experience of the two most recent months, January and February 1968. The rate of insured unemployment assumed for fiscal year 1969 is 2.2 percent.

The economic and employment growth assumed for the Nation as a whole will not be fully shared by all industries and all areas. Continued shifts in population and areas of demand, continuing technological changes, and changes in defense outlays may result in increased unemployment in some industries and in some

areas. At the same time. other industries and areas may experience shortages of qualified workers to meet employer needs.

The employment security system will be called upon to meet many problems associated with uneven growth in economic activity and changing labor-demand-supply relationships. They will be met through an intensification of recruitment to meet labor shortages, and a wide variety of activities designed to develop human resources in both urban and rural poverty areas.

Mr. Chairman, I would like to turn now to the operating components of the employment security system and bring the Committee up to date on the status of the various programs.

### UNEMPLOYMENT INSURANCE

The Committee is familiar with the operation of the Unemployment Insurance program and its primary function of providing wage loss compensation during an individual's unemployment. I should like to report that during fiscal year 1967 this account provided administrative funds to enable the States to collect over $2.900,000,000 in unemployment insurance taxes from 2,500,000 employers; to pay State benefits totalling almost $2,000,000,000 to approximately 4,500,000 beneficiaries; and, to pay $77,900,000 in benefits to 162,000 unemployed Federal employees and ex-servicemen.

The enacted appropriation for fiscal year 1968 provides funds and positions for the State unemployment insurance system to process a weekly average of 1.0 million unemployed workers and to act as agents for the Federal Government in processing a weekly average of 28,200 payments to unemployed Federal employees and ex-servicemen.

It is anticipated that the States will process claims for a weekly average of 1.1 million unemployed workers during fiscal year 1969, an increase of 100,000 per week over the level provided for in the 1968 appropriation. Due to the continued growth of the covered work force, the 1.1 million level for fiscal year 1969 results in an insured unemployment rate of 2.2 percent.

It is also anticipated that the number of payments to Federal employees and ex-servicemen in 1969 will be at about the same level that is now estimated for fiscal year 1968.

The tables and charts appearing in the budget graphically illustrate the rate of change in the workloads of the four principal claims activities from the levels in fiscal year 1963 through the current estimate for 1969. Since 1963 initial claims have declined 29%, continued claims 40%, contested claims 29%, and appeals 27%. The staff required to handle these workloads has been reduced from a yearly average in 1963 of 17,825 to 11,949 estimated in 1969, representing a reduction of 33%. Thus, staff productivity in the claims functions has been maintained overall and in some functions improved, in spite of a sharp decline in workloads.

In the area of tax operations there has been an increase in workloads between fiscal year 1963 and the estimate for 1969 of 11% in the number of subject employers and 35% in the number of wage records of covered workers. However, through the extended use of automatic data processing equipment and improved methodology staff increases have been held to 1.0% and 15% respectively.

### EMPLOYMENT SERVICE

For the past several years the Federal-State Employment Service has focused on services for the hard-core unemployed, underemployed and those on the periphery of the workforce. During fiscal year 1969, this effort will be intensified, with a significant portion of employment service resources dedicated to establishing jobless and non-job ready citizens in competitive position in the job market. This critical need arises from the fact that today, and for the next several years, the hard-core unemployed and underemployed will continue to be handicapped in finding gainful employment by reason of race, age, lack of education and marketable skills.

At the same time critical shortages in hard-to-find skills present production problems to the Nation's industries. Employability assistance leading to better utilization of the Nation's available and potential workforce will help those who are now not competitive in the job market, and will assist in filling many currently existing job vacancies.

In addition to the continuing redirection of efforts within the basic employment service program to meet changing manpower needs, the State employment services are carrying on the manpower aspects of a variety of the newer economic programs. A number of functions are performed under other appropriations. The

Employment Service finds and refers people to be trained under the Manpower Development and Training Act. They select and refer applicants to receive Job Corps training. They make determinations of eligibility of areas for assistance under the Public Works and Economic Development Act. They offer special assistance to workers affected by imports allowed under the Automotive Products Trade Act. They will have a major manpower role in the new Work Incentive Program authorized by the Social Security Amendments of 1967. They are extending individualized services to Veterans including those who served in Vietnam. While it is true that some additional financing and positions are provided for carrying on the activities, the central nucleus and resource of the Nation's total manpower effort is the 31,306 employment service people financed by the Grants to States appropriation in 1969. These are the trained manpower experts of every local community. Here is where the basic employment skills reside. Were it not for the knowledge and skills which reside in the personnel of the basic employment service system, it would not be possible to undertake these expanded manpower programs in an efficient manner.

The Employment Service must be prepared to meet the job problems of these unemployed and underemployed workers and to help fill job vacancies of employers. The traditional "matching of men and jobs" will no longer serve effectively to resolve these needs. Additional thorough assistance must be provided to the underemployed, new entrants and the hard-core unemployed to help them qualify for and find meaningful and dignified employment. This can be done through greater utilization of the Nation's available and potential manpower resources which will require: modifying hiring specifications; restructuring jobs, and upgrading present employees for the hard-to-fill vacancies. This in turn will create new openings at lower and intermediate levels for which many of today's hard-core unemployed can qualify with employability assistance provided through the Federal-State employment service system.

Included in the 11 million jobseekers who are expected to seek assistance from the public employment service are some 1.7 million older workers (45 years of age and over), 3.8 million youth under 22 years of age and over 500,000 physically or mentally handicapped workers. The majority of these require special attention and efforts before they can be absorbed in the productive sector of our society. I have already mentioned the large numbers of workers and potential labor force participants who have been denied the benefits of our Nation's affluence for a variety of reasons, such as obsolescence of skills, limited education and training, isolation from job opportunities because they live in deteriorating areas (both rural and in the inner areas of our cities), discriminaton on the basis of race or ethnic origin and apathy on their part resulting from past discouragement and denial when they attempted to improve their lot. Each of these groups represents man-years of potential productive effort which must not be wasted. In addition, they are extremely costly in terms of welfare payments and loss of potential tax revenue. We intend to turn our energies to the full development of these human resources.

To achieve this goal, virtually all employment service resources will be directed to four major activities:

(*a*) Employability development services
(*b*) Employer relations, job development and placement
(*c*) Manpower and employment information
(*d*) Administrative and technical support

*Employability development services* provide specialized services to help individuals prepare for and find employment which will enable them to achieve a more productive, better paying and more satisfying role in the work force. These services include reaching out to individuals, especially those disadvantaged for the reasons noted earlier, who are unaware of the availability of these services. It means providing them with, or referring them to, necessary orientation, counseling, testing, education and vocational training and other supportive services which will enable them to obtain and hold jobs which best fit their abilities and needs and permit them to become self-supporting contributors to society. Full use will be made of resources available through other public and private agencies and organizations to assure a comprehensive and coordinated base of services.

*Employer relations, job development and placement services* consist of activities which will assist jobseekers in finding employment and employers in obtaining the work force they require. It involves obtaining greater employer participation in the employment process, particularly to hiring and training the hard-core.

Business and industry continue to provide the major share of job opportunities. To an increasing extent the public employment service is called on by these groups for assistance and advice on hiring policies, job specifications, training programs and a variety of occupational and industrial anlysis services. These services assist employers to meet their work force needs by reducing turnover, enable them to fill job openings expeditiously and increase job opportunities, especially for the hard-core unemployed, to which employment service applicants can be referred. An increasingly greater proportion of the unemployed work force are not able to meet qualifications traditionally required by employers. This intensifies the need for assisting and encouraging employers to modify hiring requirements, restructure jobs to fit the qualifications of available applicants and increase opportunities for on-the-job training that will improve the capabilities of new employees as well as those already on their payrolls. In addition, the employment service must conduct an enlarged job develpoment program which coordinates and channels the efforts of many public and private organizations in such a way to create job opportunities and assist the employer who offers his cooperation.

*The manpower and employment information support* area serves industry, workers and agencies at all levels of government both directly and indirectly. Primarily, it is concerned with the development and presentation of job market information and also provides employment service offices with data needed to plan and manage operations. To fulfill these requirements the employment service must continue to provide information on current and anticipated job opportunities, especially for those workers with minimum skills; develop and improve techniques for measuring and estimating unemployment and underemployment, with special reference to inner city slum areas, and provide employment information in form readily usable. Special occupational analysis studies are also needed to identify, restructure and expand job opportunities for the hard to place; to analyze emerging occupations and changing job duties; and to group job skills and knowledge required for use in developing vocational training and education curricula.

Effective performance of these complex functions requires high level *administrative and technical support.* A major goal during the period ahead will be to modernize the management of the employment service system while providing the necessary support to ongoing activities. This will involve developing, testing and installing a new integrated budgeting and reporting and evaluation system based on more concise management information and improved automatic data processing capability. More flexible fiscal and management policies will be introduced to facilitate decentralization of responsibility to States while providing the Bureau with the basic information needed to sustain and improve Federal-State relationships. These efforts are discussed in greater detail later in my statement. Revised criteria for establishment and operation of local offices will be prepared. New guidelines for organizing State administrative offices to accommodate growing responsibilities will be developed and implemented. Particular emphasis will be given to improving staff recruitment and training to develop staff capability for coping with changes in program emphasis.

## SERVICES TO VETERANS

The public employment service is committed to providing all veterans "the maximum of job opportunity in the field of gainful employment." During fiscal year 1968 we propose to expand services to veterans and a supplemental estimate is now pending. The expansion will be in two directions—a personal follow-up program to contact all returning veterans and participation in the Veterans Assistance Centers program to be established by the Veterans Administration. These activities will, of course, be continued in 1969.

## FARM LABOR SERVICE

Mr. Chairman, I should like now to turn to farm labor operations. Fiscal year 1967 was another year of significant accomplishment in spite of many problems. Widespread, extremely adverse weather early in 1966 caused a tremendous amount of replanting. This in turn created late harvesting of these crops, in many cases causing them to overlap with the harvesting of other crops not so affected by the weather.

As a result, a deluge of demands were made on the Federal-State employment system to meet the double challenge of overlapping peak labor needs. Mr. Chair-

man, I would like to pay special tribute to State employment agencies for their creditable role in helping overcome a very grave situation. It was a period of great trial to many thousands of growers and to great numbers of workers who earlier had lost much employment because of the protracted rains. To my knowledge, no crops were lost through lack of labor at any time in the fiscal year.

Moreover, fewer foreign workers were used. In all, 27,537 were admitted in fiscal 1967 compared with 37,824 in the previous year.

You may recall that in the spring of 1967 much of the country experienced a recurrence of the 1966 weather conditions. Again, the State agencies rose to the occasion, even transcending their achievements of 1966. As in that year, no crop losses due to labor shortages were reported, and in that period—the fall of 1967—roughly 3,000 fewer foreign workers than in 1966 were utilized. This is a far cry from the 200,000 foreign workers used in 1964, and a marked improvement over the 35,000 used in 1965.

Mr. Chairman, I have recounted these activities with a purpose. They bring into focus the extremely important role performed annually by the Federal-State employment system in meeting the Nation's seasonal agricultural labor needs.

Recruiting seasonal workers is only part of the farm activity. The problem of locating year-round farm workers equipped with the skills demanded in modern farming operations continued. As the farms become fewer but larger, they require workers with greater competency in the use of modern machinery and technological practices. To help meet this need for increased skills, the Bureau and the States are developing worker training courses. In fiscal year 1967, under the Manpower Development and Training Act, 111 courses covering 2,575 farm workers were conducted with very satisfying results. To date, this puts the total number of trainees in agricultural occupations close to 30,000. It is our purpose to continue and expand these training courses. I might add that a good number of the trainees in 1967 were migratory workers who may now enjoy the benefits of permanent employment in fixed locations.

Another and more recent activity shows promise of inestimable benefits to both employers and workers. We propose to improve the worker-employer relationship through a better understanding of one another's problems. This consists of separately conducted farm foreman training programs and worker pre-job orientation sessions. Both activities are heavily directed towards better stabilization of the seasonal farm work force. Already there is evidence of improved employer and worker relationships, reduced turnover and better working conditions. Foreman institutes have been held in California, Arizona, Virginia, and one is now planned for Florida. We propose to stimulate strongly these foreman and worker programs in all States.

Recognizing the many problems of unemployment and underemployment in rural areas, the Bureau moved during the past year to obtain an objective study of manpower services in such areas. In July 1967, the Bureau recommended and the Secretary appointed a three-man task force to ". . . make a comprehensive analysis of manpower problems in rural areas, and examine programs of the Department of Labor's Bureau of Employment Security which serve rural manpower needs."

The task force made an extensive study of all aspects of the rural manpower programs and developed recommendations for action.

The task force found a need for the consolidation and coordination of existing programs into a comprehensive rural manpower program which would include the entire range of human resources development. The task force recommended an extensive cooperative effort on the part of all Government and private agencies concerned to bring a manpower dimension into the social, economic, and political fabric of our rural communities. It recommended also an expansion of education and training, and a greater development of job opportunities and job placement, in both the agricultural and non-agricultural segments of the rural economy.

On December 19, 1967, the Secretary of Labor directed the consolidation of Employment Service and Farm Labor Service activities within the Bureau of Employment Security. The report of the task force has been accepted as the basis for implementing the Secretary's decision. A special work group has been established to work out the details for carrying out both the task force recommendations and the Secretary's decision. Our objective is so to organize our resources as to provide the most effective manpower services possible to the rural areas of our Nation. We expect these actions to broaden the opportunity for full employment in both farm and non-farm work in rural areas. No additional resources are being requested at this time for this expanded rural manpower program.

MANDATORY INCREASES FOR FISCAL YEAR 1969

The net increase for mandatory items is $50,764,000. Increases in State salaries and personnel benefits will require $41,094,000 and $1,500,000 will be needed to meet increased postage costs resulting from the recently enacted higher postal rates. Unemployment insurance related items amount to $8,170,000.

The mandatory increases relating to unemployment insurance are of two types. The first is the result of continued normal expansion in the economy and arises from the growth in the number of workers protected under State unemployment insurance laws and the growth in the number of employers subject to tax provisions of these laws. The continued growth in the economy in fiscal year 1969 will result in an increase of 40,000 employers subject to the unemployment insurance laws and 1,500,000 employees covered by such laws. This will bring the total of subject employers to 2,610,000 and the total covered employment to 51,300,000. The increase in subject employers will require $1,170,000 for additional tax collection activities related to this growth. The increased use of automatic data processing will enable State agencies to absorb the increased volume of wage records resulting from the growth in the number of covered workers.

The second mandatory increase related to unemployment insurance is $7,000,000 to administer the increase in State insured unemployment from the 1.0 million level appropriated for 1968 to 1.1 million per week in 1969 and to provide for an increase in the number of weekly payments to unemployed Federal employees and ex-servicemen.

In fiscal year 1968 we now expect insured unemployment to average 1.2 million per week. Because of a number of special circumstances, which resulted in substantial savings during the first half of the year, it will be possible for the States to process this additional workload without any further increase in funds. These savings came about because the appropriation was late and because of further uncertainties resulting from economy measures under review in the Congress. While operating under a continuing resolution and in the face of other potential reductions, the Bureau found it necessary to impose restrictions on the hiring of State personnel and on certain other expenditures. Since the increased unemployment insurance claims workload is uncontrollable and had to be provided for it was necessary for State agencies to use existing staff to a major extent. The program curtailment which resulted fell primarily on the employment service. While most of these restrictions have now been removed, the Bureau will have to limit expenditures to some degree over the remaining months of the year to assure full funding of uncontrollable workloads.

As noted earlier, we now expect somewhat lower insured unemployment in fiscal year 1969. The budget estimate includes funds to finance an average weekly level of 1.1 million insured unemployed. The current fiscal year required emergency measures to fund an unexpected workload. We do not anticipate that savings to the degree realized in 1968 can be accomplished in 1969. Nor would it be desirable to again restrict employment service activities. Thus, the 1969 estimate provides for a fully balanced operating program in the States.

PROGRAM INCREASES FOR FISCAL YEAR 1969

Last year in my budget presentation to this Committee I mentioned two studies which have been made for the Bureau by management consulting firms. Both of these studies were requested for the purpose of obtaining advice from nationally recognized consultants on improvements which could be introduced in the management and operation of employment security programs. In addition, late in fiscal year 1967, the Department contracted to develop and implement a cost accounting system. A program increase of 758 positions and $8,484,000 is included in the budget estimate to implement these studies.

We expect, Mr. Chairman, that significant improvements in operation of the employment security system will result from these three programs. I would like to discuss each of them with you, but before doing so, I need to explain that we have already made a beginning toward the implementation of all three studies. In fact, we have already diverted 519 positions into these areas, and by the end of fiscal year 1969 we shall have diverted another 193 positions for a total of $7,516,000, which will provide 1,470 positions and $16,000,000 when added to the proposed program increase.

The first of these studies, made by Cresap, McCormick and Paget, recommended some rather substantial modifications in administrative management procedures in State employment security agencies, as well as in the Bureau itself.

Following Federal and State acceptance of the recommendations "in principle" the Bureau has undertaken a variety of activities directed toward implementing certain of the recommendations.

We have, for example, developed jointly with the States and issued a policy statement setting forth the basic principles for program planning, operations, evaluation, and administrative financing in the Federal-State employment security system. Using the policy statement as guiding principles, we have introduced plans of service as a vehicle for expressing local and State needs in program planning and budget requests. These plans of service are also used as a basis for subsequent measurement of accomplishments.

In further implementation of the recommendations, the Bureau has developed tentative evaluation programs in cooperation with State employment security agencies. The tentative programs envisage self-appraisal reviews at the local and State levels, using predesigned techniques and tools. To assure the accuracy and effectiveness of these self-appraisals, the Bureau will monitor the State agencies' evaluation efforts.

Also in accord with the recommendations, a comprehensive management information system is under development. The study pointed out the need for timely and accurate information so that Federal and State program managers can make program plans based on factual data, have information which will enhance their ability to appraise accomplishments, and, with better information to guide their decision, modify and change plans to achieve more desirable results. The development of the management information system will not be an easy task because it must meet the needs of program managers at the local, area, State, regional, and national levels. Additional problems arise because of rapid changes in programs, with new informational requirements.

When these varied efforts are fully accomplished there will be operative throughout the employment security agencies (a) a comprehensive management information program to serve as a tool for determining program needs, evaluating and measuring accomplishments, and modifying plans when conditions warrant, (b) plans of service at each operating level to serve as blueprints for local action, tools for budget management, and bases for evaluation, and (c) a systematic evaluation program which will enable the identification of less efficient and more costly operations.

In fiscal year 1969, 580 new and 521 diverted positions would be made available for program planning, evaluation, and control. The additional resources will enable State agencies to establish or strengthen organizational units concerned with program planning, internal audit, management analysis, program accomplishment, and financial management.

The second study I mentioned in last year's testimony focused on the need for effective use of automatic data processing technology in the employment security system. The initial study was made by Auerbach Corporation, with follow-up studies by the same contractor on related aspects of the problem. In cooperation with State employment security agencies, we are working down several avenues toward the ultimate objective of realizing maximum value from computer technology.

Activities planned during the current and coming fiscal year include—

Development and installation in all State agencies of an automated reporting system.

Development and implementation of prototype data systems in Florida, Michigan, and Utah, designed to automate operations to the maximum feasible extent.

Development and implementation of an Area Manpower Data System that will automate employment service operations and provide information to all manpower support agencies in the New York City area, including contiguous communities in New Jersey and Connecticut.

Development of a long-range transition plan for the conversion to automated systems.

Improvement of the mechanized system of selecting best qualified individuals for specific job openings which has been under development in California.

Presently, only the ground work has been accomplished on this important undertaking. In fiscal year 1969 we propose to use 176 positions, of which 97 are new, for this effort. These positions will be allocated to model States participating in the developmental projects, and to States needing supplemental resources to set up the data banks and processing procedures for the automated reporting system.

Increased effectiveness and efficiency are expected from the joint Federal-State efforts to automate employment security operations. From studies made with contractor's assistance, as well as from preliminary systems analyses initiated by the studies, it became apparent that heretofore only the surface has been scratched in use made of automatic data processing technology by State employment agencies. Moreover, lacking an overall national plan, individual States had been expanding their own systems on a piecemeal basis. With a comprehensive conceptual plan to serve as a blueprint for future development, and with the Bureau exercising a strong leadership role in guiding State efforts, there is now underway a unified, coordinated approach to the goal of attaining maximum use of automation in employment security operations. While claims are not made that this program will effect either immediate or substantial savings—although future economies appear hopeful—successful development of automated methods will not only tend to hold down future costs, but will improve services to the public.

The House Committee on Government Operations and the General Accounting Office have been making a concerted effort to bring all Federal agencies into compliance with the Budget and Accounting Procedures Act of 1950, which requires that all Federal agencies establish an accrual accounting and a cost-based budgeting system.

Subsequent to my presentation on last year's budget request, the Department entered into a contract with Touche, Ross, Bailey and Smart, for the development of an accounting system. As part of this effort, the contract calls for the development of a system covering Federal funds allocated through the Bureau of Employment Security.

The contract provides for the development of an accounting system which is to be designed by June 30, and to be installed in three States by December 30, 1968. Manuals and training material developed by the contractor will then be used to install the system in the balance of the State agencies. Since the system will have been designed and available in fiscal year 1969, we are requesting funds for an additional 81 State employees over the 112 we will divert so that we can take advantage of the contractor's effort.

Additional employees are needed because of the added requirements of the new system. For instance, a whole new system is being installed to collect costs on an accrual basis and to identify costs of operating functions and responsibilities. It will also include a property accountability system which is not now a part of the States' operation.

It should be emphasized that this system is being developed as an aid to State and Federal program managers. The system will collect expense data in a disciplined manner so that program decisions can be made with a consciousness of the costs involved. The new system will provide a close coupling between the approved budgets and reports on the actual use of resources. This will provide managers with the tools to determine the effectiveness of their organization by measuring actual performance against planned performance, and to determine efficiency by relating resources consumed to work accomplished. The new system should also make it easier to estimate budget requirements, and to justify these requirements.

Program managers will have available cost data which will better enable them to compare relative costs of service in many ways. The system will identify costs by programs, by geographical area, by characteristic of the clientele served, and by the activity performed. Because common cost ingredients will be used throughout the State agencies program managers can look at their costs with assurance that the data are comparable.

The final objective of all these management techniques and improvements is to better utilize resources and provide more effective individualized service to workers. Through improved management we can accurately assess our achievements in providing service to those needing training and jobs, pinpoint the extent and location of worker needs, and assign available resources to meet these needs.

The remaining program increase of $98,000, as I noted earlier, is to place the fiscal year 1968 veterans program supplemental on a full year basis.

Mr. Chairman, this concludes my statement on the estimate for Grants to States for Unemployment Compensation and Employment Service Administration.

GRANTS TO STATES

Senator HILL. How does your budget compare this year with last year?

Mr. GOODWIN. Overall, there is some increase. The first item is the appropriation for grants to States, Mr. Chairman. This program depends to a substantial extent on the economic situation and so the assumptions that we make in connection with the economy are important as far as this program is concerned.

ANTICIPATED UNEMPLOYMENT INSURANCE COVERAGE

We are assuming that the steady growth which has characterized the economy in recent years will continue through fiscal year 1969. The anticipated rate of growth, even with rising productivity, will result in an increase in total employment which will more than offset the expected growth in the work force.

The volume of total unemployment is expected to edge down to an average of 3.1 million. In 1968, the average unemployment is now assumed to be 3.2 million. It will be a hundred thousand less in 1969 if these estimates prove to be correct. This will result in the filing of 1,100,000 unemployment insurance claims per week.

Much of this growth in employment will occur in establishments that are covered by State unemployment insurance laws so that covered employment is expected to grow substantially. Changes in State laws designed to extend coverage will also add to the number of workers covered by State unemployment insurance. There has been a steady growth in the coverage provisions of State unemployment insurance laws.

The economic growth we expect will not be fully shared by industries or all areas. There will be shifts in populations and areas of demand and continued technological changes. These will bring unemployment in some areas and the unemployment insurance program will be called upon to meet problems of this kind throughout the year

The unemployment we are expecting will be short term. This is reflected in our estimate that the average spell of unemployment in the State program will be only 5.3 weeks. It is truly transitional unemployment.

It is the kind of problem we will have in the unemployment insurance program, helping the person to get over a very short period between jobs.

ADMINISTRATIVE COSTS: TRUST FUND REVENUE FINANCING

The estimate of administrative costs to operate the employment security system in the States is $616,573,000 for fiscal year 1969. Now this appropriation, as I am sure you know, Mr. Chairman, is financed entirely from trust fund revenues, from the employer tax.

LIMITATION INCREASE

The increase of $59,346,000 over last year's limitation provides $50,764,000 for mandatory costs, $98,000 for the full year cost of a supplemental is being sought for the remainder of fiscal year 1968, and

$8,484,000 to enable us to improve the management of State employment security operations.

All of these items are discussed fully in my formal statement and the budget estimate before you. Briefly, the mandatory increases provide $41,094,000 to meet increases in State salaries and fringe benefits, $1,500,000 for increased postage costs resulting from the recently enacted postal rate bill, $1,170,000 for the growth in the number of workers and employers covered by State unemployment insurance laws, and $7 million to finance an increase of 100,000 in the average weekly level of insured unemployment.

### PROGRAM INCREASES

Mr. Chairman, we are requesting a total of $8,582,000 for program increases.

#### Veterans Program

Of this total, $98,000 is for full year costs of the proposed 1968 veterans program supplemental. We are expanding services to veterans in two directions, a personal follow-up program to contact and offer job assistance to all returning veterans and participation in the veterans assistance centers which are currently being established by the Veterans' Administration.

Senator Hill. These centers are proceeding pretty well?

Mr. Goodwin. Yes. They were started fairly recently but most of them are now in operation. They have not been in operation very long.

Senator Hill. They were not started until a short time ago?

Mr. Goodwin. That is right. This was announced by the President just a couple of months ago. We do not have any good evaluation yet on how they are working out. They seem to be working quite well from what we can see.

#### Implementation of Studies: Management and Operation Improvement and Cost Accounting

The balance of the program increases, $8,484,000 and 758 positions is for a purpose that I would like to discuss a little bit more fully, if I may.

Last year in my budget presentation to this committee I mentioned two studies which had been made for the Bureau by management consulting firms. Both of these were requested for the purpose of obtaining advice from nationally recognized consultants on improvements which could be introduced in the management and operation of employment security programs. In addition, late in fiscal year 1967, the Department contracted for the development and installation of a cost-accounting system. A program increase of 758 positions and $8,484,000 is included in the budget estimate to implement these studies.

We have already made a beginning toward the implementation of all three studies. In fact, we are already using 519 positions for this work this year and propose to assign another 193 positions next year for a total of 712 positions. This will provide 1,470 positions and $16 million when added to the proposed program increase.

I will not repeat the detailed program plan and justification for the increase in these remarks. However, I would like to mention some of the improvements we expect to achieve in 1969.

As I indicated, it will provide a comprehensive management information program which will serve as a tool for determining program needs, evaluating and measuring accomplishments, and modifying plans when conditions warrant.

### Development of Service Plans

It will include development of plans of service at each operating level to serve as a blueprint for local action, tools for budget management, and bases for evaluation.

### Systematic Evaluation

It will provide a systematic evaluation program which will enable the identification of less efficient and more costly operations.

### Prototype Data System

To make these effective we are providing for a prototype data system in three States to test all of these activities before they are put into effect throughout the system.

The final objective of all these management improvements is, of course, to get better results, to get better utilization of our resources, and to provide a more effective individualized service to the worker.

They are badly needed in order to bring the employment security system up to date and I am sure that in years to come they will more than pay for themselves in terms of savings that can be made.

## REPORT ON CRITERIA FOR ESTABLISHING LOCAL OFFICES

At this time, Mr. Chairman, I would like to insert in the record a further report on the criteria for establishing local employment security offices. We submitted an interim report to the committee during our fiscal year 1968 hearings and we plan to keep you informed of our actions in this area.

This covers the statement on the grants to States, Mr. Chairman.

(The report follows:)

### Interim Report, Criteria for Establishing and Maintaining Local Employment Security Offices

This report is submitted to the Committee to provide information on actions to date concerning the above matter. It supplements the report presented at the hearings on the 1968 appropriations.

We have met and discussed the subject of criteria for local offices with two of the standing committees of the Interstate Conference of Employment Security agencies. These are the Program and Operations Committees of both the Employment Service and Unemployment Insurance Services. Based on these discussions, we have reached the following conclusions:

1. That the criteria for local offices in metropolitan areas, developed several years ago, are not realistic at this time. These have been suspended.
2. That a work group composed of State, regional and national office personnel should be convened to develop revised criteria. This is being done.
3. That all State proposals to establish new offices should be supported and reflected in State Plans of Service. The State Plans of Service constitute their budget justifications.

Progress has been made in implementing the recommendations of the consulting firm, discussed with the Committee last year, which was retained to assist us in improving our management and financial operations. Plans of Service will be

developed in fiscal year 1969 by each local, area and State office in the Employment Security system. This is a fundamental factor relating to local office criteria.

A second step is the initiating of an evaluation system. Evaluation of results obtained will be based on the Plans of Service. This too, has a direct relationship to the subject of local office criteria as they would apply to the continuation of existing offices.

There are a number of emerging programs which involve the Employment Security system, particularly the Employment Service and which have a direct bearing on how services can or should be provided. Examples of these are: the Work Incentive Program; the Concentrated Employment Program; Model Cities; One-stop Neighborhood Centers; and the pressing need to provide more extensive rural manpower services.

These programs must be taken into account in the development of revised criteria.

A complete report on this subject will be submitted to your Committee as soon as revised criteria are developed and adopted.

# Bureau of Employment Security

## Unemployment Compensation for Federal Employees and Ex-servicemen

### STATEMENT OF ROBERT C. GOODWIN, ADMINISTRATOR

#### Appropriation Estimates

"Bureau of Employment and Security, Unemployment Compensation for Federal Employees and Ex-Servicemen

"For payments to unemployed Federal employees and ex-servicemen, as authorized by title XV of the Social Security Act, as amended, [$65,000,000, of which not to exceed $5,000,000 shall be available for benefit payments for trade adjustment activities] *$92,200,000*, together with such amount as may be necessary to be charged to the subsequent year appropriation for the payment of benefits for any period subsequent to March 31 of the current year.

"Unemployment compensation for Federal employees and ex-servicemen, next succeeding fiscal year: For making, after May 31 of the current fiscal year, payments to States, as authorized by title XV of the Social Security Act, as amended, such amounts as may be required for payment to unemployed Federal employees and ex-servicemen for the first quarter of the next succeeding fiscal year, and the obligations and expenditures thereunder shall be charged to the appropriation therefor for that fiscal year: *Provided*, That the payments made pursuant to this paragraph shall not exceed the amount paid to the States for the first quarter of the current fiscal year."

AMOUNTS AVAILABLE FOR OBLIGATION

| | 1968 | 1969 |
|---|---|---|
| Appropriation or estimate | $65,000,000 | $92,200,000 |
| Advance to prior year | −2,416,000 | ---------- |
| Comparative transfer to "Trade adjustment activities" | −2,200,000 | ---------- |
| Estimated program supplemental | 28,800,000 | ---------- |
| Total fund availability or estimated, revised | 89,184,000 | 92,200,000 |

OBLIGATIONS BY ACTIVITY

| Description | Appropriation revised, 1968 | Estimate 1969 | 1969 change |
|---|---|---|---|
| 1. Unemployment compensation for Federal employees | $39,073,000 | $40,700,000 | +$1,627,000 |
| 2. Unemployment compensation for ex-servicemen | 50,111,000 | 51,500,000 | +1,389,000 |
| Total obligations | 89,184,000 | 92,200,000 | +3,016,000 |

OBLIGATIONS BY OBJECT

| | Appropriation revised, 1968 | Estimate 1969 | 1969 change |
|---|---|---|---|
| 13 Benefits for former personnel | $89,184,000 | $92,200,000 | +$3,016,000 |

*Summary of changes*

| | Amount |
|---|---|
| 1968 enacted appropriation | $65,000,000 |
| Advance to prior year | −2,416,000 |
| Comparative transfer to "Trade adjustment activities" | −2,200,000 |
| Estimated program supplemental | 28,800,000 |
| 1968 appropriation, revised | 89,184,000 |
| 1969 Estimate | 92,200,000 |
| Total change | +3,016,000 |

MANDATORY ITEMS

| | |
|---|---|
| Increases: | |
| To provide for a higher average weekly benefit amount for unemployment compensation for Federal employees | +1,627,000 |
| It is estimated that the average weekly benefit amount will be $44.20 in fiscal year 1969, $1.60 higher than currently estimated for fiscal year 1968. This reflects the increases in the State unemployment maximum weekly benefit amount. | |
| To provide for a higher average weekly benefit amount for unemployment compensation for ex-servicemen | +1,389,000 |
| It is estimated that the average weekly benefit amount will be $44.20 in fiscal year 1969, $1.30 higher than estimated for fiscal year 1968. This reflects the increases in the State unemployment weekly benefit amount. | |
| Total change | +3,016,000 |

*Activity 1. Unemployment compensation for Federal employees*

| | |
|---|---|
| 1968 | $39,073,000 |
| 1969 | 40,700,000 |

NARRATIVE DESCRIPTION OF PROGRAM

This program provides for payment of unemployment compensation to unemployed Federal employees under Title XV of the Social Security Act, as amended. The program started on January 1, 1955. The claims of unemployed Federal employees are processed by State unemployment insurance agencies on the same basis as claims of other unemployed workers whose employment is covered under the State unemployment compensation law. In the Virgin Islands benefits are paid in accordance with the provisions of the District of Columbia unemployment compensation law. Under this program Federal funds are allocated to the States, which act as agents for the Federal government, for the payment of benefits.

CHANGE FOR 1969

| | 1967 | 1968 | 1969 | Change |
|---|---|---|---|---|
| Increase in average weekly benefit amount | $41.08 | $42.60 | $44.20 | +$1,627,000 |

Actions by State legislatures increasing maximum weekly benefit amounts for unemployment insurance benefits have resulted in a higher estimated average weekly benefit amount for fiscal year 1969.

*Activity 2. Unemployment compensation for ex-servicemen*

| | |
|---|---|
| 1968 | $50,111,000 |
| 1969 | 51,500,000 |

NARRATIVE DESCRIPTION OF PROGRAM

This program provides for unemployment compensation for ex-servicemen to be administered similarly to the program of unemployment compensation for civilian employees of the Federal government under Public Law 848 of the 85th congress, approved August 28, 1958, which amended title XV of the Social Security Act. A claim for benefits by an eligible ex-serviceman is processed under the unemployment insurance law of the State in which he first files his claim after his most recent release from active service.

CHANGE FOR 1969

| | 1967 | 1968 | 1969 | Change |
|---|---|---|---|---|
| Increase in average weekly benefit amount | $41.26 | $42.90 | $44.20 | +$1,389,000 |

Actions by State legislatures increasing maximum weekly benefit amounts for unemployment insurance benefits resulted in a higher estimated average weekly benefit amount for fiscal year 1969.

BENEFITS PAID FOR UNEMPLOYMENT COMPENSATION FOR UNEMPLOYED FEDERAL WORKERS AND EX-SERVICEMEN

Fiscal year 1967, actual

| Month | Federal employees | Ex-servicemen | Total |
|---|---|---|---|
| July | $2,637,454 | $2,431,783 | $5,069,237 |
| August | 3,329,032 | 3,257,715 | 6,586,747 |
| September | 2,744,422 | 2,552,830 | 5,297,252 |
| Total, 1st quarter | 8,710,908 | 8,242,328 | 16,953,236 |
| October | 2,489,722 | 2,111,493 | 4,601,215 |
| November | 2,851,709 | 2,463,604 | 5,315,313 |
| December | 3,157,803 | 3,021,730 | 6,179,533 |
| Total, 2d quarter | 8,499,234 | 7,596,827 | 16,096,061 |
| January | 3,669,994 | 4,008,315 | 7,678,309 |
| February | 3,784,676 | 3,921,597 | 7,706,273 |
| March | 4,317,567 | 4,234,089 | 8,551,656 |
| Total, 3d quarter | 11,772,237 | 12,164,001 | 23,936,238 |
| April | 3,430,227 | 3,600,024 | 7,030,251 |
| May | 3,384,004 | 3,472,634 | 6,856,638 |
| June | 3,476,890 | 3,509,806 | 6,986,696 |
| Total, 4th quarter | 10,291,121 | 10,582,464 | 20,873,585 |
| Total for year | 39,273,500 | 38,585,620 | 77,859,120 |

Fiscal year 1968, estimated

| | | | |
|---|---|---|---|
| July | 2,758,703 | 3,119,586 | 5,878,289 |
| August | 3,694,287 | 4,497,677 | 8,191,964 |
| September | 3,104,644 | 3,733,695 | 6,838,339 |
| Total, 1st quarter | 9,557,634 | 11,350,958 | 20,908,592 |
| October | 3,276,210 | 3,552,335 | 6,828,545 |
| November | 3,617,552 | 3,983,548 | 7,601,100 |
| December [1] | 3,763,813 | 4,644,834 | 8,408,647 |
| Total, 2d quarter | 10,657,575 | 12,180,717 | 22,838,292 |
| January | 5,381,000 | 6,495,000 | 11,876,000 |
| February | 3,972,000 | 5,728,000 | 9,700,000 |
| March | 3,275,000 | 4,949,000 | 8,224,000 |
| Total, 3d quarter | 12,628,000 | 17,172,000 | 29,800,000 |
| April | 2,079,000 | 2,940,000 | 5,019,000 |
| May | 2,020,000 | 3,225,000 | 5,245,000 |
| June | 2,130,791 | 3,242,325 | 5,373,116 |
| Total, 4th quarter | 6,229,791 | 9,407,325 | 15,637,116 |
| Total for year | 39,073,000 | 50,111,000 | 89,184,000 |

BENEFITS PAID FOR UNEMPLOYMENT COMPENSATION FOR UNEMPLOYED FEDERAL WORKERS AND EX-SERVICEMEN—Continued

| Fiscal year 1969, estimated | | | |
|---|---|---|---|
| July | 2,700,000 | 3,400,000 | 6,100,000 |
| August | 3,700,000 | 4,800,000 | 8,500,000 |
| September | 3,100,000 | 4,000,000 | 7,100,000 |
| Total, 1st quarter | 9,500,000 | 12,200,000 | 21,700,000 |
| October | 3,200,000 | 4,000,000 | 7,200,000 |
| November | 3,500,000 | 4,500,000 | 8,000,000 |
| December | 4,200,000 | 5,300,000 | 9,500,000 |
| Total, 2d quarter | 10,900,000 | 13,800,000 | 24,700,000 |
| January | 4,300,000 | 5,300,000 | 9,600,000 |
| February | 4,400,000 | 5,600,000 | 10,000,000 |
| March | 5,000,000 | 6,000,000 | 11,000,000 |
| Total, 3d quarter | 13,700,000 | 16,900,000 | 30,600,000 |
| April | 2,200,000 | 2,800,000 | 5,000,000 |
| May | 2,100,000 | 2,800,000 | 4,900,000 |
| June | 2,300,000 | 3,000,000 | 5,300,000 |
| Total 4th quarter | 6,600,000 | 8,600,000 | 15,200,000 |
| Total for year | 40,700,000 | 51,500,000 | 92,200,000 |

[1] Actual through December.

PREPARED STATEMENT

Mr. Goodwin. The next appropriation is Unemployment Compensation for Federal Employees and Ex-Servicemen.

Do you wish me to proceed with that?

Senator Hill. Yes, go ahead.

Mr. Goodwin. At this point, Mr. Chairman, I would like to insert in the record the prepared statement for unemployment compensation for Federal employees and ex-servicemen.

(The statement follows:)

In successive programs beginning with the Servicemen's Readjustment Act of 1944, the Federal Government has provided the protection of unemployment insurance to ex-servicemen following their discharge from the armed services under conditions other than dishonorable. In 1958 this protection was made a permanent addition to title XV of the Social Security Act (now Title V of the U.S. Code). Federal civilian workers, likewise, have been afforded this protection since 1955.

Generally, the benefits provided are paid to ex-servicemen and former Federal civilian workers in accordance with the unemployment compensation law of the State to which the Federal wages are assigned. These State laws govern the amounts as well as the qualifying and eligibility requirements for receipt of the benefits. The temporary protection afforded to ex-servicemen and former Federal civilian employees is similar to the protection against the risks of involuntary unemployment that is available to workers in private industry.

For fiscal year 1969 our estimate assumes that the cost of benefits that will be paid to ex-servicemen and former Federal civilian employees will amount to $92,200,000. Of this total, $40,700,000 will be expended for the former Federal civilian employees' program and $51,500,000 for the ex-servicemen's program. In fiscal year 1969 the total $92,200,000 estimate for the two programs is $3,016,000 greater than the amount now requested for fiscal year 1968. This increase is not to finance any greater number of payments. It is needed because the average weekly benefit amount continues to rise as States liberalize State unemployment insurance laws and as pay increases for the Federal workers and servicemen become fully effective. The request envisions that the number of payments will not change from 1968 as we expect the number of military and civilian separations to remain at the current level during fiscal 1969.

To insure that payments will not be interrupted if the appropriation proves insufficient, language should again be included to permit funds from the subse-

quent fiscal year to be used, if needed, after March 31, 1969, in the event that time will not permit obtaining a supplemental appropriation from Congress. This provision constitutes a major improvement in the financing of these programs and proved to be a major factor in preventing a suspension of benefit payments to claimants during the last 2 weeks of fiscal year 1967 when appropriated funds were $2.4 million less than the actual benefit payment expenditures. We earnestly request that the same language be included for the 1969 appropriation. As you know, these benefits are mandatory under Title V of the U.S. Code and monies appropriated by the Congress for this purpose cannot be used for any other activity.

Following the intent of Congress as expresed in the Senate report on last year's estimate, funds for trade adjustment activties are not included within this appropriation but are budgeted for separately.

Mr. Chairman, this concludes my statement on the request for Unemployment Compensation for Federal Employees and Ex-servicemen.

BUDGET REQUEST

Mr. GOODWIN. For fiscal year 1969, our estimate assumes that the cost of benefits which will be paid to ex-servicemen and former Federal civilian employees will amount to $92,200,000.

Of this total, $51,500,000 is for ex-servicemen and $40,700,000 for former Federal civilian employees. The $92,200,000 estimate for the two programs is $3,016,000 greater than the amount now being requested for fiscal year 1968.

STATE UNEMPLOYMENT INSURANCE LAW LIBERALIZATION AND PAY INCREASES

This increase does not assume a greater number of payments. It is needed because the average weekly benefit payment continues to rise as States liberalize State unemployment insurance laws and as pay increases for Federal workers and ex-servicemen become fully effective.

The number of payments is not assumed to change from 1968 and we expect the number of military and civilian separations to remain about at the current level during fiscal 1969.

INSUFFICENCY LANGUAGE

INCLUSION OF PROVISIONAL LANGUAGE

To insure that payments will not be interrupted if the appropriation proves insufficient, language should again be included to permit funds from the subsequent fiscal year to be used, if needed, after March 31, 1969, in the event that time will not permit obtaining a supplemental appropriation from Congress.

This provision constitutes a major improvement in the financing of these programs. It was a major factor in preventing a suspension of benefit payments to claimants during the last 2 weeks of fiscal year 1967 when appropriated funds were $2.4 million less than the actual benefit payment expenditures.

We earnestly request that the same language be included in the 1969 appropriation.

As the committee knows, these benefits are mandatory under title V of the United States Code and the money that is appropriated by the Congress for this purpose cannot be used for any other activity.

### 1968 Deficit

Mr. Chairman, as I told the committee during our hearing on the supplemental for this appropriation, we now expect expenditures for this program to be somewhat higher in 1969 than would be provided by the initial appropriation plus the pending supplemental.

At that time we estimated deficits of $13 million and $26,800,000 in 1968 and 1969, respectively.

Based on more recent information, we have now revised this additional requirement to about $17 million in 1968, which can be funded by an advance from 1969 moneys as provided for in the appropriation language.

### Anticipated 1969 Deficit

This development, plus others, leads us to expect that the 1969 request will need to be further adjusted.

Our current estimate is that we will need an additional $35,800,000 in 1969.

### Present Availability of Funds

Senator Hill. How is this program going with the exhaustion of benefit funds due to the fact that the urgent supplemental bill has not yet been enacted?

Mr. Goodwin. We have 2 weeks of payments, Mr. Chairman, which have not been paid because the money is not available. There are two or three exceptions to that, where States have had State money that could be used and have used it until they can be reimbursed by the Federal Government.

Beginning yesterday, April 1, we can finance those costs from next year's appropriation. That is due to the language which I was referring to.

Senator Hill. That you asked us to put back in the bill this year?

Mr. Goodwin. Yes. It permits us to use next year's money only after March 31.

Senator Javits. The 2 weeks would then remain unpaid until you got the supplemental?

Mr. Goodwin. Yes.

Senator Javits. You would be current except for the 2 weeks?

Mr. Goodwin. That is correct.

### Adjustment Assistance: Rejected Claims

Senator Javits. I wanted to ask you a question about this adjustment assistance matter which interests me greatly.

Is there any way we could get a list of the claims rejected and the reasons for rejection? You have given us the claims accepted and paid. You do not give us the claims rejected and the reasons for rejection.

Would that come within your jurisdiction?

Mr. GOODWIN. This is information that would be available in the State. We could get it, I believe, through a special request to the State.

Senator JAVITS. But whether or not to grant adjustment assistance is a matter for determination here in Washington, isn't it?

Mr. GOODWIN. You mean whether the company——

Senator JAVITS. Yes, is entitled to it.

Mr. GOODWIN. I thought you meant an individual claim.

### TRADE EXPANSION ACT CASES AND CANADIAN AUTO PARTS TARIFF CASES

Mr. RUTTENBERG. I think, Senator Javits, you should make a distinction between the adjustment assistance cases which have come before the Tariff Commission in connection with the Trade Expansion Act of 1962 and those adjustment assistance cases which have come as a result of Canadian auto parts tariff agreements.

The latter go before a three-man board, chaired by the Secretary of Labor, composed of the Secretary of Commerce and the Secretary of the Treasury.

Senator JAVITS. Would you rather we make the request?

Mr. RUTTENBERG. No. We can get it very easily. No cases have been approved under the Adjustment Assistance Act and Trade Expansion Act of 1962.

Cases under the auto agreement have been the only ones that have been approved.

Senator JAVITS. Could you get for us just an explanation by the Tariff Commission as to what applications they have had and why they have denied them?

Mr. RUTTENBERG. Yes, we can get that very easily.

Senator JAVITS. It is very important to the future of this whole trade assistance.

Senator HILL. Is there anything you would like to add, Mr. Goodwin?

Mr. GOODWIN. No, sir.

(The information follows:)

### PETITIONS FILED UNDER THE ADJUSTMENT ASSISTANCE PROVISIONS OF THE AUTOMOTIVE PRODUCTS TRADE ACTS OF 1965

The Automotive Products Trade Act of 1965 implements the United States-Canadian Automotive Products Agreement. This Agreement eliminates tariffs between the two countries on new motor vehicles and on certain automotive products. The Act established special procedures which make available to firms and workers the same adjustment assistance as that provided under the Trade Expansion Act of 1962. Under these procedures, petitions for adjustment assistance may be filed with the Automotive Agreement Adjustment Assistance Board. The Board, consisting of the Secretaries of the Treasury, Commerce, and Labor, makes its determinations on the basis of an investigation and report of the facts by the Tariff Commission and advice from other Government agencies. Basically, the

Board must determine whether the operation of the U.S.-Canadian Automotive Products Agreement has been the primary factor in causing the dislocation of the firm or group of workers.

| Petitioner's firm and location | Finding | Reason for finding |
|---|---|---|
| 1. Ford, Pennsauken, N.J | Certified, Apr. 14, 1966 | Operation of agreement primary factor causing dislocation. |
| 2. General Motors, Grand Rapids, Mich. | Certified, July 28, 1966 | Do. |
| 3. Fram Corp., Birmingham, Ala | Certified, Aug. 25, 1966 | Do. |
| 4. Maremont Corp., Cleveland, Ohio | Certified, Dec. 23, 1966 | Do. |
| 5. Borg-Warner Corp., Memphis, Tenn. | Denied, Apr. 6, 1967 | Operation of agreement not primary factor causing dislocation. |
| 6. Rockwell-Standard Corp., Adrian, Mich. | Certified, Mar. 22, 1967 | Operation of agreement primary factor causing dislocation. |
| 7. Eaton, Yale & Towne, Detroit, Mich. | Certified, Apr. 14, 1967 | Do. |
| 8. Eaton, Yale & Towne, Lackawanna, N.Y. | Certified, Apr. 28, 1967 | Do. |
| 9. American Motors, Milwaukee, Wis | Certified, June 15, 1967 | Do. |
| 10. American Motors, Kenosha, Wis | Certified, June 15, 1967 | Do. |
| 11. Chrysler Corp., Detroit, Mich | Certified, June 16, 1967 | Do. |
| 12. General Motors, Wilmington, Del | Denied, June 21, 1967 | Operation of agreement not primary factor causing dislocation. |
| 13. Chevrolet, Tarrytown, N.Y | Certified, Sept. 5, 1967 | Operation of agreement primary factor causing dislocation. |
| 14. Fisher Body, North Tarrytown, N.Y. | Certified, Sept. 5, 1967 | Do. |
| 15. Borg-Warner, Detroit, Mich | Certified, Nov. 13, 1967 | Do. |
| 16. Eaton, Yale & Towne, Cleveland, Ohio | Denied, Aug. 30, 1967 | Operation of agreement not primary factor causing dislocation. |
| 17. Rockwell-Standard, Mishawaka, Ind. | Denied, Nov. 1, 1967 | Do. |
| 18. Borg-Warner, Detroit, Mich | Certified, Feb. 15, 1968 | Operation of agreement primary factor causing dislocation. |
| 19. PPG Industries, Ford City, Pa | Denied, Jan. 18, 1968 | Operation of agreement not primary factor causing dislocation. |
| 20. PPG Industries, Creighton, Pa | Denied, Jan. 18, 1968 | Do. |

Note: No petitions have been filed by firms.

## Petitions Filed Under the Tariff Adjustment and Adjustment Assistance Provisions of the Trade Expansion Act of 1962

The Trade Expansion Act of 1962 provides that industries, firms, or groups of workers who are seriously injured by increased imports resulting from trade concessions may petition the Tariff Commission for certain forms of relief. Under this Act, the Tariff Commission investigates the facts of the case and determines if the statutory criteria have been met. Before it can be found that the petitioning indusry is eligible for tariff relief or that the firm or group of workers is eligible for adjustment assistance, it must be determined that the imports in question are entering the United States in increased quantities; that the increased imports are due in major part to trade-agreement concessions; and that such increased imports are the major factor in causing, or threatening to cause, serious injury to the industry, firm, or group of workers.

WORKER PETITIONS

| Product, firm, and location | Finding | Reason for finding |
|---|---|---|
| 1. Unmanufactured zinc, New Jersey Zinc Co., Hanover, N. Mex. | Denied, Mar. 11, 1963 | The Commission unanimously found that unmanufactured zinc was not, as a result in major part of concessions granted under trade agreements, being imported in such increased quantities as to cause the unemployment of a significant number or proportion of the workers. |
| 2. Transistor radios, Philco Corp., Sandusky, Ohio. | Denied, May 17, 1963 | The Commission unanimously found that transistor radios were not, as a result in major part of concessions granted under trade agreements, being imported in such increased quantities as to cause the unemployment of a significant number or proportion of the workers. |
| 3. Iron ores, Ishkooda & Wenonah Iron Ore Mines, United States Steel Corp., Red Mountain, Ala. | Denied, June 28, 1963 | The Commission unanimously found that iron ore was not, as a result in major part of concessions granted under trade agreements, being imported in such increased quantities as to cause the unemployment of a significant number or proportion of the workers. |
| 4. Carded cotton sheeting, Indian Head Mills, Cordova, Ala. | Denied, July 19, 1963 | The Commission unanimously found that carded cotton sheeting was not, as a result in major part of concessions granted under trade agreements, being imported in such increased quantities as to cause the unemployment of a significant number or proportion of the workers. |
| 5. Ceramic mosaic tile, Winburn Tile Manufacturing Co., Little Rock, Ark. | Denied, Nov. 25, 1963 | The Commission unanimously found that ceramic mosaic tile was not, as a result in major part of concessions granted under trade agreements, being imported in such increased quantities as to cause, or threaten to cause, the unemployment or underemployment of a significant number or proportion of the workers. |
| 6. Men's leather footwear, Packard Division, Knapp Bros. Shoe Manufacturing Corp., Brockton, Mass. | Denied, Mar. 4, 1968 | The Commission unanimously found that footwear like or directly competitive with welt footwear produced by the Packard Division was not, as a result in major part of concessions granted thereon under trade agreements, being imported into the United States in such increased quantities as to cause, or threaten to cause, the unemployment or underemployment of a significant number or proportion of the workers. |

FIRM PETITIONS

| | | |
|---|---|---|
| 1. Household china, American Ceramic Products, Inc., Santa Monica, Calif. | Denied, Apr. 9, 1963 | The Commission unanimously found that household china tableware, kitchenware, and table and kitchen utensils not containing 25 percent or more of calcined bone and currently dutiable under par. 212 of the Tariff Act of 1930 at the rate of 10 cents per dozen separate pieces plus 35 percent ad valorem were not, as a result in major part of concessions granted under trade agreements, being imported into the United States in such increased quantities as to cause, or threaten to cause, serious injury to the firm. |
| 2. Sodium gluconate, Industrial Biochemicals, Inc., Edison, N.J. | Denied, July 23, 1963 | The Commission unanimously found that sodium gluconate, technical, was not, as a result in major part of concessions granted under trade agreements, being imported in such increased quantities as to cause, or threaten to cause, serious injury to the firm. |
| 3. Crude petroleum, Danaho Refining Co., Houston, Tex. | Denied, Aug. 21, 1964 | The Commission unanimously found that crude petroleum was not, as a result in major part of concessions granted under trade agreements, being imported in such increased quantities as to cause, or threaten to cause, serious injury to the firm. |
| 4. Ceramic floor and wall tiles, National Tile & Manufacturing Co., Anderson, Ind. | Denied, Dec. 21, 1964 | The Commission found (2 commissioners dissenting) that ceramic floor and wall tiles provided for in TSUS items 532.21 and 532.24 were not, as a result in major part of concessions granted under trade agreements, being imported in such increased quantities as to cause, or threaten to cause, serious injury to the firm. |
| 5. Plywood door skins, General Plywood Corp., Louisville, Ky. | Denied, Oct. 29, 1965 | The Commission, being equally divided, made no affirmative finding under sec. 302(c)(1) of the Trade Expansion Act of 1962 on the question of whether, as a result in major part of concessions granted under trade agreements, birch and lauan plywood door skins provided for in TSUS items 240.14, 240.18, and 240.20 like or directly competitive with articles produced by the General Plywood Corp., were being imported into the United States in such increased quantities as to cause, or threaten to cause, serious injury to said corporation. |
| 6. Barbers' chairs, Emil J. Paidar Co., Chicago, Ill. | Denied, Jan. 22, 1968 | The Commission found (2 commissioners dissenting) that barbers' chairs and parts thereof, provided for in item 727.02 of the Tariff Schedules of the United States, were not, as a result in major part of concessions granted thereon under trade agreements, being imported into the United States in such increased quantities as to cause, or threaten to cause, serious injury to the firm. |
| 7. Barbers' chairs, Koken Cos., Inc., St. Louis, Mo. | Denied, Jan. 22, 1968 | The Commission unanimously found that barbers' chairs and parts thereof, provided for in item 727.02 of the Tariff Schedules of the United States, were not, as a result in major part of concessions granted thereon under trade agreements, being imported into the United States in such increased quantities as to cause, or threaten to cause, serious injury to the firm. |

INDUSTRY PETITIONS

| Product | Finding | Reason for finding |
|---|---|---|
| 1. Softwood lumber | Denied, Feb. 14, 1963 | The Commission unanimously found that softwood lumber was not, as a result in major part of concessions granted under trade agreements, being imported in such increased quantities as to cause, or threaten to cause, serious injury to the domestic industry producing the like article. |
| 2. Hatters' fur | Denied, Mar. 13, 1963 | The Commission unanimously found that hatters' fur was not, as a result in major part of concessions granted under trade agreements, being imported in such increased quantities as to cause, or threaten to cause, serious injury to the domestic industry producing a like or directly competitive article. |
| 3. Household china tableware and kitchenware. | Denied, Apr. 5, 1963 | The Commission unanimously found that household china tableware and kitchenware were not, as a result in major part of concessions granted under trade agreements, being imported in such increased quantities as to cause or threaten to cause, serious injury to the domestic industry producing like or directly competitive articles. |
| 4. Earthenware table and kitchen articles. | Denied, Apr. 11, 1963 | The Commission unanimously found that earthenware table and kitchen articles were not, as a result in major part of concessions granted under trade agreements, being imported in such increased quantities as to cause, or threaten to cause, serious injury to the domestic industry producing like or directly competitive articles. |
| 5. Whisky | Denied, Apr. 26, 1963 | The Commission unanimously found that whisky (except Irish, Irish type, Scotch, and Scotch type) provided for in par. 802 of the Tariff Act of 1930, was not, as a result in major part of concessions granted under trade agreements, being imported in such increased quantities as to cause, or threaten to cause, serious injury to the domestic industry producing like or directly competitive whisky. |
| 6. Umbrellas and parts of umbrellas (except handles). | Denied, Sept. 1, 1964 | The Commission unanimously found that umbrellas and parts of umbrellas (other than handles) provided for in items 751.05 and 751.15–.25 of the Tariff Schedules of the United States were not, as a result in major part of concessions granted under trade agreements, being imported in such increased quantities as to cause, or threaten to cause, serious injury to the domestic industry or industries producing like or directly competitive articles. |
| 7. Watches, watch movements, and watch parts. | Denied, Oct. 30, 1964 | The Commission unanimously found that watches, watch movements, and parts of watch movements were not, as a result in major part of concessions granted under trade agreements, being imported in such increased quantities as to cause, or threaten to cause, serious injury to the domestic industry producing like or directly competitive articles. |
| 8. Mushrooms, prepared or preserved. | Denied, Jan. 27, 1965 | The Commission unanimously found that mushrooms prepared or preserved, provided for in item 144.20 of the Tariff Schedules of the United States were not, as a result in major part of concessions granted under trade agreements, being imported in such increased quantities as to cause, or threaten to cause, serious injury to the domestic industry or industries producing like or directly competitive articles. |

INDUSTRY PETITIONS—Continued

| Product | Finding | Reason for finding |
|---|---|---|
| 9. Ice skates and parts thereof | Denied, Feb. 19, 1965 | The Commission unanimously found that ice skates (including footwear with skates permanently attached), and parts thereof, provided for in item 734.92 of the Tariff Schedules of the United States were not, as a result in major part of concessions granted thereon under trade agreements, being imported in such increased quantities as to cause, or threaten to cause, serious injury to the domestic industry or industries producing like or directly competitive articles. |
| 10. Eyeglass frames | Denied, Oct. 6, 1967 | The Commission unanimously found that frames and mountings for eyeglasses, lorgnettes, goggles, and similar articles, provided for in item 708.47 of the Tariff Schedules of the United States hereinafter (generally referred to as eyeglass frames), were not, as a result in major part of concessions granted thereon under trade agreements, being imported into the United States in such increased quantities as to cause, or threaten to cause, serious injury to the domestic industry producing like or directly competitive articles. |
| 11. Barbers' chairs | Denied, Jan. 22, 1968 | The Commission unanimously found that barbers' chairs and parts thereof, provided for in item 727.02 of the Tariff Schedules of the United States, were not, as a result in major part of concessions granted thereon under trade agreements, being imported into the United States in such increased quantities as to cause, or threaten to cause, serious injury to the domestic industry producing like or directly competitive articles. |
| 12. Broomcorn | Denied, Mar. 25, 1968 | The Commission unanimously found that broomcorn provided for in item 192.55 of the Tariff Schedules of the United States was not, as a result in major part of concessions granted under trade agreements, being imported into the United States in such increased quantities as to cause, or threaten to cause, serious injury to the domestic industry producing like or directly competitive articles. |

## INSUFFICIENCY LANGUAGE

Senator JAVITS. How long can you go on paying these veterans readjustment benefits after the 1st of April under the language of the statute? As long as you have money?

Mr. GOODWIN. Yes; until the new fiscal year, July 1. At that point, assuming that the continuing resolution has been passed, we can continue paying.

Senator JAVITS. Thank you.

## Trade Adjustment Activities

STATEMENT OF ROBERT C. GOODWIN, ADMINISTRATOR
ACCOMPANIED BY:
W. R. CURTIS, DEPUTY ADMINISTRATOR
THERON J. WILLIAMS, EXECUTIVE ASSISTANT
CHARLES E. ODELL, DIRECTOR, U.S. EMPLOYMENT SERVICE
FOREST L. MILLER, DIRECTOR, UNEMPLOYMENT INSURANCE SERVICE
JACK S. DONNACHIE, DEPUTY DIRECTOR, OFFICE OF FARM LABOR SERVICE
EDWARD L. OMOHUNDRO, CHIEF, VETERANS' EMPLOYMENT SERVICE
PHILIP T. LAWLOR, DIRECTOR, OFFICE OF BUDGET ORGANIZATION AND MANAGEMENT
MICHAEL J. NASTICK, CHIEF, DIVISION OF APPROPRIATIONS AND FEDERAL FISCAL ACTIVITIES
STANLEY H. RUTTENBERG, ASSISTANT SECRETARY FOR MANPOWER
RICHARD E. MILLER, DIRECTOR, OFFICE OF PROGRAM AND BUDGET REVIEW

### Appropriation Estimate

*"Trade Adjustment Activities*

*"For necessary expenses to carry out the responsibilities of the Secretary of Labor in connection with trade adjustment activities, as provided by law, including benefit payments to eligible workers $1,300,000."*

### Explanation of Language Change

New language is needed for the separate appropriation that has been proposed to finance Trade Adjustment Activities. These activities were formerly financed under the appropriation, "Unemployment Compensation for Federal Employees and Ex-servicemen." The Senate Committee on Appropriations suggested that the Department of Labor submit a separate request for funds for this purpose beginning with fiscal year 1969.

### Amounts Available for Obligation

| | 1968 | 1969 |
|---|---|---|
| Appropriation or estimate | | $1,300,000 |
| Comparative transfer from "Unemployment Compensation for Federal Employees and ex-servicemen" | $2,200,000 | |
| Total fund availability or estimate | 2,200,000 | 1,300,000 |

OBLIGATIONS BY ACTIVITY

| Description | Appropriation revised, 1968 | Estimate, 1969 | 1969 change |
|---|---|---|---|
| 1. Trade adjustment allowances | $2,000,000 | $1,200,000 | —$800,000 |
| 2. State administration—Trade adjustment activities | 200,000 | 100,000 | —100,000 |
| Total obligations | 2,200,000 | 1,300,000 | —900,000 |

OBLIGATIONS BY OBJECT

| | | | |
|---|---|---|---|
| 41 Grants, subsidies and contributions | $2,200,000 | $1,300,000 | —$900,000 |
| Total obligations | 2,200,000 | 1,300,000 | —900,000 |

*Summary of changes*

| | |
|---|---|
| 1968 enacted appropriation | ---------- |
| Comparative transfer from "Unemployment compensation for Federal employees and exservicemen" | $2,200,000 |
| 1968 appropriation, revised | 2,200,000 |
| 1969 estimate | 1,300,000 |
| Total change | —900,000 |

MANDATORY ITEMS

| | |
|---|---|
| Increase: | |
| To provide for a higher average weekly allowance payment to workers | +50,000 |
| The average weekly allowance will be $73.75 in fiscal year 1969, $2.85 higher than currently estimated for 1968. | |
| Total, mandatory items | +50,000 |

PROGRAM ITEMS

| | |
|---|---|
| Decreases: | |
| Reduction due to fewer number of claimants | —835,000 |
| No new petitions can be accepted after June 30, 1968, under existing legislation, therefore allowances will be paid to approximately 1,320 eligible workers who will carry over entitlement into fiscal year 1969 compared to payments to 2,250 workers in fiscal year 1968. | |
| Reduction due to lower average duration of payments | —15,000 |
| Approximately 1,025 of the 1,320 workers carrying over entitlement to allowances in fiscal year 1969 will have received the greater part of their allowances during fiscal year 1968 thereby reducing the average number of weeks compensated during fiscal year 1969. | |
| Reduction due to fewer direct hours for counseling, testing, referral and placement services, and processing of payments | —74,000 |
| No new petitions can be accepted after June 30, 1968, under existing legislation, therefore approximately 18,050 hours will be necessary to process allowances payments and to provide services to those who will carry over entitlement into fiscal year 1969 compared to the 34,500 hours needed in fiscal year 1968. | |
| Reduction due to decrease in overall administration costs | —26,000 |
| Overall administration costs to cover services to those who carry over entitlement into 1969 will be approximately $13,000 compared to $39,000 expended during fiscal year 1968. | |
| Total, program items | —950,000 |
| Total change | —900,000 |

MANDATORY CHANGES BY ACTIVITY

| Type of change | Activity 1 amount | Activity 2 amount | Total amount |
|---|---|---|---|
| To provide for a higher average weekly allowance payment to workers | +$50,000 | | +$50,000 |
| Total | +50,000 | | +50,000 |

PROGRAM CHANGES BY ACTIVITY

| Object classification | Activity 1 amount | Activity 2 amount | Total amount |
|---|---|---|---|
| 41 Grants, subsidies and contributions | −$850,000 | −$100,000 | −$950,000 |
| Total | −850,000 | −100,000 | −950,000 |

*Activity 1. Trade adjustment allowances*

| | |
|---|---|
| 1968 | $2,000,000 |
| 1969 | 1,200,000 |

NARRATIVE DESCRIPTION OF PROGRAM

The activity provides for assistance to workers in the form of weekly adjustment allowances to employees partially or totally separated from firms which make products affected by the operation of the United States Canadian Automotive Agreement.

Trade adjustment assistance is payable under certain conditions to workers who lose their jobs as a result of an increase in imports. Such payments are made in accordance with the provisions of Title III of the Trade Expansion Act of 1962 (19 U.S.C. 1901–1991).

The Automotive Products Trade Act of 1965 (19 U.S.C. 2001–2033) implements an agreement between the United States and Canada for the free trade in automotive products between the two countries. In order to provide adjustment assistance to workers who lose their jobs due to the working of the agreement, the provisions of Title III of the Trade Expansion Act were made applicable. These provisions provide that the Secretary of Labor ". . . shall pay or provide such assistance to applicants who are so entitled . . ." and indicated the manner in which this shall be accomplished. The Automotive Products Trade Act, established new and special standards, including detailed economic criteria for determining the cause of the dislocation, and for establishing the eligibility of firms and/or workers for this assistance.

*Changes for 1969*

| | |
|---|---|
| Mandatory changes amount to | +$50,000 |
| Program changes amount to | −850,000 |
| Positions | None |

BASIS FOR THE ESTIMATE

| | Number of workers | Average duration | Average weekly allowances | Total cost |
|---|---|---|---|---|
| Number of workers pending placement: | | | | |
| (a) Determinations made in fiscal years 1967 and 1968 | 1,015 | 10 | $73.75 | $750,000 |
| (b) Determinations made in fiscal year 1969 | 305 | 20 | 73.75 | 450,000 |
| Total | 1,320 | | | 1,200,000 |

Worker adjustment assistance benefits will be paid to automotive workers under Automotive Products Trade Act in accordance with the adjustment assistance provisions of the Trade Expansion Act. No new petitions can be accepted after June 30, 1968, under existing legislation.

During fiscal years 1966 and 1967, petitions had been certified for allowances to be paid during fiscal year 1968 to workers for the following companies:

The Ford Division, Pennsauken, New Jersey
Eaton Manufacturing Co., Lackawanna, New York
Chevrolet Assembly Plant, N. Tarrytown, New York
Fisher Body, N. Tarrytown, New York
Fram Filter Co., Birmingham, Alabama
Fisher Body Works, Grand Rapids, Michigan
Rockwell Standard Corp., Adrian, Michigan
Eaton Yale and Towne Incorp., Detroit, Michigan
Chrysler Jefferson Plant, Detroit, Michigan
Gabriel Shock Absorber Co., Cleveland, Ohio
American Motors Milwaukee Body Plant, Milwaukee, Wisconsin
American Motors Corp., Kenosha, Wisconsin

In fiscal year 1968 through December 31, 1967, one petition has been certified for allowances to be paid for workers of the Long Manufacturing Division, Borg-Warner Corp., Detroit, Michigan (workers of the Oil Cooler Department). Also, as of December 31, 1967, petitions filed by three different groups of workers in fiscal year 1968 are still pending. These petitions involve a total of approximately 385 workers and have been received from:

Borg-Warner Corporation, Long Manufacturing Division, Detroit, Michigan
Condenser Department, Pittsburgh Plate Glass Company
Works #1, Creighton, Pennsylvania
Works #4, Ford City, Pennsylvania

The July–December 1967 statistics are as follows:

| | Number filing new claims | Number paid allowances | Weeks compensated | Amount of allowances |
|---|---|---|---|---|
| New Jersey | 2 | 26 | 309 | $23,838 |
| New York | 25 | 171 | 2,542 | 181,214 |
| Alabama | 1 | 66 | 864 | 57,959 |
| Michigan | 114 | 664 | 7,536 | 524,643 |
| Ohio | 8 | 110 | 1,416 | 100,304 |
| Wisconsin | 256 | 235 | 4,693 | 324,126 |
| Total | [1] 406 | 1,272 | 17,360 | [2] 1,212,084 |

[1] Represents new claims filed in fiscal year 1968.
[2] Includes reimbursement to State agency for unemployment insurance benefits paid.

*Activity 2. State administration-trade adjustment activities*

| | |
|---|---|
| 1968 | $200,000 |
| 1969 | 100,000 |

NARRATIVE DESCRIPTION OF PROGRAM

This program provides for the services by the State Employment Security agencies in the administration of the worker adjustment assistance provisions authorized by the Automotive Products Trade Act of 1965. To provide these services will require the State Employment Security agencies to investigate worker employment histories in order to determine worker entitlement to adjustment assistance allowances; to administer the payment of allowances; to pay relocation expenses of workers transferred to a new area of residence; to determine if there were refusals to accept training without good cause thus causing workers to lose their eligibility for allowances; to make weekly certification for training; to process and make payments of subsistence and travel expenses; to consult trainee and training facility concerning termination of training; to determine whether a weekly training payment should be denied; to prevent, detect and collect overpayments by examining the records of each separate payment; to prosecute for fraud; to furnish information for the annual report on activities

under the Act; and to furnish information for investigation of anticipated economic impacts of other agreements contemplated under Section 202 of the Act.

In addition, the State Employment Security agencies will furnish employment services in the local offices of the State affected for the workers estimated to be found eligible for adjustment assistance. State agencies will promote new job opportunities and provide specialized placement services. Specialized and intensive counseling, testing and placement services will be utilized to reduce reliance on trade adjustment benefits and to return adversely affected workers to full employment as quickly as possible. All efforts will be made to locate suitable employment affording a reasonable expectation of long-term duration either in the area of residence or in another area within the United States.

Finally, the State Employment Security agencies in the State concerned will need to provide staff training, procedural development and overall program supervision.

Through December 31, 1967, administrative costs incurred were as follows:

| | |
|---|---|
| New Jersey | $2,406 |
| New York | 30,989 |
| Alabama | 1,442 |
| Michigan | 28,130 |
| Ohio | 5,191 |
| Wisconsin | 9,870 |
| Total | 78,028 |

*Changes for 1969*

| | |
|---|---|
| Mandatory changes amount to | |
| Program changes amount to | —$100,000 |
| Positions | None |

BASIS FOR THE ESTIMATE

| | Workload | Unit time (hours) | Hours |
|---|---|---|---|
| Number of determinations | 305 | 2 | 600 |
| Number of payments | 16,250 | 1 | 16,250 |
| Total payment processing | | | 16,850 |
| Employment service activities: | | | |
| Counseling, testing, referral to employment or training | 305 | 4 | 1,200 |
| Total direct hours | | | 18,050 |

*Overall administration—Includes training, procedures development, evaluation, and overall supervision*

| | |
|---|---|
| 15 percent of direct hours | 2,700 |
| Total hours | 20,750 |
| Cost per hour | $4.80 |
| Total cost of State administration, 1969 | $100,000 |

Administrative expenses of State Employment Security agencies in connection with trade adjustment assistance are estimated to be $100,000. This will include the cost of determining work eligibility and payment of allowances; counseling, testing, referral and placement services and general staff training, procedural development and overall program administration. The funds will be distributed to State agencies in proportion to each State's share of the trade adjustment assistance activity during the year.

PREPARED STATEMENT

Mr. Goodwin. The next item we have is the trade adjustment request, Mr. Chairman.

Again, with your permission, I would like to insert the formal statement in the record and make just a few points in connection with this request.

(The statement follows:)

Under Title III of the Automotive Products Trade Act of 1965, and under Title III of the Trade Expansion Act of 1962, the Federal Government has provided the protection of unemployment insurance in the form of adjustment allowances to eligible dislocated workers. These allowances are paid by the State employment security agencies under agreement with the Secretary of Labor.

The temporary protection provided to the dislocated workers is similar to the protection that is available to workers in private industry against the risks of involuntary unemployment. In fiscal year 1967, a total of 1,339 workers with an average duration of 20.6 weeks of unemployment were paid $1,879,800 in adjustment allowances.

Since no new petitions can be accepted after June 30, 1968, under existing legislation, the funds requested for 1969 are required to pay allowances only to those eligible workers who will carry over entitlement from fiscal year 1968. For 1969 we estimate that the cost of adjustment allowances to be paid dislocated workers will amount to $1,200,000 while the administrative expenses of State employment security agencies to make these allowance payments will amount to $100,000. The total estimate of $1,300,000 is $900,000 less than the amount now estimated to be paid in fiscal year 1968. These allowance payments are mandatory under current legislation and monies appropriated by the Congress for this purpose cannot be used for any other activity.

In fiscal year 1968, this program was funded from the appropriation "Unemployment Compensation for Federal Employees and Ex-servicemen." For fiscal year 1969, following the intent of Congress as expressed in Senate report number 469 a separate appropriation request has been submitted.

Mr. Chairman, this concludes my statement on the estimate for funds for Trade Adjustment Activities.

STATUTORY AUTHORITIES

Mr. Goodwin. This program operates under title III of the Automotive Products Trade Act of 1965 and under title III of the Trade Expansion Act of 1962.

The Federal Government has provided protection under these acts in the form of adjustment allowances to eligible dislocated workers.

These allowances are paid by the State employment security agencies under agreement with the Secretary of Labor.

BUDGET REQUEST

For 1969, we estimate that the cost of adjustment allowances to be paid to dislocated workers will amount to $1,200,000 while the administrative expenses of the State employment security agencies will amount to $100,000. The total estimate of $1,300,000 is $900,000 less than the amount now estimated to be paid in fiscal year 1968.

This decline is based upon current legislation which provides that new petitions cannot be accepted after June 30, 1968.

These allowance payments are mandatory under current legislation and the money cannot be used for any other activity.

APPROPRIATION SEPARATION

In fiscal year 1968, this program was funded from the appropriation "Unemployment Compensation for Federal Employees and Ex-servicemen." Congress requested last year in Senate Report 469 that it be handled separately this year. We have therefore presented it as a separate item.

That is all I have to say on this particular item, Mr. Chairman, unless there are some questions.

Senator Hill. What is your next item?

# BUREAU OF EMPLOYMENT SECURITY

## Salaries and Expenses

STATEMENT OF ROBERT C. GOODWIN, ADMINISTRATOR
ACCOMPANIED BY:
W. R. CURTIS, DEPUTY ADMINISTRATOR
THERON J. WILLIAMS, EXECUTIVE ASSISTANT
CHARLES E. ODELL, DIRECTOR, U.S. EMPLOYMENT SERVICE
FOREST L. MILLER, DIRECTOR, UNEMPLOYMENT INSURANCE SERVICE
JACK S. DONNACHIE, DEPUTY DIRECTOR, OFFICE OF FARM LABOR SERVICE
EDWARD L. OMOHUNDRO, CHIEF, VETERANS' EMPLOYMENT SERVICE
PHILIP T. LAWLOR, DIRECTOR, OFFICE OF BUDGET ORGANIZATION AND MANAGEMENT
MICHAEL J. NASTICK, CHIEF, DIVISION OF APPROPRIATIONS AND FEDERAL FISCAL ACTIVITIES
STANLEY H. RUTTENBERG, ASSISTANT SECRETARY FOR MANPOWER
RICHARD E. MILLER, DIRECTOR, OFFICE OF PROGRAM AND BUDGET REVIEW

### Appropriation Estimate

"Bureau of Employment Security, Salaries and Expenses

"For expenses necessary for the general administration of the employment service and unemployment compensation programs; performing functions under the Manpower Development and Training Act of 1962, as amended (42 U.S.C. 2571–2620); and administration of the Farm Labor Contractor Registration Act of 1963 (7 U.S.C. 2041); and activities relating to the admission and employment in agriculture of non-immigrant aliens in connection with the Secretary of Labor's responsibilities under the Immigration and Nationality Act (8 U.S.C. 1184); [$2,630,000] *$3,026,000*, together with not to exceed [$17,990,000] *$20,947,000*, which may be expended from the employment security administration account in the Unemployment Trust Fund, of which not to exceed [$1,802,000] *$1,885,000* shall be available for activities of the farm labor services, and of which [$1,801,000] *$2,001,000* shall be for carrying into effect the provisions of title IV (except section 602) of the Servicemen's Readjustment Act of 1944."

AMOUNTS AVAILABLE FOR OBLIGATION

| | 1968 | | 1969 | |
|---|---|---|---|---|
| | Trust fund | General revenue | Trust fund | General revenue |
| Appropriation or estimate | $17,990,000 | $2,630,000 | $20,947,000 | $3,026,000 |
| Estimated program supplemental | 262,000 | | | |
| Proposed transfer from "Office of Manpower Administrator, salaries and expenses" for pay increases (Public Law 90–206 effective Oct 8, 1967) | | 42,000 | | |
| Increase in trust fund authorization for increased pay costs under Public Law 90–206 | 476,000 | | | |
| Appropriation or estimate, revised | 18,728,000 | 2,672,000 | 20,947,000 | 3,026,000 |

## OBLIGATIONS BY ACTIVITY

| | Appropriation revised, 1968 | | Estimate, 1969 | | 1969 change | |
|---|---|---|---|---|---|---|
| | Positions | Amount | Positions | Amount | Positions | Amount |
| 1. Unemployment Insurance Service | 295 | $4,137,000 | 321 | $4,603,000 | +26 | +$466,000 |
| a. Unemployment insurance | 172 | 2,392,500 | 178 | 2,554,000 | +6 | +161,500 |
| b. Administration and management | 73 | 1,061,000 | 73 | 1,095,600 | | +34,600 |
| c. Regional offices | 50 | 683,500 | 70 | 953,400 | +20 | +269,900 |
| 2. U.S. Employment Service | 844 | 11,292,000 | 892 | 12,343,000 | +48 | +1,051,000 |
| a. U.S. Employment Service | 323 | 4,443,000 | 335 | 4,829,000 | +12 | +386,000 |
| Regional offices | 149 | 2,023,000 | 185 | 2,519,800 | +36 | +496,800 |
| b. Farm Labor Service | 97 | 1,130,000 | 97 | 1,171,100 | | +41,100 |
| Regional Offices | 56 | 692,000 | 56 | 713,900 | | +21,900 |
| c. Veterans Employment Service | 144 | 1,942,000 | 144 | 2,001,000 | | +59,000 |
| d. Administration and management | 75 | 1,062,000 | 75 | 1,108,200 | | +46,200 |
| 3. Administration and management | 107 | 1,332,000 | 153 | 1,986,000 | +46 | +654,000 |
| a. Office of the Administrator | 40 | 543,400 | 72 | 980,500 | +32 | +437,100 |
| b. Administration and management | 67 | 788,600 | 81 | 1,005,500 | +14 | +216,900 |
| 4. Manpower development and training activities | 197 | 2,645,000 | 222 | 2,998,000 | +25 | +353,000 |
| 5. Farm labor contractor registration activities | 14 | 240,000 | 14 | 243,000 | | +3,000 |
| a. State Administration | | 100,000 | | 100,000 | | |
| b. Federal Administration | 14 | 140,000 | 14 | 143,000 | | +3,000 |
| 6. Admission and employment in agriculture of nonimmigrant aliens | 68 | 1,007,000 | 68 | 1,031,000 | | +24,000 |
| 7. Admission and employment of immigrant aliens | 60 | 747,000 | 60 | 769,000 | | +22,000 |
| Total obligations | 1,585 | 21,400,000 | 1,730 | 23,973,000 | +145 | +2,573,000 |

## OBLIGATIONS BY OBJECT

| | Appropriation revised, 1968 | Estimate, 1969 | Change, 1969 |
|---|---|---|---|
| Total number of permanent positions | 1,585 | 1,730 | +145 |
| Positions other than permanent | 1 | 1 | |
| Average number of all employees | 1,463 | 1,599 | +136 |
| 11 Personnel compensation | $16,249,700 | $18,303,400 | +$2,053,700 |
| 12 Personnel benefits | 1,227,900 | 1,370,900 | +143,000 |
| 21 Travel and transportation of persons | 1,146,600 | 1,229,900 | +83,300 |
| 22 Transportation of things | 53,400 | 58,500 | +5,100 |
| 23 Rent, communications, and utilities | 465,800 | 564,500 | +98,700 |
| 24 Printing and reproduction | 382,300 | 377,700 | −4,600 |
| 25 Other services | 794,400 | 897,500 | +103,100 |
| Services of other agencies | 796,400 | 844,300 | +47,900 |
| 26 Supplies and materials | 113,900 | 133,600 | +19,700 |
| 31 Equipment | 69,600 | 92,700 | +23,100 |
| 41 Grants, subsidies, and contributions | 100,000 | 100,000 | |
| Total obligations | 21,400,000 | 23,973,000 | +2,573,000 |
| Working capitol fund items included above | (993,400) | (1,130,700) | (+137,300) |

SUMMARY OF CHANGES

| | Trust fund | | General revenue | | Total | |
|---|---|---|---|---|---|---|
| | Position | Amount | Position | Amount | Position | Amount |
| 1968 enacted appropriation | 1,373 | $17,990,000 | 199 | $2,630,000 | 1,572 | $20,620,000 |
| Proposed transfer from "Office of Manpower Administrator, salaries and expenses" for pay increases (Public Law 90-206 effective Oct. 8, 1967) | | | | 42,000 | | 42,000 |
| Increase in trust fund authorization for increased pay costs under Public Law 90-206 | | 476,000 | | | | 476,000 |
| Estimated program supplemental | 13 | 262,000 | | | 13 | 262,000 |
| 1968 appropriation, revised | 1,386 | 18,728,000 | 199 | 2,672,000 | 1,585 | 21,400,000 |
| 1969 estimate | 1,506 | 20,947,000 | 224 | 3,026,000 | 1,730 | 23,973,000 |
| Total change | +120 | +2,219,000 | +25 | +354,000 | +145 | +2,573,000 |
| Mandatory items: | | | | | | |
| Increases: | | | | | | |
| Net additional pay increase costs not completely funded in 1968 | | +306,500 | | +72,500 | | +379,000 |
| Net additional cost of within-grade promotions effective for part year in 1968 | | +111,900 | | +18,300 | | +130,200 |
| Net cost of within-grade promotions becoming effective in 1969 | | +116,100 | | +15,700 | | +131,800 |
| To provide for 1 extra day of pay in 1969 for current year staff | | +65,500 | | +9,500 | | +75,000 |
| Subtotal, increases | | +600,000 | | +116,000 | | +716,000 |
| Decrease: To provide for a net decrease in contributions to the Federal employees' compensation fund | | −1,000 | | | | −1,000 |
| Total, mandatory items | | +599,000 | | +116,000 | | +715,000 |
| Financing items: To provide for full cost of centralized services purchased from the working capital fund | | +34,000 | | | | +34,000 |
| Program items—Increases: | | | | | | |
| To provide for the expanded scope of the manpower development training activites program and to strengthen the role of the employment service to provide for the continued emphasis in reaching the disadvantaged. ($194,500 personal services, $43,500 nonlabor costs) | | | +25 | +238,000 | +25 | +238,000 |
| To provide the staff capability in the Bureau of Employment Security to direct and coordinate comprehensive management improvements through all levels of employment security operations by the establishment of an automated reporting system, a State-based evaluation system, the installation of a planning system at the State and local level to provide a means of allocating resources to meet State and local needs, the implementation of a cost accounting system, and further development of automatic data processing technology. ($1,239,400 personal services, $260,600 nonlabor costs) | +120 | +1,500,000 | | | +120 | +1,500,000 |
| To provide for full-year costs of the 1968 program supplemental estimates ($70,800 personal services, $15,200 nonlabor costs) | | +86,000 | | | | +86,000 |
| Total, program items | +120 | +1,586,000 | +25 | +238,000 | +145 | +1,824,000 |
| Total change | +120 | +2,219,000 | +25 | +354,000 | +145 | +2,573,000 |

## MANDATORY AND FINANCING CHANGES BY ACTIVITY

| Type of change | Activity 1 | | Activity 2 | | Activity 3 | | Activity 4 | | Activity 5 | | Activity 6 | | Activity 7 | | Total | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | Positions | Amount | Positions | Amount | Positions | Amount | Positions | Amount | Positions | Amount | Positions | Amount | Positions | Amount | Positions | Amount |
| Mandatory items: | | | | | | | | | | | | | | | | |
| Net additional pay increase costs | | +$67,500 | | +$175,100 | | +$41,500 | | +$72,300 | | +$1,600 | | +$11,900 | | +$9,100 | | +$379,000 |
| Net additional cost of within-grade promotions effective for part-year in 1968 | | +23,600 | | +73,500 | | +5,700 | | +17,800 | | +200 | | +3,900 | | +5,500 | | +130,200 |
| Net within-grade promotion costs initially effective in 1969 | | +22,200 | | +74,700 | | +8,200 | | +15,600 | | +600 | | +5,600 | | +4,900 | | +131,800 |
| Extra day of pay in 1969 for current year staff | | +14,200 | | +39,000 | | +6,800 | | +9,300 | | +600 | | +2,600 | | +2,500 | | +75,000 |
| Contributions to FEC fund (+ or −) | | | | −1,000 | | | | | | | | | | | | −1,000 |
| Subtotal, mandatory items | | +127,500 | | +361,300 | | +62,200 | | +115,000 | | +3,000 | | +24,000 | | +22,000 | | +715,000 |
| Financing items: Cost of centralized services | | +17,000 | | +17,000 | | | | | | | | | | | | +34,000 |
| Total | | +144,500 | | +378,300 | | +62,200 | | +115,000 | | +3,000 | | +24,000 | | +22,000 | | +749,000 |

*Mandatory and financing changes for 1969*

MANDATORY ITEMS

| | |
|---|---|
| Increases: To provide for full year cost of pay increases effective October 8, 1967 and to provide full funding of part-year costs | $379,000 |
| Within-grade promotion costs: | |
| 1969 net additional cost of within-grade promotions effective for part-year in 1968 | +130,900 |
| Personnel compensation | 140,184 |
| Deduct lapse | 4,984 |
| Deduct savings due to turnover | 13,400 |
| Personnel benefits | 9,100 |
| Net cost | 130,900 |
| Absorption of a portion of above increases | −700 |
| Adjusted net additional cost of within-grade promotions effective for part year in 1968 | 130,200 |
| Net cost of within-grade promotions becoming effective during 1969 | +132,500 |
| Personnel compensation | 142,017 |
| Deduct lapse | 5,017 |
| Deduct savings due to turnover | 13,600 |
| Personnel benefits | 9,100 |
| Net cost | 132,500 |
| Absorption of a portion of above increases | −700 |
| Adjusted net cost of within-grade promotions becoming effective during 1969 | 131,800 |
| To provide for one extra day of pay in 1969 for current year staff | 75,000 |
| Decreases: To reduce the level of contributions to the Federal Employees' Compensation Fund | −1,000 |
| Total, mandatory items | +749,000 |

FINANCING ITEMS

| | |
|---|---|
| Amount originally in base budget | 1,096,700 |
| Amount currently required in base budget | 1,130,700 |
| Changed financing required | +34,000 |

Changes in fees charged for centralized services (such as visual exhibits or reproduction) and changes in anticipated services rendered by the Working Capital Fund require adjustments to the funds provided in the base budget.

## PROGRAM CHANGES BY ACTIVITY

| Object classification | Activity No. 1 | | Activity No. 2 | | Activity No. 3 | | Activity No. 4 | | Total | |
|---|---|---|---|---|---|---|---|---|---|---|
| | Positions | Amount | Positions | Amount | Positions | Amount | Positions | Amount | Positions | Amount |
| 11 Personnel compensation | | +$250,300 | | +$519,600 | | +$448,800 | | +$180,900 | | +$1,399,600 |
| 12 Personnel benefits | | +18,700 | | +39,100 | | +33,700 | | +13,600 | | +105,100 |
| 21 Travel and transportation of persons | | +15,300 | | +27,500 | | +31,200 | | +9,300 | | +83,300 |
| 22 Transportation of things | | +900 | | +2,500 | | +1,700 | | +200 | | +5,300 |
| 23 Rent, communications, and utilities | | +15,000 | | +32,600 | | +33,700 | | +13,500 | | +94,800 |
| 24 Printing and reproduction | | +900 | | −12,700 | | +6,700 | | +500 | | −4,600 |
| 25 Other services | | +11,500 | | +22,200 | | +20,300 | | +10,000 | | +64,000 |
| Services of other Agencies | | | | +33,700 | | | | | | +33,700 |
| 26 Supplies and materials | | +3,700 | | +7,000 | | +6,500 | | +2,500 | | +19,700 |
| 31 Equipment | | +5,200 | | +1,200 | | +9,200 | | +7,500 | | +23,100 |
| Total | +26 | +321,500 | +48 | +672,700 | +46 | +591,800 | +25 | +238,000 | +145 | +1,824,000 |

*Activity 1. Unemployment Insurance Service*

| | |
|---|---|
| 1968 (positions, 295) | $4,137,000 |
| 1969 (positions, 321) | 4,603,000 |

NARRATIVE DESCRIPTION OF PROGRAM

This program provides for leadership and technical assistance to all States, in the development, financing and administration of their unemployment insurance laws. Those laws provide a first defense against deprivation through unemployment to over 50 million workers. The nation's economy and local communities have a bulwark against dislocations through loss of purchasing power. The Unemployment Insurance Service determines whether State unemployment insurance laws and their administration meet requirements for Federal Unemployment Tax Act offset credits amounting to over $4 billion and for administrative grants under the Social Security Act. It also determines the amounts to be granted to each State for administration of its unemployment insurance law and supervises performance of State agencies as agents for payments estimated at $93 million in 1969 to individuals under Title XV of the Social Security Act.

*in 1967*, accomplishments were reflected in the development of major management improvements in the Federal-State unemployment insurance system.

1. Notable progress has been made in the following respects:

(*a*) An evaluation outline for measuring State accomplishments against performance standards was developed and tested in four States. Based on the findings of this test, a revised outline will be developed and a further test conducted in selected States in 1968. Tentative standards of effective quality, and error and delay limits in tax collection and benefit operations were formulated in concrete, measurable terms which will enable objective comparisons among States and over time spans.

(*b*) *Plans of action* were utilized by the Bureau for the first time in the budgetary allocation process for two areas of State unemployment insurance administration. State plans for tax administration and for benefit payment control, containing specific operating objectives to support the budgetary requirements, provided valuable data for the Bureau's guidance in the allocation of 1968 grants in accordance with program needs.

(*c*) In support of Bureau of Employment Security and Department efforts to develop effective computerized management information systems, work has been resumed on development of complete definition of requirements for information and analytic reports and on systems design to permit programming of defined reports. The inventory of data elements and output requirements will be required to be furnished to a consulting firm for their use in designing an interim reporting system and will contribute to determination of long range Bureau, Manpower Administration and Department of Labor data processing requirements.

2. A nationwide study of Federal Unemployment Tax Act compliance was initiated by the Bureau and is being carried out with the cooperation of the Internal Revenue Service and the State agencies. The findings, tentatively scheduled to be available early in fiscal year 1969, will provide a basis for cooperative planning of improved tax enforcement.

3. Unemployment Insurance Service staff specialists conducted 15 post-installation reviews of new automatic data processing systems in unemployment insurance operations and provided continuing consultation on a major new system in two States for the actual time required to process claims and payments through direct wire connections between State and local office equipment.

4. In conjunction with the Administration and Management Service arrangements were made for out-service training for State agency technicians through training institutes conducted under contract with universities. A total of 1,063 professional staff received such training; they included field auditors, claims examiners, appeals referees, and management staff. In addition, the Unemployment Insurance Service conducted training courses for State staff on data processing systems in unemployment insurance operations, and a seminar on unemployment insurance cost estimating and benefit financing.

5. Fiscal year 1967 saw considerable progress in strengthening the unemployment insurance system's research capabilities for evaluating program content. Of special importance has been the continued expansion and consolidation of the

Continuous Wage and Benefit History program which yields valuable data for studies of the program results for individual workers. By the end of the fiscal year there were a total of 46 States with on-going or planned programs compared to 35 States at the start of the year. Most States have adopted the uniform sample approach urged by the Bureau to facilitate greater comparability of information, interstate exchange of data for individual workers and claimants, and coordination with data from the Social Security Administration's one-percent worker sample under the Old Age, Survivors, Disability and Health Insurance (OASDHI) program. Some States are summarizing and publishing data from the Continuous Wage and Benefit History program and many more are getting to the stage of doing so.

Considerable activity was devoted to evaluating the basic State unemployment insurance legislative structure, largely through analyses of program statistics and the findings of research studies. A major project involved the use of data from the Old Age, Survivors, Disability and Health Insurance one-percent worker sample to test the impact of various benefit formulas and qualifying requirements. Plans were developed for further exploitation of this source of data for these purposes, as well as for evaluation of farm worker coverage proposals. Special tabulations of Census data on employment and payrolls of small firms were designed, obtained from Census Bureau and made available to State agencies for use in their analysis of the impact of proposals for extension of coverage to employers of fewer than four workers.

*In 1968*, it is planned to augment support of the State systems by concentrating efforts of national office staff on developmental efforts and solving more complicated or multi-state problems while depending more heavily on State agencies for evaluating operations and providing information on effectiveness of performance. This reliance on self-evaluation by States will be possible by redesigning their management systems to produce specified data, by providing the specifications of evaluative methods and performance standards and by Regional Office monitoring. This redirection of staff effort began in fiscal year 1967 and will increase as rapidly as developmental efforts permit during 1968, as follows:

1. Continue as rapidly as our staff resources will permit the long-range program now in progress for modernization of the Federal-State unemployment insurance administration system.

2. In our continuing analysis and review of claims operations, emphasis will be added (to that dealing with surveillance of eligibility) to constructive initiative by claims examiners to accelerate the claimant's return to gainful employment. Studies already under way will be continued to develop effective techniques for better direction of the claimant's own work search and for coordination to achieve intensified efforts by the Employment Service, including employability services where appropriate. Experimental systems for developing effective techniques to accelerate the claimant's return to gainful employment were started in 1967 and will continue in 1968.

3. The adjudication by the State agencies of contested claims for benefits has been found inadequate as to both the investigation of facts and the notices to the interested parties, and the Bureau has developed appropriate guides for strengthening supervision and establishing quality control programs in this activity. Assistance will be given to States in the installation of these measures.

4. Work will continue on a limited scale toward a coordinated national program of research by State unemployment insurance services which will yield the factual basis both for the individual States' needs in developing legislative improvement, and the Bureau's needs for national program planning.

5. The Bureau will continue to give guidance and assistance to States in establishing organization patterns which will better accommodate effective, direct-line supervision over the claims functions in local offices. This will involve greater use of claims control centers through which a small cadre of specialists may maintain several points of service within a relatively large geographical area. The method provides for improved service to the public and more economical employment of limited professional staff resources.

*Changes for 1969*

| | |
|---|---|
| Mandatory changes amount to | +$127,500 |
| Financing changes amount to | +$17,000 |
| Program changes amount to | +$321,500 |
| Positions | +26 |

This program increase is to provide national and regional office staff in efforts to support the management improvement activities of the Unemployment Insurance Service by the establishment of an automated reporting system, a State based evaluation system, implementation of a cost accounting system, and further development of automatic data processing technology. It is explained in detail under the Administration and Management Service justification.

BASE

Positions: None. Estimated cost: None.

ADDITIONAL COST

Positions: 26. Man-years: 23.4. Estimated cost: $321,500.

BASIS FOR THE ESTIMATE

The estimate for 1969 provides for a continuation of the basic functions of the Unemployment Insurance Service. These functions are essentially in the nature of central staff services which the Bureau performs within the Federal-State framework for some 26,500 staff in 52 operating agencies. The workload projections reflect assumptions of obligatory activities at about their present levels except for increases in public inquiries and greater legislative activities in 1969 when more legslatures meet.

WORKLOAD STATISTICS

| | Actual | | Estimated | |
|---|---|---|---|---|
| | 1966 | 1967 | 1968 | 1969 |
| Evaluations, surveys, or operations audits, onsite (field assignments) | 179 | 141 | 178 | 118 |
| Technical assistance to States, onsite (field assignments) | 96 | 114 | 126 | 90 |
| In-office evaluations, audits, or analyses (completed reports) | 2,444 | 3,437 | 2,461 | 3,500 |
| Routine correspondence on individual State UI matters (communications written) | 5,703 | 5,997 | 7,294 | 7,300 |
| State documents reviewed (communications written) | 747 | 1,093 | 1,026 | 1,100 |
| In-office program analyses (communications written) | 337 | 352 | 307 | 350 |
| Developmental projects (projects completed) | 23 | 33 | 34 | 40 |
| Printed guides, instructions, standards, manuals (releases) | 123 | 142 | 289 | 200 |
| UI-sponsored institutes, conferences, and training seminars (assemblages) | 56 | 73 | 103 | 100 |
| Budget transactions (budget documents) | 495 | 947 | 857 | 857 |

*Activity 2. U.S. Employment Service*

1968 (positions 844) ..... $11,292,000
1969 (positions 892) ..... 12,343,000

NARRATIVE DESCRIPTION OF PROGRAM

This program provides for national leadership, direction, and coordination for program and operations to a nationwide system of public employment offices. Beginning in fiscal year 1968, the employment service program in the states will be organized and will be accountable to the Bureau under four major program areas, i.e. Employability Development, Employer Relations and Placements, Manpower and Employment Information and Administration and Technical Support.

Under these basic categories the United States Employment Service develops basic policies, program activities, procedures, tools and techniques, and guidelines to assist State and local offices to effectively provide: (a) an efficient job placement service in all occupations for all workers and employers; (b) specialized services to those who encounter serious difficulties in the competitive job market; (c) mobile employment services to smaller communities where fulltime offices are not economically feasible; (d) assistance to communities in the formulation and execution of plans to develop the economic potentialities of the community and make the most effective utilization of its manpower resources; (e) occupational and manpower information and area employment and

unemployment information; and (f) greater mobility of labor by guiding necessary shifts of workers between geographic locations and across occupational and industrial lines.

The United States has for the last two decades been undergoing a gigantic industrial and economic transformation, reflected in a rapid increase in population and labor force, the expansion of the economy, the introduction of new production techniques with accompanying changes in jobs, and wide-spread geographic shifts in industrial location. Also, increasing productivity on the farms through mechanization and more efficient methods has accelerated the movement of population to urban areas.

These forces of change and progress are not new. What is new is the rate at which they are taking place, the magnitude of the resulting problems, and the relative inadequacy of present institutions, practices, and legislation to deal effectively with the many facets of these changes. It has become increasingly evident that the new problems are too complex, too difficult, and too interrelated to permit quick and easy solutions.

The Nation has come to recognize the need for an active manpower policy. The basic elements of such a policy have been defined and a variety of approaches are rapidly being developed. Within the past four years the Congress has given increasing recognition to the problems of human resource development and has enacted legislation in which there are specific provisions relating to the complex of these problems. In each of these the implementation directly involves the United States Employment Service and its affiliated State agencies.

A specialized service evaluates local office job counseling and placement services for veterans, and interprets and carries out policies of the Secretary of Labor pertaining to placement of veterans. The Veterans Employment Service provides leadership, develops policy and gives advice to States.

The Office of Farm Labor Service develops policies, program objectives, and operating procedures for a nationwide program to service the needs of workers and employers in agriculture and the woods industry. As an integrated part of that program, the Service assists State agencies in carrying out the Secretary of Labor's overall regulations relating to interstate recruitment and determines the availability of domestic farm labor.

*U.S. Employment Service*

| | |
|---|---|
| 1968 (positions 547) | $7,528,000 |
| 1969 (positions 595) | 8,457,000 |

*In 1967*, accomplishments included 253 Bureau conducted evaluations by management and program specialists of State agency activities at both State and local levels. On the local office level, they are carried out by direct observation, comparing the overall balance of the program with special programs. Activities are examined for utilization of resources with employer demands and the quality of service to applicants. Field assistance to States in program activities totaled 359 in fiscal year 1967. This assistance is provided primarily by regional office staff who assist in developing plans for State agencies to improve their programs. The analysis and classification of labor areas provide employment data useful to the Bureau in setting up employment security programs and also provide useful information for other agencies. In fiscal year 1967, 800 areas were anlyzed and classified, and a total of 37 surveys were conducted. These surveys serve a two-fold purpose in that they indicate what skills are required for local employers and provide prospective outside employers with information pertaining to available labor supply.

Demands on the staff of the United States Employment Service are many and varied, requiring specialized staff in each individual aspect of the program. They include requests from the States for assistance in conducting their operations; the requirement for nationwide coordination and direction of the multiple employment service programs; the implementation and follow-up of various demonstration projects of previous years and the need to translate Administration policy into a concrete, effective manpower system. While the concept of "matching men with jobs" is still valid, the Employment Service plays an important role in shaping the Nation's economic destiny. Since the early 1960's, the Employment Service has redirected its plans and efforts to meet the needs resulting from rapidly occurring technological innovations, the necessity to reach and serve hard-core unemployed and various disadvantaged workers and implementation of recently enacted manpower legislation.

This redirection of effort, designed to effectuate an active manpower policy, began to assume organized form in fiscal year 1966. In that year, the human resources development concept was formulated as the guiding principle and a very modest start in putting it into effect was made. In brief, the human resources development concept provides for the coordinated planning and management of all employment service resources, from whatever source derived, in order to assure the most effective use of the Nation's entire manpower resources. In scope, it goes far beyond the traditional matching of job-ready applicants with employers' job orders. It involves reaching out to make contact with those who do not on their own initiative seek employment service assistance. It places major emphasis on serving the disadvantaged, the long-time-unemployed and underemployed, Negroes, youth, older workers, the handicapped and others who encounter serious problems in the job market. It stresses special assistance in terms of educational and vocational training and other necessary services, to the disadvantaged to develop their employability and to meet employers' needs. At the same time it stresses work with employers to modify rigid and unrealistic hiring requirements and job specifications and to restructure jobs so as to enable "graduates" from training to qualify. It culminates in individualized job development efforts, including related services to employers, placing people in jobs which will make maximum use of their potential and following up to insure satisfactory adjustment. Implementation of the human resources development concept was undertaken on a larger scale in fiscal year 1967.

The approach to the most effective implementation of the human resources development concept, in brief, is based on three principles, as follows:

1. A revised State program budget structure comprising two basic program areas, a basic and supporting program area, and an area of activities to support and assure accomplishments of the objectives of the first three. Each area comprises a limited number of activities indicating the work performed or service rendered rather than the individual or group for whom it is performed. The new structure is more fully explained in the Grants to States estimates.

2. Elimination of the fragmented allocations for a wide variety of special purposes, including those for services to special applicant groups such as youth, older workers, minorities, the handicapped and the like. Services to such groups will continue to be reported, however, by means of the present statistical reports and any other workload accomplishment reports that may be necessary.

3. The preparation by each State of a Plan of Service describing the manner, including distribution of resources among the program areas and activities, in which it proposes to meet overall State needs and the needs of areas within the State. In fiscal year 1969, State plans will be based on, and to the extent necessary will include area and local office plans.

*In 1968*, it is planned to further develop and refine the new budget structure and particularly the State and local office Plans of Service, the development of which will create major demands on the time of national and regional office staffs in fiscal year 1968. This matter is too important to be neglected, since success in this area is fundamental to successful implementation of the human resources development concept.

In addition, technical assistance must continue to be provided to States, areas and localities in planning, developing and carrying on programs, especially in the newly developed programs of services to the disadvantaged.

The Nation has embarked on an effort to improve its vocational education efforts so that workers can be retrained for occupations in which there is reasonable opportunity for employment. The United States Employment Service has undertaken to broaden the occupational, industry and area coverage of its information on job market conditions which can be used by educators, and by individuals as well as by employers and communities in manpower planning. The development of techniques and technical assistance for carrying out such surveys in local communities and assistance to the States in analyzing job market conditions will be continued. Equally important is the need to improve methods for estimating urban and rural unemployment rates. To better cope with job skills shortages, more occupational opportunities information is needed.

The emphasis placed by the Employment Service in fiscal year 1967 on strengthening its management information system at all levels, State and Federal, will be continued in fiscal year 1968.

Work must be continued on the development and installation of a comprehensive cost accounting system and the use of cost benefits studies as a tool in management decision-making.

The Employment Service is now completing a large-scale reassessment of its organizational structure and assignments of staff responsibility to develop a pattern which assures the most effective use of present resources in order to achieve its objectives. Implementation of the new pattern is now underway and will be completed in fiscal year 1968.

*Veterans Employment Service*

| | |
|---|---|
| 1968 (positions 144) | $1,942,000 |
| 1969 (positions 144) | 2,001,000 |

*In 1967*, accomplishments included the placement of 1,182,200 veterans in nonagricultural jobs, 111,400 placements of disabled veterans in nonagricultural jobs, and the processing of 1,762,900 veterans applications for employment through local offices.

The number of veterans has grown rapidly. As of March 1967, as reported by the Veterans Administration, there were a total of 25,839,000 veterans in civilian life. This figure includes: 1,929,000 who fought in the Spanish American War and in World War I, 14,860,000 who fought in World War II, 4,567,000 who fought only in the Korean Conflict, and 4,483,000 who fought in the Post-Korean Conflict.

The passage of the Veterans' Readjustment Benefits Act of 1966 gave veterans status to all those who separated from military service after 1955 and to those separating in the future. It added to the veteran total a "backlog" of 3.8 million people. In addition, increasing numbers are expected to separate from military service in the coming years. The Department of Defense estimates of separations are 630,000 in 1967, 830,000 in 1968, and 840,000 in 1969 as shown on the chart.

*In 1968*, it is planned to provide intensified employment services to all returning veterans. Every veteran will be contacted as soon after his separation from the Armed Forces as possible.

The age distribution of veterans calls for specialized employment assistance. With the inclusion of the Post-Korean Conflict and the Viet Nam Veterans under the 1966 "GI Bill", youth becomes a significant category. Many of these young veterans have never worked before and need, in addition to the usual placement services, extensive counseling and skill development prior to selecting a field of work. Almost all these workers need current job market information.

Another category requiring specialized employment services is the older worker. The Korean War Veterans with an average age of 37.5 years and the World War II veterans with an average age of 47 years are in, or approaching, the older worker category. In addition, each year, 60,000 military men with an average age of 45 years retire from service. Re-entering the labor market as older workers, many of these workers need orientation to employment possibilities under their new status. Also, employer contact is needed to promote consideration of older workers and to inform the employer of the applicability of military experience to civilian training. Another special category is the handicapped veteran. This group is rapidly increasing as disabled veterans return from Viet Nam. A special program has been announced by the President to aid separated servicemen.

The President called for "personal employment assistance" to "smooth the transition from military to civilian life." To aid in this effort, United States Veterans Assistance Centers will be staffed in fiscal year 1968. The Bureau will provide technical assistance to State agencies, prepare and distribute informational materials to returning veterans and develop research into military job skill transferability.

*Farm labor service*

| | |
|---|---|
| 1968 (Positions 153) | $1,822,000 |
| 1969 (Positions 153) | 1,885,000 |

*In 1967*, efforts were directed toward improving existing practices in the Federal-State system, rather than introducing new practices. This was based on indicated needs following 162 farm program evaluations, 38 of which were performed by national office staff, the remainder by regional offices.

The most urgent area for improvement was in the recruitment of seasonal workers, particularly school youth for summer work and for their replacement at the beginning of the new school year. Farm labor service staffs assisted State agencies in 120 on-site actions to strengthen and improve these recruitment operations. In a number of instances there would have been a need to use foreign labor, but this contingency was avoided or minimized in most cases. An important side effect of these efforts was the opportunity provided youth to earn wages in gainful

employment, thus making possible a return to school or college in an undeterminable number of cases.

While all States vigorously pursued the pattern of program improvements initiated in Fiscal Year 1967—18 of them surpassing placement levels of 1966—adverse weather conditions generally reduced overall labor needs for agricultural and harvesting labor. With more favorable conditions prevailing in the first five months of fiscal 1968 (July–November 1967), agencies reported over 200,000 placements in excess of the five-month period in the previous year.

An equally important activity was a study of "retention" services. These services, which adapt successful industrial relations techniques to agriculture, consist of many actions undertaken in the area of employer and worker relations, and are designed to influence stability of the seasonal farm labor force. "Retention" services are becoming an integral part of placement work in many areas, and have been beneficial to both workers and employers particularly since the termination of the Mexican farm labor program. In consequence, the movement will be further expanded for nationwide use in the latter half of fiscal year 1968. These actions will apply also to employers and workers in woods activities and, where appropriate, to all others embraced in the total rural manpower program.

Improvements in the recruitment and movement of interstate migratory workers called for over 100 instances of staff assistance to State agencies. In many cases these were the result of adverse weather and crop conditions which disrupted the planned itineraries of migratory crews. Involved in all these interstate recruitment actions were prevailing wage surveys, expansion of informational services and housing inspections.

*In 1968*, it is planned to initiate new approaches in helping meet the increasing need for year-round workers skilled or trained in the use of modern farm machinery and equipment. Already in exploratory and field test stages in respect to the milk industry, Federal-State plans call for measurements of need in respect to metropolitan milk-shed areas, and for the development of working relationships with dairy associations in wide-sweeping recruitment and training actions. The premise is that concerted, well-directed actions relating to an entire milk-shed area will be far more productive than the undirected actions of rural communities acting separately. Similar plans will be launched in major geographic areas specializing respectively in the production of broilers, eggs, beef cattle, hogs, and pulpwood.

In addressing itself to the seasonal labor and job needs relating to vegetables, fruits and many other high labor-using crops, the Farm Labor Service will continue to push for stronger, well-organized community day-haul operations. Revitalized in fiscal year 1967, with particular emphasis on selection, pre-job orientation, and follow-up retention services, day-haul operations have proven to be the most effective method of mobilizing local labor, especially school and college youths who are available during the summer months and on weekends during the school year.

Special directional and guidance material will be issued to States for the purpose of promoting more active relationships with community organizations concerned with the welfare of disadvantaged groups. It is hoped that through these means more people in need of gainful employment can be reached and better utilized.

Most workers recruited for seasonal farm work are members of low-income families, many totally unemployed and, therefore, have most pressing need for funds. A high proportion of these workers are from minority groups. In the absence of other (non-farm) work being available, economic pressures draw into the agricultural labor market many inexperienced young people from these groups, with resulting high turnover. To help remedy this situation, pre-job orientation with employer assistance, and follow-up actions to foster job stability will be part of the Bureau's emphasis program in fiscal year 1968.

During fiscal year 1968, the worker housing of all growers recruiting interstate migrant labor through the public employment system will be checked for conformity with the Secretary's Regulations on Interstate Recruitment, as revised in 1967. The housing standards in these regulations are now mandatory, rather than recommended. It is expected that some growers, being found with substandard housing, will decline to use the interstate recruitment system in order to avoid the cost of remedial repairs. Regardless of this possibility and its effect on placement workloads, the housing of all growers using, or who elect to use the system, will be inspected.

*In 1969*, it is planned to utilize the results of field tests relating to the milk industry and the need for metropolitan milkshed areas and work with dairy associations. This will be a continuation of the work done in this area in 1968.

"Retention" services will be strongly emphasized in 1969 as a result of studies undertaken in 1967 and 1968. This activity will be instrumental in reducing the high incidence of turnover. The job orientation with employer assistance and follow-up actions to foster job stability will continue to be emphasized in 1969.

The Farm Labor Service will continue to promote better relationships between communities and farm workers, particularly those organizations concerned with the welfare of disadvantaged groups. The worker housing of all growers recruiting interstate migrant labor through the public employment system will be checked for conformity with the Secretary's revised regulations of 1967.

*Changes for 1969*

| | |
|---|---|
| Mandatory changes amount to | +$361,300 |
| Financing changes amount to | +$17,000 |
| Program changes amount to | +$672,700 |
| Positions | +48 |

U.S. EMPLOYMENT SERVICE

The program increase for this item will provide the staff resources in the National and regional offices to direct and coordinate comprehensive management improvements in the Employment Service. This will be accomplished by the establishment of an automated reporting system, a State-based evaluating system, the installation of a planning system at the State and local level, the implementation of a cost accounting system and further development of automatic data processing technology. It is explained in detail under the Administration and Management Service justification.

BASE

Positions: 0. Estimated Cost: 0.

ADDITIONAL COST

Positions: 48. Man-Years: 43.12. Estimated Cost: $586,700.

Part of the program change item is related to financing the full year costs of the 1968 supplemental appropriation for the Exemplary Rehabilitation Certification Program.

BASE

Positions: 10. Estimated Cost: $173,000.

ADDITIONAL COST

Positions: 0. Man-Years: 4.6. Estimated Cost: $74,000.

VETERANS EMPLOYMENT SERVICE

This program increase will finance the full year costs of 1968 supplemental appropriation for the Veterans Employment Service for increased services to veterans under the "contact" program and activities relating to establishment of United States Veterans Assistance Centers.

BASE

Positions: 3. Estimated Cost: $89,000.

ADDITIONAL COST

Positions: 0. Man-Years: 1.4. Estimated Cost: $12,000.

BASIS FOR THE ESTIMATE

The fundamental basis for estimating resource requirements for the United States Employment Service is the continuing need to translate Administration policy into a manpower system to make the most effective use of the Nation's workforce. The many and varied programs are administered by the State agencies but are initiated, developed, evaluated, and directed by the national and regional staff of the Employment Service. Much of the staff requirement is based on the continuing nature of many programs, for example, the review of State reports, budget requests; organization and management etc. remains fairly constant unless dramatic new programs are introduced.

Federal staff of the Employment Service for 1969 will amount to 892 positions. The functions they will perform will direct the activities of 31,306 State employees, a ratio of over 35 to 1. These State employees will receive and process almost 11 million new applications, conduct 2,200,000 counseling interviews, test 2,200,000 individuals and make 6,500,000 placements. All of these activities must be monitored and evaluated by the Federal staff. Toward this end 260 full program evaluations will be made, 360 field assistance trips are scheduled, and 800 evaluations of State plans of service, analyses of budget requests, program performance etc. will be required.

In addition to staff time spent on evaluation and analyses, the employment service must keep all States, as well as other agencies, informed on labor market conditions. In a dynamic economy conditions change rapidly and thus continual labor area surveys, contacts with multi-State employers, job definitions, job vacancy information, and new testing devices must be maintained and updated.

Finally, new programs are constantly emerging and must be developed on a nationwide level before being introduced to the States.

The estimates of staff needed to carry out all the described functions are based on the workload estimates which have been validated by experience, plus or minus anticipated or planned deviation from the basic program.

With respect to the Farm Labor Service, the estimate of staff needs for 1969 are based on levels of resources used in performing identifiable workloads in fiscal year 1966 and fiscal year 1967. In lieu of a functional time-reporting system, unit supervisors' approximations of staff utilization are accepted as these relate to reportable major functions. The method does lend itself to reasonable computations of man-year productivity in a single activity or a combination of activities. It is estimated that the method offers 75 to 90% reliability, is considered not less efficient than functional-time reporting and is not as costly to administer. Shown below are estimates of individual workloads based on the prevailing method, averaged for fiscal years 1966 and 1967. The computations consider all tasks performed by professional and clerical workers, and cover both field and office phases of all staff time consumed.

| | *Individual performance average* |
|---|---|
| Technical assistance to State employment service agencies | 2.5 |
| Program evaluations (on site) | 12 |
| Publications and technical aids | 29 |
| Reviews and analyses | 80 |
| Interstate farm job orders reviewed and cleared: Number of orders cleared | 4,218 |
| Determinations and certifications re alien entry requests under Public Law 414 for permanent agricultural employment | [1] 491 |

[1] Based on fiscal year 1967 experience only since the "320" program operating in fiscal year 1966 involved a different policy and method of workload reporting.

It is understandable that workloads will vary, sometimes for reasons beyond control, sometimes because of deliberate planning. When these variations are marginal or of a temporary nature, staff reductions or increases are deemed neither desirable or necessary.

WORKLOAD STATISTICS

| | Actual | | Estimated | |
|---|---|---|---|---|
| | 1966 | 1967 | 1968 | 1969 |
| **EMPLOYMENT SERVICE** | | | | |
| Evaluation of State agency program activities | 235 | 253 | 260 | 260 |
| Evaluation of State plans of service; analyses of State annual and supplemental budget requests, program performance, etc | 800 | 750 | 800 | 800 |
| Field assistance to States in program activities, organization and management, and training activities | 330 | 359 | 360 | 360 |
| Analysis and classification of labor areas | 600 | 800 | 750 | 750 |
| Current occupational studies | 75 | 185 | 300 | 300 |
| Manpower projection (area skill) surveys | 20 | 37 | 20 | 20 |
| Job definitions, classifications, and descriptions prepared | 9,700 | 9,766 | 9,800 | 9,800 |
| Occupational tests development studies | 58 | 80 | 80 | 80 |
| Promotional contacts with multistate employers | 105 | 90 | 120 | 120 |
| Industrywide manpower surveys | 6 | 0 | 7 | 7 |
| **VETERANS EMPLOYMENT SERVICE** | | | | |
| Total number of veterans making application for employment in local offices | 1,172,500 | 1,762,900 | 1,855,000 | 1,850,000 |
| Total number of disabled veterans making application for employment in local offices | 121,100 | 146,600 | 160,000 | 160,000 |
| Total number veteran nonagricultural placements | 974,200 | 1,182,200 | 1,400,000 | 1,400,000 |
| Total disabled veteran nonagricultural placements | 103,800 | 111,400 | 120,000 | 120,000 |
| Number of local office visits by State veterans employment representatives | 4,759 | 4,388 | 5,000 | 5,000 |
| Number of local office evaluations by State veterans employment representatives | 1,368 | 1,383 | 1,700 | 1,700 |
| Number of veterans visiting offices of State veterans employment representatives [1] | 12,297 | 10,516 | 12,000 | 12,000 |
| Number of veteran employment problem cases referred to VES [1] | 1,704 | 2,100 | 2,200 | 2,200 |
| Number of contacts made by State veteran employment representative: | | | | |
| Employer | 7,016 | 6,950 | 7,500 | 7,500 |
| Veteran organizations | 13,542 | 13,446 | 13,500 | 13,500 |
| Other | 15,395 | 14,594 | 15,500 | 15,500 |
| Total contacts [2] | 35,953 | 34,990 | 36,500 | 36,500 |
| Number of performance evaluations of State veterans employment representatives offices by national office staff | 52 | 45 | 52 | 52 |
| **FARM LABOR SERVICE** | | | | |
| Technical assistance to State ES agencies | 241 | 235 | 219 | 220 |
| Program evaluations (on site) | 35 | 38 | 41 | 45 |
| Publications and technical aids | 99 | 103 | 116 | 116 |
| Reviews and analyses [3] | 1,400 | 1,416 | 1,078 | 1,100 |
| Interstate farm job orders reviewed and cleared: | | | | |
| Number of orders cleared | 7,814 | 9,059 | 10,100 | 9,500 |
| Number of workers involved | 405,513 | 410,000 | 425,000 | 415,000 |
| Determinations and certifications re alien entry requests under Public Law 414 for permanent agricultural employment | 5,500 | 1,474 | 1,700 | 1,700 |

[1] Workload items over which VES has no control.
[2] Represents personal and telephone contacts with other Federal and State governmental agencies, labor unions, private organizations, and community groups on veterans employment activities.
[3] Includes the reviews and analyses of State employment service agency budget requests, preseason and in-season farm labor area reports, prevailing wage finding reports, and field evaluations.

### *Activity 3. Administration and management service*

1968 (Positions, 107) ..... $1,332,000
1969 (Positions, 153) ..... 1,986,000

NARRATIVE DESCRIPTION OF PROGRAM

This program provides for or coordinates, as appropriate, leadership and assistance in overall administrative management activities within the Bureau and to affiliated employment security agencies. Responsibilities involved include overall direction and coordination of planning, budgeting, accounting, reporting and evaluating activities.

Within the Employment Security System, this activity directs the development of program plans and their execution and formulates and administers policies applicable to Federal responsibilities involved. It directs the development of legislative proposals and establishes and maintains effective relationships with Fed-

eral and State agencies concerned. The Administration and Management Service reviews performance and accomplishments of the Bureau's staff; directs and coordinates the budgeting and accounting responsibilities of the Bureau and maintains the nationwide statistical reporting and validation system which serves the needs of the Bureau and affiliated agencies for statistical data and economic research and analysis. The Service participates in the evaluation of administration and accomplishment of affiliated agencies and provides centralized services and assistance involving such activities as automatic data processing management studies, and organization control.

In the Federal-State relationship, this function provides overall leadership and guidance, directs and coordinates the budgeting and accounting processes applicable to affiliated State agencies; and maintains fiscal accounts and prepares Federal fiscal reports on funds allocated through the Bureau. It also provides technical assistance in efforts to improve administrative management functions in affiliated State agencies and participates in the development and conduct of agency personnel training programs. The Service monitors agencies' compliance with Federal merit system standards; assists agencies in the application and utilization of automatic data processing facilities and otherwise provides assistance to affiliated State agencies in the effective administration of programs.

*In 1967*, accomplishments included actions taken by the Bureau to strengthen administrative management of the Federal-State employment security system, including varied working relationships with other agencies in the antipoverty program. In-depth studies were made of management and administrative practices, and staff training and revised standards for new personnel were provided to improve the competency of State employment security staff. Considerable effort was expended on research and study of program needs, with attendant work devoted to implement study-findings in such forms as drafts of proposed legislation, program outlines, estimates of budget requirements, organizational structure changes, and proposed procedures. These efforts frequently involved consultation with other agencies, private groups, and both established and ad hoc advisory committees. Throughout the fiscal year, the Bureau provided technical assistance to affiliated State agencies in the review and evaluation of management functions, feasibility studies and equipment selection, personnel management procedures, staff training programs, automatic data processes, fiscal management activities, and statistical reporting operations.

The Bureau approved training for some 10,000 State agency staff members in all phases of employment security operations. In the Experimental Training Center at Michigan State University, opened in March 1967, training was given to State personnel in automatic data processing management and communications, employer services, services to veterans, labor market analyses, and interpersonal and intergroup relations. Thirteen institutes were held at Michigan State University in 1967. Before the end of the fiscal year, commitments were made for 40 institutes at various institutions for training 1,200 employees of State agencies in human resources development.

In the Bureau's national office, training in managerial skills was provided under the Federal Employees Training Act, and clerical stenographic-refresher training was given to selected employees. All United States Employment Service supervisory personnel were trained in the human resources concept including methods used at the successful "Jobs Now" project for job placement of the disadvantaged in Chicago. Arrangements were made with the National Urban League for training Employment Service staff in 16 cities in work relations with minority groups.

To assist State agencies in their personnel management responsibilities, model qualification standards were issued for local office interviewers and unemployment insurance positions; exploratory work was conducted on qualifications and selection standards for subprofessionals; and continued guidance was given to promote practices which would insure equal opportunity in the internal staffing and personnel management of State agencies.

Under contract with the Bureau, a management consulting firm (Cresap, McCormick and Paget), evaluated methods for making grants to State agencies and assuring effective use of funds. Efforts by the Bureau to carry out recommendations accepted included considerable headway in simplifying the budget process. In addition, Federal-State task forces developed comprehensive procedures for conducting in-depth evaluations of administrative management functions and program operations, thus implementing other recommendations of the consulting firm.

Submittal of a conceptual report for automating employment security operations brought to a conclusion intensive and extensive efforts by the Bureau and cooperating State agencies on the first phase of a long-range project being carried out with technical assistance from the Auerbach Corporation. Acceptance of the contractor's conceptual report resulted in the immediate commencement of the second phase of the project.

Numerous problem-solving meetings held during the past fiscal year with representatives of State agencies encompassed such administrative management affairs as fund allocations, acquisition of property under rental-purchase arrangements, organizational proposals, classification and compensation plan revisions, lease renewals and conditions, audit questions, office locations, and general matters relating to the recommendation and future implementation of the Cresap, McCormick and Paget and Auerbach studies.

Over 470 technicians and officials from 60 countries visited the Bureau, and in some cases State and local offices, for orientation on employment security policies, programs, and operations.

To help State agencies in recruiting applicants for work experience and occupational training opportunities, the Bureau arranged for the production of a number of short films including "Training Opportunities Under MDTA", "Applying for a Job", "Jobs in the Health Field", and "Sales and Merchandising Careers" out of trust fund and other sources.

Carrying out vested responsibilities for "furnishing and publishing information as to opportunities for employment and other information of value in the operation of the system" the Bureau published a variety of regular and special reports during the fiscal year.

*In 1968*, it is planned to continue, to the extent possible within available resources, the implementation of the recommendations of the consulting firms with regard to an automated reporting system, evaluation and self-appraisal and expanded automatic data processing. In addition, a beginning will be made on the development of a cost accounting system. No new resources were appropriated for these purposes in fiscal year 1968. Through redirection and diversion of staff a great deal of the preparatory work can be accomplished which will permit full utilization of the program increase requested for 1969.

*Changes for 1969*

| | |
|---|---|
| Mandatory changes amount to | +$62,200 |
| Program changes amount to | +$591,800 |
| Positions | +46 |

The program changes appear under this activity because it is from here that they will be directed and coordinated. In addition to the amounts above, 26 positions and $321,500 are reflected under Activity 1, Unemployment Insurance and 48 positions and $586,700 are reflected under Activity 2, Employment Service.

*Proposal.*—To direct efforts toward activities specifically related to the coordination and direction of comprehensive improvements throughout the Employment Security System. It is planned to establish an automated reporting system, install plans of service geared to the needs of local communities, implement a cost accounting system and further develop the application of automatic data processing technology to employment security operations.

*The Need.*—The Bureau will devote concentrated attention to three major administrative management areas during fiscal year 1969. The areas of next year's concerted effort were identified in management studies made by the consulting firms of Cresap, McCormick and Paget, and Auerbach Corporation.

In the Cresap, McCormick and Paget study, recommendations were made for developing an improved employment security management system, supported by new concepts of program planning, evaluation, and control, and strengthened by better management information including cost accounting.

Auerbach's studies produced a conceptual plan for obtaining maximum use of the technology of automation in the performance of employment security operations, and blueprints of automated reporting systems, and automatic data processing support systems in area manpower program operations.

Cost accounting as a management tool received emphasis in the management improvement recommendations of the Cresap, McCormick and Paget study. Additional impetus was given to the Bureau's plans to introduce a cost accounting system. as recommended in the study, by the House Government Operations Committee in its hearings on deficient compliance by Federal agencies with the

requirements in the Budget and Accounting Procedures Act of 1950. Pursuant to Departmental commitments made in the House committee's hearings, contractual assistance was arranged for the development of an accounting system in the Department, with a complementary system covering the Federal-State employment security funds. Bureau staff members have been working with the accounting systems contractor (Touche, Ross, Bailey and Smart) in the developmental phases of the contract.

*The Program.*—All three of these major areas of activity will have an impact on workload and staff requirements in State employment security agencies during fiscal year 1969. Similarly, the Bureau's workload will be increased in fiscal year 1969 in carrying out Federal responsibilities involved in each of the three priority activities.

As will be noted, 26 additional positions are requested for the Unemployment Insurance Service. National and regional office efforts will be required in support of management improvement activities and to carry out the further recommendation of the consulting firm that:

"A major effort should be made to develop costs of performing each function by a cost accounting system and to develop, as rapidly as possible, sound productivity standards for performing Unemployment Insurance functions."

"While States may vary in processes for valid reasons, and trying new methods should be encouraged and promoted, differences in costs of routine, similar operations should not be allowed to exist indefinitely."

"The goal of this effort should be establish realistic standards and reduce the present unreasonably wide range in productivity among States, which already is of great concern to the Unemployment Insurance Service."

"Because of the lack of such a systematic effort in the past, the standards must be developed through on-site study by specialists, and not derived by purely statistical analysis."

"The specialists should use appropriate techniques to measure, in each State, the following components of efficient operations: Methods and procedures, work pace of employees, nonproductive time of employees."

The consulting firm also stated that:

"To have an adequate program of time and methods analysis, the Bureau should think in terms of maintaining it at a level of about 25 full-time methods and work measurement specialists, plus the time, as needed, of regional personnel and national office program specialists, for a total of perhaps 50 to 60 man-years per year."

Because of the critical need to improve Employment Service planning and management, the United States Employment Service requests 48 additional positions for assignment in fiscal year 1969 to two major activities:

First, intensified efforts are needed to refine and extend the Plan of Service concept, and as a corollary step to make the related budgetary process more realistic.

Second, increased attention must be given to strengthening and expanding evaluations of State agency operations through the State's self-evaluation as prescribed by the Bureau, and by improved and increased numbers of Bureau conducted evaluations.

These activities will require the provision of a substantial amount of technical assistance by Bureau staff in the national and regional offices to introduce and follow-up on the self-evaluation program. Additionally, plans to intensify and increase Bureau conducted evaluations of State employment service operations will require an augmentation of United States Employment Service staff in both the national and regional offices. It should be pointed out that developmental work and pilot try-outs of the tools and techniques involved in these efforts have been accomplished thus far by staff diverted from other activities.

A significant amount of the Bureau's implementation efforts in the three areas of priority attention will fall on the Administration and Management Service for which 46 additional positions are requested. The 4 new positions will provide a program planning and control capability. They would be used in the preparation of work plans for the Administration and Management Service staff in the national and regional offices, reviewing reports of accomplishments on plans; developing tools and techniques for evaluating State agency administration and management; scheduling evaluation activities and participating in related field work; and designing or developing measurements of accomplishments in administrative management functions. Although the estimate indicates that all regional staff will be assigned to Unemployment Insurance and Employment Service, there-

are Administration and Management functions which will be carried out. The staff will be helping State agencies to improve their self-evaluation programs, monitoring the self-evaluation activities of individual State agencies, conducting special evaluations, and assisting States in their overall management functions.

Priority emphasis is being directed to the application of computer technology to improve employment security operations, planning and administration. Substantial progress was made during fiscal year 1967 in developing concepts and plans with contractual assistance from the Auerbach Corporation. In June 1967, these concepts and plans were reviewed by joint Federal-State task forces and a steering committee and the contract amended to provide for technical assistance from the Auerbach Corporation during fiscal years 1968 and 1969 to assist the Bureau and selected State agencies. The contract amendment provides for the following:

1. Developing plans for automating the employment security reporting system in all State agencies and the Bureau to be implemented in fiscal year 1969;

2. Developing plans for and assisting in the implementation of prototype data systems in three model State agencies that will automate all employment security operations at all levels to a maximum feasible extent. The three model States are Utah, Florida and Michigan;

3. Developing plans for and assisting in the implementation of an Area Manpower Data System in the New York metropolitan area that extends into contiguous communities in New Jersey and Connecticut, that will automate employment service operations and determine the extent to which information can be interchanged between other manpower support agencies located in a large complex labor market area;

4. Developing long-range plans for the expansion and exportation of prototype automated systems to all States and affecting a transition to a fully automated status throughout the Federal-State system; and

5. To provide on-site assistance to the California agency in achieving maximum value and efficiency from the Labor Inventory Communication System. The purpose of the California system is to determine the most efficient and effective means for using a computer to support local office placement operations for professional occupations.

In addition, the contract provides for the inclusion of automated data processing requirements in the States and the Bureau that are generated as a result of the work performed by Cresap, McCormick and Paget and Touche, Ross, Bailey and Smart to develop management information and cost accounting systems.

During fiscal years 1968 and 1969 the Bureau will be heavily involved and committed to provide technical assistance and guidance to State agencies. To fulfill its responsibility in this joint Federal-State endeavor, the Bureau plans to increase its technical staff to effectively monitor the technical aspects of automation programs to assist the State agencies in implementing and evaluating automated systems, and to develop the Federal counterpart of the employment security system. Achieving compatibility between State automatic data processing systems and the Federal and State management information systems will be accomplished through the establishment of Data Elements and Codes Standards and Technical Standards.

Bureau staff will undertake the implementation of the automated reporting systems in the States and the Bureau in fiscal year 1969. Every effort will be made to coordinate the work of the contractors engaged in the development of the management information and cost accounting systems, to incorporate their requirements for data processing into Federal-State systems being developed under contract with the Auerbach Corporation.

Since the principal thrust behind the long-range plans to automate employment security operations is provided by the Administration and Management Service, the entire 36 additional positions for the Bureau's automation efforts are requested for Administration and Management Service.

To carry out the Bureau's responsibilities for extending the application of the accounting system being designed by Touche, Ross, Bailey and Smart into all employment security agencies, 6 additional positions are requested. Incumbents would be used to provide on-site assistance to State agencies in adopting the contractor's system design to the peculiarities of each individual State agency. Also involved is the responsibility of training each State agency's fiscal staff, and monitoring applications until assurance is obtained that the system is fully operative.

All of these efforts will result in a better, and more efficient employment security system to better serve the nation's workers and employers. The plans of service to be developed at the local and State level will contain evaluations of manpower needs, proposals of actions to be taken, and a program for the greatest level of accomplishment to be achieved with available resources. An automated management information system will provide the information necessary for decision making at all levels of the employment security system on a more timely and consistent basis so that managers of the system can assess all aspects of administration and management, program achievement, and resource utilization in sufficient time to take management action. Compatible systems of financial management and reporting of planned utilization and actual expenditures of funds will insure proper accountability and management. The system being developed will incorporate the ability to accumulate the cost data necessary to identify elements of cost with specific program objectives and evaluate the cost-benefit relationship of employment security programs. In general, the system will provide the basis for both effective planning and control by providing the means to project anticipated activities by fund, responsibility center, activity, and program, coupled with quantitative and qualitative controls to compare actual results to planned objectives. The following summary indicates the proposed distribution of the additional positions by functional activity.

| | Unemployment insurance service | Employment service | Administration and management service |
|---|---|---|---|
| Management improvements (Cresap, McCormick & Paget) | 26 | 48 | 4 |
| Automation (Auerbach Corp.) | 0 | 0 | 36 |
| Cost accounting (Touche, Ross, Bailey & Smart) | 0 | 0 | 6 |
| Total | 26 | 48 | 46 |

Fifty-six of the 120 additional positions requested are expected to be assigned to the Bureau's regional offices. Distribution of the regional positions are: Unemployment Insurance Service—20, United States Employment Service—36.

BASE

Positions: 0. Estimated cost: 0.

ADDITIONAL COST

Positions: 46. Man-years: 41.4. Estimated cost: $591,800.

BASIS FOR THE ESTIMATE

The study conducted by Cresap, McCormick and Paget identified a number of weaknesses in the planning and management of employment security programs. To remedy deficiencies which occur when essential planning, evaluation and control functions are performed on a "time available" basis, the Bureau is requesting 78 additional positions in order to obtain resources for full-time and continuing use in some of the most basic administrative management functions. Most of the additional positions requested are intended for assignment to regional offices. This distribution not only recognizes one of the major recommendations in the Cresap, McCormick and Paget study (which proposed a decentralization of the Bureau's technical assistance activities), but it contemplates the economies inherent in having the new resources close to the agencies where assistance is needed.

The six positions requested for the accounting system will be used to assist State agencies in the installation of the system. The five professionals will accompany the contractor's employees into the three model States to observe and assist, and to learn the system and techniques needed to install the system in additional Employment Security State agencies. These employees will use the accounting manual and teaching materials which will have been developed by December 30, 1968 to teach at least three employees from each of the remaining agencies. In addition to the teaching of the fundamentals of the system, teams of these employees will actually install the system in 5 additional State agencies.

The need for increasing the Bureau's staff of data processing technicians was brought into sharp focus in fiscal year 1967 when, due to a shortage of qualified

automatic data processing technicians, a contract was entered into with the Auerbach Corporation to study and develop plans to apply computer technology to employment security operations and administration. The contract was amended to provide technical assistance through fiscal year 1969. A total of 36 positions are requested for this purpose.

In total, the estimate will provide 120 positions. The estimate is based on the recommendations made by the contractors after careful study and review by the Bureau.

WORKLOAD STATISTICS

| | Actual | | Estimated | |
|---|---|---|---|---|
| | 1966 | 1967 | 1968 | 1969 |
| Development of economic assumptions and estimates of economic related data for budget requests | 23 | 23 | 23 | 23 |
| Review of State assumptions, estimates, and experience | 150 | 150 | 150 | 150 |
| Review of State needs for research and reporting | 53 | 53 | 53 | 53 |
| State training reports and proposals reviewed | 330 | 350 | 250 | 250 |
| Development of standards and guides | 14 | 12 | 10 | 10 |
| Administrative management reviews of State agencies | 3 | 3 | 3 | 3 |
| State ADP equipment requests reviewed | 29 | 25 | 30 | 50 |
| Fiscal management evaluations conducted | 10 | 9 | 10 | 10 |
| Technical assistance visits to State agencies [1] | 142 | 73 | 146 | 224 |
| Training conferences conducted [1] | 38 | 17 | 21 | 30 |
| State budgets approved, including supplemental requests | 2,774 | 3,080 | 3,100 | 3,100 |

[1] These include visits and conferences held by all units of A. & M.S.

*Activity 4. Manpower development and training activities*

1968 (positions, 197) ..... $2,645,000
1969 (positions, 222) ..... 2,998,000

NARRATIVE DESCRIPTION OF PROGRAM

This program provides for carrying out the Department of Labor's operating responsibilities under the Manpower Development and Training Act by the United States Employment Serrvice and its affiliated State employment security agencies. The Service provides leadership, direction, coordination and control throughout the Federal-State system. It develops and issues operating procedures and instructions: for determining the specific training occupations; for identifying unemployed and underemployed persons needing training; for testing, counseling, selection, referral and placement of trainees; and for determining eligibility of trainees for and payment of training, transportation and subsistence allowances. The Employment Service works closely with the U.S. Office of Education, Department of Health, Education, and Welfare, on development, review and approval of institutional training projects, and with other components of the Manpower Administration in the development of on-the-job training projects.

The Employment Service is responsible for Federal review, approval and funding of institutional training project proposals. Responsibilities with respect to on-the-job training projects include development of standards for determination of training needs, selection, certification and enrollment of trainees, and determining eligibility for and payment of allowances. In both institutional and on-the-job training projects, follow-up on trainees' employment experience at the three months. six months, and one year intervals following training also rests with the Employment Serivce.

The Employment Service regional office staff provides direct technical assistance to States in conducting skill surveys, in training project development, in the counseling, testing, selection and referral of unemployed and underemployed workers to training and in the maintenance of necessary records and reports. Regional representatives and those of the Department of Health, Education, and Welfare review and approve institutional training projects.

The Employment Service has a major role in the development of annual goals and guildelines for the implementation of the National Cooperative Area Manpower Planning System. Under this system Federal agencies with widely varying legislative authority and administrative procedures, coordinate their efforts to provide maximum manpower development and related services to the community. Regional office staff provide technical assistance to the States, and participate in the final review and approval of the individual State plans.

*In 1967*, accomplishments included the approval of 132,000 institutional training opportunities. The Manpower Development and Training Act has proven an effective tool in meeting the employment needs of thousands of workers, particularly the disadvantaged. Since the inception of the program an estimated 352,000 enrollees have completed training. At the time of last contact, during the first year after completion of training, 75 per cent were employed. Other fiscal year 1967 programs geared to meeting the challenge of worker demand included refresher training for registered nurses and training in other health occupations. Special programs were also established for persons 45 and over, for individuals referrals to private institutions, and part-time training to upgrade workers' skills.

Experience under the 1966 amendments to the Act has pointed up the necessity for continued intensive outreach to identify and involve disadvantaged workers in occupational training programs. Programs have been structured to meet the needs of disadvantaged workers requiring a person-to-person approach to assure that each individual has the opportunity to achieve the most suitable occupation. This entails a wide range of institutional training programs dealing with skill needs, basic education, employment, and work orientation.

*In 1968*, services will be provided to 275,000 trainees, of which 109,000 will be institutional, 109,000 on-the-job training, and 57,000 part-time and other. The training targets in 1968 are programmed to provide training opportunities tailored to the needs of disadvantaged workers and to focus on alleviating skill shortages. The 1968 institutional training level of 109,000 opportunities is comprised of 42,000 disadvantaged youth, 26,400 regular adults and 40,600 disadvantaged adults. In total, 1968 State plans are expected to show trainee goals totaling approximately 82,000 disadvantaged individuals.[1] In 1968 about 65 percent of the total training effort will be directed toward the ranks of the hard-core unemployed and other disadvantaged groups. The remaining 35 percent of the training effort will focus on meeting worker skill shortages. Priority will be given to selecting persons from among the disadvantaged for training in the shortage occupations.

Not less than 75 percent of the disadvantaged trainees should have less than a high school education, and in view of the disproportionately high jobless rates and poverty levels among minority groups, they will constitute an unusually high proportion of all trainees in each major program component.

The planning targets for the States for the skill shortage category will emphasize needs for training workers in the health field, occupations providing services for children, and other vocational fields as determined by needs indentified in the communities concerned.

*Changes for 1969*

| | |
|---|---|
| Mandatory changes amount to | +$115,000 |
| Program changes amount to | +$238,000 |
| Positions | +25 |

*Proposal.*—It is planned to develop and implement new and innovative polices and programs in order to provide for the expanded scope of the Manpower Development and Training Activities program. Current emphasis on assisting the disadvantaged and other special worker groups will be continued and new techniques and approaches will be developed and adopted. Additional staff resources in the National and regional offices will be added to effectively carry operational responsibilities of manpower training to provide for the increased types of programs.

*The Need.*—The requirement for increased Employment Service Staff to carry out Manpower Development and Training Activities is due to the increased effort involved and the continued emphasis on reaching the disadvantaged. In 1969, services will be provided to 275,000 trainees, of which 109,000 will be institutional, 102,700 on-the-job training, and 63,000 part-time and other. The 109,000 institutional training opportunities consists of 42,000 disadvantaged youth, 26,400 regular adult and 40,600 disadvantaged adult. The unemployed and the underemployed and their families, along with those employed at low wages and a significant number of persons who although within the normal working age group and in need of jobs, are not in the work force, account for "the poor" in this Nation. Those who fail to seek work despite a crucial need for income

[1] This figure includes the anticipated enrollment of disadvantaged workers in training to meet skill shortages.

include many mature women who are heads of families, youth and adults who have become discouraged with repeated failures in job hunting, and those in more sparsely populated areas. In round numbers the poor are estimated by the Office of Economic Opportunity at more than 32 million based on a sliding scale of cash incomes related to family size, age of family members and location. A survey of 1965 incomes indicated that nonwhite people make up a disproportionate share of the poor, 32 percent versus 12 percent of the total population. The survey revealed that the poor are disproportionately located in rural areas—39 percent compared with 30 percent of the total population. Added staff resources will be used in a variety of ways to further improve the program in fiscal year 1969. The improvement will be not only in the existing program content but also innovations and new approaches to training.

*The Program.*—In the expansion of types of programs planned for fiscal year 1969, increased emphasis will be placed on linking manpower development training with a variety of other training and work-experience programs. Implementation of such varied programs will involve the establishment of coöperative procedures, training guides, and the provision of significant technical assistance in developing and structuring new programs and projects. Program emphasis on special groups, such as residents of ghetto areas, deprived rural workers, older workers, handicapped workers, Indians, Spanish-Americans, Negroes, and other minority group members will require and will be given special assistance and attention.

The increasing inter-relationship between manpower development activities under the Manpower Development and Training Act and other training, vocational education and work experience programs projected for fiscal year 1969, will require improved information on the nature of available job opportunities by local area and occupation. The effectiveness of manpower training—in terms of improving employment opportunities for disadvantaged workers, and in meeting and alleviating local skill shortages—is contingent to a significant extent on the timeliness and validity of such information on area manpower needs and resources. Such information will also be needed to assess the manpower needs and improve the employability of close to 3 million new workers who will be entering the labor force for the first time in fiscal year 1969 (and in each of the succeeding years in the early 1970's), and the many million other workers who will be making job changes because of needs growing out of shifts in the Viet-Nam situation, the general growth in the economy, or in response to technological and other industrial changes.

This information on employment and training opportunities will be needed by specific occupation and individual local areas, since the matching of jobs and workers is done primarily in an occupational framework within an area. In view of the very substantial increases in the dimensions of these manpower development programs during the past few years, the present staff at both the national and regional office level is no longer adequate in size to provide the necessary technical assistance and guidance to the States in developing and analyzing data on current and projected occupational requirements. The expanded emphasis on assistance to the disadvantaged also necessitates a closer review of the data developed to assure that planned training activities are keyed to the characteristics of the disadvantaged workers in the area, and are responsive to changing local job market conditions, and to insure that there are reasonable prospects for employment of the trainees in the occupation for which they are trained. Four-fifths of the additional staff to be added will be stationed in the Bureau's regional offices; these added staff members will work under the direction of the United States Employment Service Regional Director, and in close cooperation with the Regional economist.

The inauguration of the Cooperative Area Manpower Planning System already has placed added responsibilities on both field and national office staff of the Employment Service for providing technical assistance and guidance in developing and reviewing proposed plans. The system will require continuing review and modification of approved plans. The complex legislative authorities and administrative procedures under which the Federal and State agencies involved in Cooperative Area Manpower Planning System operate vary widely. New or expanding and urgently needed programs have increased the necessity for concerted and cooperative action and for improved coordination of all Federally-sponsored manpower-related activities at levels of the employment service. In order to achieve more effective administration and improved coordination, additional staff are essential to the success of such programs as: the Multipurpose Neighborhood

Centers; the Concentrated Employment Program; the Model Cities Programs; the broadened scope of Manpower Development Training Act programs; the increased scope of Economic Opportunity Act programs; and the establishment of the Cooperative Area Manpower Planning System (CAMPS) which promotes further inter-agency coordination in the development of comprehensive plans of action for specified geographical jurisdictions. Present staffing resources are not adequate to conduct any broad scale studies and surveys to develop a total plan to meet the manpower needs of the Nation. Additional staff will be required to handle the planned increase of on-the-job training project activity, particularly in regard to coupled projects, and the increase in the number of national on-the-job training contracts, which require special handling and coordination.

Especially important to the effective operation of the overall program will be the implementation of new programs and techniques developed through experimental and demonstration projects. It is essential that those techniques and approaches demonstrated to be effective are adopted and put into immediate operation. Additional staff resources will be required to provide the necessary guidelines and technical assistance.

Further responsibility was placed on the Employment Service with the institution of a pilot program in 19 cities and two rural areas in the spring of 1967. The Manpower Administration is being supported in this undertaking by the Office of Economic Opportunity and the Department of Health, Education and Welfare. This is one test of the efficacy of a Concentrated Employment Program. The program serves as a testing ground to determine whether such a manpower system can be integrated with the more comprehensive systems being structured in the Model Cities Program. At the same time, the concentrated employment effort provides an excellent opportunity to integrate and operationally test the Employment Service's Human Resources Development concept in limited, controlled areas.

At the local level, the Employment Service will presumably provide the various manpower services for the Concentrated Employment Program working in close cooperation with all other operating agencies. As the major implementor of the manpower aspects of the concentrated employment effort to be included in the Model Cities, additional Employment Service staff will be required in the national and regional offices to accomplish this task.

BASE

Positions: 197. Estimated cost: $2,760,000.

ADDITIONAL COST

Positions: 25. Man-years: 22.5. Estimated cost: $238,000.

BASIS FOR THE ESTIMATE

During fiscal years 1967 and 1968, Employment Service staff have been assigned increased responsibilities in implementing the Manpower Development and Training Act. This was the direct outgrowth of the effort to find new approaches to meet manpower problems; and to provide opportunities to disadvantaged segments of the work force who previously could not qualify for training opportunities; and the increased urgency of effective coordination between program staff and that of other Federally-sponsored manpower programs. We anticipate that this trend will increase significantly in fiscal year 1969 with further development of the Cooperative Area Manpower Planning System and the greater impact of manpower programs sponsored by Housing and Urban Development, Office of Economic Opportunity or Health Education and Welfare. One such program is the Concentrated Employment Program which was initiated by the Manpower Administration of the Department of Labor and supported by other anti-poverty agencies as a pilot program in 19 cities and two rural areas in fiscal year 1967 and planned for installation in about 118 areas by fiscal year 1969.

The estimate is based on staff requirements to provide the nationwide direction to over 4,000 Manpower Development and Training Act staff in State employment service agencies. The fiscal year 1969 program design is fully described in the budget estimate for overall Manpower Development and Training Activities. It is estimated that 4,400 training project approvals, including redevelopment area training, will be granted and Bureau staff will review 8,000 training

projects. The increasing responsibility and greater involvement in programs such as Cooperative Area Manpower Planning System and Concentrated Employment Program form the basis for the estimate of increased staff discussed in the preceding section.

WORKLOAD STATISTICS

| | Actual | | Estimated | |
|---|---|---|---|---|
| | 1966 | 1967 | 1968 | 1969 |
| Development and revision of procedures, handbooks, guides, training units and manuals of procedures for State agency operations (pages) | 250 | 460 | 460 | 500 |
| Review State manuals, forms, directives, and training material for compliance with Federal laws, regulations, and procedures (pages) | 10,000 | 18,000 | 19,000 | 20,000 |
| Field assistance to States in program activities | 337 | 501 | 501 | 550 |
| Evaluation of program activities, program performance, etc | 80 | 89 | 89 | 92 |
| Instructional and training material (items printed) | 91 | 100 | 100 | 110 |
| Correspondence—Letters and memorandums relating to operations or in reply to inquiries, etc | 3,000 | 3,200 | 3,200 | 3,400 |
| Public relations items—Articles, pamphletsl etc., promoting the program | 12 | 12 | 12 | 14 |
| Training project approvals, including redevelopment area training | 3,850 | 4,400 | 4,400 | 4,400 |
| Training project reviews | 6,000 | 8,000 | 8,000 | 8,000 |
| Meetings and conferences | 44 | 52 | 52 | 54 |
| Prices of mail handled (incoming and outgoing) | 1,442,318 | 1,573,000 | 1,575,000 | 1,575,000 |
| State budget requests processed (including supplemental) | 245 | 268 | 280 | 280 |
| Analyses of program activities, reports, etc | [1] 18,618 | [1] 30,492 | [1] 30,492 | 31,500 |

[1] Workload based on new system of trainee review.

*Activity 5. Farm labor contractor registration activities*

| | |
|---|---|
| 1968 (position 14) | $240,000 |
| 1969 (position 14) | 243,000 |

NARRATIVE DESCRIPTION OF PROGRAM

This program provides for the registration and regulation of persons engaged, under certain conditions, as farm labor contractors and full-time or regular employees of such contractors. Under authority delegated to it, the Office of Farm Labor Service within the Bureau of Employment Security is responsible for all functional activities, except legal services, involved in the implementation of the Act. These responsibilities include: publicizing requirements of the Act and the Secretary's regulations (CFR 29; 40–40.1) relating thereto, and for the receiving and transmittal of applications for registration, complaints and appeals; reviewing applications and recommending the issuance, denial, revocation or suspension of certificates; and conducting necessary investigations relating to these actions.

*In 1967*, accomplishments were the registration of 2,132 contractors, an increase of 222 new registrants from the 1966 level, and investigation of 326 complaints against a projection of 350.

The cost and availability of vehicle insurance continued to act as a restraint on the number of contractors applying for certificates of registration. However, by working with insurance companies and agencies the Bureau was successful in the development of at least one new insurance policy which met the requirements of the Act. Because this policy has been made available for periods of 3, 6 or 9 months, so that a contractor who operates for less than a full year need not be burdened by the costs of an annual policy, it is much more attractive to the crew leader.

*In 1968 and 1969*, it is planned to continue the efforts made toward greater mobility of field staff.

Because of the limited staff assigned to this program, and the pressing need to bring more subject contractors within the scope of the Act, it became necessary to depart from the regional reporting procedure. Originally our field staff reported directly to the regional offices. The field staff now reports directly to the national office. Accordingly, in the last half of fiscal year 1967, a plan of greater mobility was adopted. The purpose was to move the field staff into regions and areas where

greater numbers of interstate crews could be contacted while they were in employment status. To provide for maximum coordination, the field staff was placed under the direction of the national office of the Farm Labor Service. The plan worked out very well since it resulted in the highest increase of new registrants following the initial months of the program. There were 1,910 registrations for fiscal year 1966. This number was increased by 222 in fiscal year 1967. This increase is attributed to the greater number of contacts that the field staff was able to make working directly under the national office. In this manner we have been able to contact more unregistered crew leaders while working in different States. The plan will be continued throughout 1968 and 1969.

The problem of registering crew leaders and assuring compliance with the Act is complicated by the seasonal movement of these workers. The map following shows the travel patterns followed by migratory farm crews and indicates the necessity of national direction not only in providing for insurance coverage but also to follow-up in the compliance aspects of the program.

Efforts are being made to reduce the time for processing cases against contractors who are in violation of the Act. Two to three weeks time is now consumed in processing a criminal case because it must be sent to the Solicitor's Office for review before the case is referred to the Justice Department. This time loss can be eliminated by the proposed procedure. We are attempting to develop a system which will allow our regional offices, in conjunction with the Office of the Solicitor, to work directly with the United States Attorney's Office.

*Changes for 1969*

Mandatory changes amount to ..... +$3,000
Program changes amount to ..... None

BASIS FOR THE ESTIMATE

The basis for the estimate is the potential workload in carrying out the provisions of the Act, especially the two-thirds of an estimated number of 7,500 contractors subject to the Act who have consistently avoided registration. The figure of 7,500 contractors subject to the Act is based on reports from State agencies which indicate where crew leaders are scheduled to perform work in seasonal areas as they move during the season. At the beginning of the program, studies made of the Bureau's annual worker plan, subsequently updated through field experience, indicate that this number represents the potential registration workload. To date just under one-third of this potential workload has been registered.

This is a regulatory activity and all functions are performed under the immediate direction and control of the national office, and relate to both field and headquarters functions. The staffing level for this activity is based primarily on a "hold-the-line" policy in workload performance, plus progressive annual increases in registrations, even though modest.

No functional time-reporting system is used; instead, supervisors' approximations of individual workloads and staff time consumed in their performance are accepted. Averaged for fiscal years 1966 and 1967, these appear as follows:

| | Workload per individual | Percent of individual staff time used |
|---|---|---|
| Applications handled | 162 | 60 |
| Registrations and ID cards processed | 144 | 20 |
| Complaints investigated | 25 | 20 |

WORKLOAD STATISTICS

| | Actual | | Estimated | |
|---|---|---|---|---|
| | 1966 | 1967 | 1968 | 1969 |
| Applications processed | 2,142 | 2,395 | 2,490 | 2,600 |
| Issuance of certificates of registration | 1,910 | 2,132 | 2,160 | 2,300 |
| Compliance investigations | 397 | 326 | 330 | 330 |

*Activity 6. Admission and employment in agriculture of nonimmigrant aliens*

1968 (positions 68) ..... $1,007,000
1969 (positions 68) ..... 1,031,000

NARRATIVE DESCRIPTION OF PROGRAM

This program provides for (1) implementing the Regulations (Title 20 CFR 602.10) of the Secretary of Labor governing applications for foreign workers for temporary agricultural employment in the United States; (2) developing and maintaining prevailing wage and job data in connection with the Regulations; (3) providing special recruitment assistance to State employment agencies on behalf of employers subject to the Secretary's Regulations; and (4) providing administrative support services.

The basic purpose of this Federal-State activity, and for which the Bureau has primary responsibility, is to direct and conduct intensive domestic recruitment when an employer has indicated a possible need for foreign labor. The main productive measurement of the activity is the elimination of need for foreign labor, or the extent of reduction in the certified need, without the employer suffering a loss.

*In 1967*, accomplishments were the certification of 1,929 employers for the temporary use of foreign labor, and the admission of 27,537 foreign workers in the course of the fiscal year. These figures compare with 800 employers and 37,824 admittances in fiscal year 1966. While an admittedly small portion of the reductions was occasioned by adverse weather or labor-saving devices, the greater part was the result of intensive recruitment on the part of the Federal-State teams, and by the employers themselves. The main thrust of the program is to provide domestic labor for employers and to eliminate as much as possible the reliance on foreign workers. Since the termination of the Mexican program, substantial progress toward these objectives have been achieved.

The only increase in the use of foreign labor (British West Indians) was occasioned by an exceptionally late and heavy citrus crop in Florida, resulting in 1,452 more foreign workers than in 1966. The greatest reduction was in Mexican National Labor—10,838—and was confined to California employers. There was a reduction of 174 Canadian workers, relating principally to apple and potato harvests in the New England States; the use of 727 Bahamians in 1966 was completely eliminated in 1967. The following table sets forth the number of foreign workers employed during fiscal year 1967.

A principal administrative function of the program is that of insuring employer conformity with requirements of the Secretary's Regulations relating to P.L. 414. The measurements of this activity are principally in the incidence of conformity field checks and the investigation of complaints. In fiscal year 1967, a total of 67,757 field checks were made, relating to sixteen standards incorporated in the Secretary's Regulations, to variable crop activities, and to spot checks on a sustained basis during the tenure of foreign employment. Throughout the fiscal year there was no evidence of any employer involved in this program having suffered losses due to the lack of labor.

NUMBER OF FOREIGN SEASONAL AGRICULTURAL AND WOODS WORKERS AUTHORIZED AND EMPLOYED, BY STATE, FISCAL YEAR 1967

| State | Total | |
|---|---|---|
| | Number authorized | Number employed |
| California | 6,703 | 6,652 |
| Florida | 12,336 | 11,758 |
| Connecticut | 50 | 50 |
| Maine | 4,869 | 3,880 |
| | (4,059) | (2,796) |
| Massachusetts | 315 | 297 |
| New Hampshire | 365 | 295 |
| New York | 735 | 685 |
| Rhode Island | 85 | 58 |
| Vermont | 90 | 77 |
| Virginia | 525 | 377 |
| West Virginia | 225 | 200 |
| Totals | 30,357 | 27,125 |
| | (4,059) | (2,796) |

Note: (1) Figures in parentheses relate to "woods" program; (2) of the 30,357 authorized, 27,537 were admitted, but 412 returned home or absconded, resulting in 27,125 who were employed.

NUMBER OF FOREIGN SEASONAL AGRICULTURAL AND WOODS WORKERS AUTHORIZED AND EMPLOYED, BY STATE, 1ST 6 MONTHS FISCAL YEAR 1968 (JULY–DECEMBER 1967)

| State | Total | |
|---|---|---|
| | Number authorized | Number employed |
| California | 8,100 | 6,124 |
| Florida | 9,979 | 9,015 |
| Connecticut | 100 | 91 |
| Maine | 6,941 | 5,739 |
| | (3,501) | (2,569) |
| Massachusetts | 400 | 377 |
| New Hampshire | 865 | 500 |
| | (465) | (143) |
| New York | 1,315 | 1,047 |
| | (195) | (115) |
| Rhode Island | 75 | 39 |
| Vermont | 344 | 261 |
| | (125) | (90) |
| Virginia | 979 | 665 |
| West Virginia | 336 | 329 |
| Totals | 29,434 | 24,187 |
| | (4,286) | (2,917) |

Note: Figures in parentheses relate to "woods" program.

*In 1968 and 1969*, it is planned to make the greatest use of field staff in mobilizing adequate levels of domestic labor. While the main thrust of this program is directed toward avoiding the use of non-immigrant aliens in agriculture, it is recognized that unpredictable factors of weather, crop conditions, and the sufficiency of domestic labor in any given area can upset the best of planning. At the first indication of significant shortages, staff will be moved to the areas involved to direct and engage in intensive local, intrastate and interstate recruitment. Economic assumptions in respect to each State will be carefully studied in advance for their possible impact on farm labor market conditions, and potential weak spots ear-marked. Where these spots are seen to exist, readiness plans will be shaped up, and should the shortages begin to materialize, intensive recruitment actions as outlined above will be implemented.

The preceding table shows the number of foreign workers certified and employed in the first 6 months of fiscal year 1968. This is the period of highest seasonal employment, hence certifications during the remainder of the fiscal year will be at a greatly reduced level; total for the full year is not expected to exceed 30,000 certified workers.

Should it be necessary to certify for the use of foreign labor in any area, employer conformity with all requirements of the Secretary's Regulations relating to temporary admittances under Public Law 414 will be constantly checked.

*Changes for 1969*

Mandatory changes amount to ..... +$24,000
Program changes amount to ..... None.

BASIS FOR THE ESTIMATE

Estimates of future need for foreign supplemental farm labor are difficult to develop with any great degree of reliability. The Department of Labor is, however, committed to the policy of full utilization of the domestic work force. Estimates for 1969 are predicated on the admittance of a maximum of 26,000 workers and on the necessary recruitment to provide sufficient domestic labor.

The original estimate of 30,000 foreign workers was based upon the number of workers certified for admission during the first half of fiscal 1968. Because of changes in crop conditions and the greater availability of domestic workers, the number of workers actually admitted during 1967 was about 27,000. In the first 6 months of 1968 about 24,200 workers were admitted. Given the long term trend towards reduced farm employment—seasonal workers employed dropped by about 4 percent between 1966 and 1967—an estimate of about 26,000 foreign workers to be admitted during fiscal 1969 for temporary employment in agriculture and the woods industry appears to be a reasonable one. It is certain that advances in mechanization and agricultural technology will continue to reduce the need for seasonal farm labor. As this occurs, the need for foreign labor will also decline.

WORKLOAD STATISTICS

| | Actual | | Estimated | |
|---|---|---|---|---|
| | 1966 | 1967 | 1968 | 1969 |
| Cooperating employers [1] | 4,100 | 3,991 | 4,000 | 4,000 |
| Conformity field checks | 55,000 | 67,757 | 68,000 | 67,800 |
| Investigations of alleged crop losses and/or labor shortages | 325 | 338 | 455 | 350 |
| Recommendations re need for foreign labor | 800 | 1,929 | 2,000 | 2,000 |

[1] Includes "woods" program, formerly reported by USES. Figure for 1966 represents group count, whereas 1967 (actual) and 1968 and 1969 estimates represent individual counts due to a change in procedure relating to employer associations.

*Activity 7. Admission and employment of immigrant aliens*

| | |
|---|---|
| 1968 (positions, 60) | $747,000 |
| 1969 (positions, 60) | 769,000 |

NARRATIVE DESCRIPTION OF PROGRAM

When the Immigration and Nationality Act was amended in 1965, the Department of Labor was charged with a threefold responsibility relating to the admission of aliens for employment. With respect to permanent admission, prospective immigrant workers must have prior certification from the Secretary of Labor that U.S. workers are not available and that admitting the aliens will not adversely affect similarly employed U.S. workers. Second, the Secretary is responsible for advising the Attorney General and the Secretary of State on qualifications of immigrant workers. Third, with respect to temporary admissions, by agreement with the Attorney General, the Secretary of Labor, certifies that persons capable of performing such service or labor are not available and that such employment is in accordance with employment service policies.

Applications for alien employment certification are processed either on an individual basis or through identification of the alien's occupation on a Schedule. The occupations on Schedule A, for instance, may be processed by the State Department and the Immigration and Naturalization Service without reference to the Department of Labor. Schedule B is a list of occupations for which resident workers are available and for which no alien will be certified. Applications for Schedule C occupations are processed in the national office of the Bureau of Employment Security. All other applications are presented by a prospective employer through a local office of the Employment Service.

In the course of processing the applications for alien employment, various techniques are involved. For instance, aliens seeking admission as members of the professions or as being exceptionally qualified in the arts or sciences require no job offer but their qualifications, with supporting documents attesting to education, training, and experience are evaluated and advisory opinions furnished to consular or immigration offices, when required. When an employer seeks to employ an alien on a job offer basis, the local office furnishes information as to availability of U.S. Workers and the prevailing wages for the occupation offered.

*In 1967*, accomplishments were the development and implementation of procedures necessary to process in excess of 110,000 cases per year and to conduct activities which fulfill the Department's responsibilities under the Act. These procedures and activities are:

(*a*) Making final determinations in all cases, except those involving occupations on Schedules A and B.

(*b*) Issuing guidelines and providing technical assistance to State agencies.

(*c*) Coordinating certification activity with other Federal agencies (Department of State; Justice; Health, Education, and Welfare; Interior; and Defense).

(*d*) Conducting field evaluations.

(*e*) Conducting random post-audits of determinations to insure consistency in procedure and criteria.

(*f*) Processing requests for review and reconsideration.

(g) Preparing training units and training State agency staff.

(*h*) Preparing administrative reports and conducting special studies of problems caused by admission of alien workers.

(*i*) Providing information to Congress, the executive, and the public on activity, research, policy, procedures, and individual case determination.

(*j*) Contacting labor organizations, professional organizations, elected officials, attorneys, employers, aliens, and other groups involving alien labor.

(*k*) Developing and continually evaluating content and applicability of Schedules A, B, and C in terms of changing labor supply and demand.

(*l*) Conducting studies concerning adverse effect on wages and working conditions.

(*m*) Updating previous special studies, i.e., Guam, Virgin Islands, problems and depression of wages along the Mexican border.

(*n*) Maintaining and improving reporting systems.

The 1965 amendments substantially increased the scope and intensity of the Department's responsibility concerning immigrant employment. Workload has increased a minimum of five times. Procedures have been continually reviewed, revised, and simplified to expedite processing time and to meet changes in the economy and job market. The decision-making process has been progressively decentralized and fact-finding requirements have been modified.

*In 1968 and 1969*, it is planned to—

(1) Make recommendations to Departments of Justice and State regarding entry of aliens for employment and advise on aliens' occupational qualifications.

(2) Analyze and revise Schedules for maximum effectiveness.

(3) Compile and disseminate information on occupations in which sizable numbers of aliens are approved for entry as an indicator of probable need for manpower training.

(4) Develop and utilize job market information designed to fulfill Employment Service responsibilities.

(5) Analyze the impact of alien labor by occupation, or by geographic areas, to provide indicators of needed procedural or policy changes.

(6) Annually conduct on-site evaluations of regional offices' immigration operations, post-audit a sample of their case determinations, and provide assistance and training to improve management efficiency and assure compliance with established policy, procedures, and regulations.

(7) Prepare, clear, and release instructions implementing or describing procedural and policy changes.

(8) Process and reply to requests for reconsiderations (appeals) directed to the Secretary of Labor.

(9) Respond to telephone inquiries and correspondence requesting information concerning immigration policy and program.

An economic recession or a substantial increase in unemployment would necessitate changes in processing of applications for alien employment certification, probably resulting in the majority of applicants requiring a job offer, which would have to be screened against availability of resident workers.

*Changes for 1969*

| | |
|---|---|
| Mandatory changes amount to | +$22,000 |
| Program changes amount to | None. |

BASIS FOR THE ESTIMATE

Workload estimates for fiscal year 1969 are based upon a projection of fiscal year 1967 Department of Labor permanent case determinations, as experienced, and workload activity of the State Department and Immigration and Naturalization Service.

Under present procedures, and allowing for anticipated modifications in the Schedules due to changes in the labor supply and demand which affect certifications, the national and regional offices will process 117,200 permanent and temporary cases in fiscal year 1969.

Other time consuming workload items should remain fairly steady in fiscal year 1969. It is anticipated that there will be 800 requests for reconsideration (appeals) and an estimated 4,800 permanent case determinations will be post-audited in fiscal 1969. Post-audits are a necessary function to assure compliance with policy, procedures and standards. Based on the fiscal 1967 rate, the national office alone should receive an estimated 5,100 letters and 16,200 phone call inquiries in fiscal 1969.

WORKLOAD STATISTICS

| | Actual | | Estimated | |
|---|---|---|---|---|
| | 1966 | 1967 | 1968 | 1969 |
| 1. Total case output (permanent and temporary) (national and regional offices) | [1] 27,900 | 107,111 | 113,700 | 117,200 |
| 2. Requests for reconsideration ("appeals") | 558 | 721 | 800 | 800 |
| 3. Postaudit review | [2] 430 | 5,913 | 4,500 | 4,800 |

[1] Program initiated Dec. 1, 1965.
[2] Fiscal 1966 postaudits not conducted on a continual basis. Figures represent 1 sample audit.

DISTRIBUTION OF FIELD STAFF

| | 1968 | | | 1969 | | |
|---|---|---|---|---|---|---|
| | Professional | Clerical | Total | Professional | Clerical | Total |
| Atlanta, Ga | 28 | 15 | 43 | 28 | 13 | 41 |
| Boston, Mass | 22 | 11 | 33 | 34 | 17 | 51 |
| Chambersburg, Pa | 20 | 11 | 31 | 26 | 14 | 40 |
| Chicago, Ill | 22 | 11 | 33 | 31 | 13 | 44 |
| Cleveland, Ohio | 17 | 10 | 27 | 21 | 11 | 32 |
| Dallas, Tex | 25 | 12 | 37 | 26 | 14 | 40 |
| Denver, Colo | 24 | 10 | 34 | 36 | 13 | 49 |
| Kansas City, Mo | 21 | 10 | 31 | 27 | 13 | 40 |
| New York, N.Y | 29 | 12 | 41 | 26 | 13 | 39 |
| San Francisco, Calif | 48 | 22 | 70 | 52 | 23 | 75 |
| Seattle, Wash | 19 | 9 | 28 | 23 | 10 | 33 |
| Subtotal | 275 | 133 | 408 | 330 | 154 | 484 |
| Veterans Employment Service | 77 | 52 | 129 | 77 | 52 | 129 |
| Total | 352 | 185 | 537 | 407 | 206 | 613 |

EXPLANATION OF ESTIMATE BY OBJECT

*Personnel compensation, $18,303,400*

This provides for 1,730 full-time positions or 1,599 man-years and 0.4 man-years of intermittent employment. The net increase of $2,053,700 provides for costs of within-grade promotions of $122,700; full-year costs of within-grade promotions of $121,100; one extra day of pay +$75,000; full-year costs for pay increase pursuant to Public Law 90–206 of $335,300 and $1,399,600 for program increases.

*Personnel benefits, $1,370,900*

This estimate is a net increase of $143,000 over the 1968 estimate and will provide for related personnel benefits for within-grade promotion costs of $18,200, pay increase costs of $20,700, $105,100 for program increases and less $1,000 in contributions to the Federal Employees' Compensation Fund.

| | 1968 | 1969 | Change |
|---|---|---|---|
| Employees' group life insurance | $52,700 | $59,500 | +$6,800 |
| Employees' health benefits | 95,300 | 96,000 | +700 |
| Contributions to C.S.C. retirement fund | 1,048,000 | 1,182,200 | +134,200 |
| Refunds, awards, and indemnities | 12,000 | 11,000 | −1,000 |
| Contributions under the Federal Insurance Contribution Act | 19,900 | 22,200 | +2,300 |
| Total | 1,227,900 | 1,370,900 | +143,000 |

*Travel and transportation of persons, $1,229,900*

This estimate is an increase of $83,300 over 1968 and provides for the program increase as follows:

| | 1968 | 1969 | Change |
|---|---|---|---|
| 39,175 days of travel at $16 per diem | $585,100 | $626,800 | +$41,700 |
| Mileage and transportation costs | 538,500 | 579,000 | +40,500 |
| All other transportation costs | 23,000 | 24,100 | +1,100 |
| Total | 1,146,600 | 1,229,900 | +83,300 |

*Transportation of things, $58,500*

This estimate provides for the moving of household goods, shipment of supplies, printed material and Post Office mailings and is an increase of $5,100 over 1968.

*Rent, communications, and utilities, $564,500*

This estimate, which is an increase of $98,700 over 1968, provides for communications and rental of office space as follows:

| | 1968 | 1969 | Change |
|---|---|---|---|
| Rents | $188,100 | $263,600 | +$75,500 |
| Paid official mail | 48,600 | 49,000 | +400 |
| Communication services, including telephone calls, GSA telecommunications, teletype and telegrams | 66,000 | 70,700 | +4,700 |
| Federal telecommunications system | 85,000 | 85,000 | ---------- |
| Working capital fund | 78,100 | 96,200 | +18,100 |
| Total | 465,800 | 564,500 | +98,700 |

*Printing and reproduction, $377,700*

This estimate reflects a decrease of $4,600 over 1968 and provides for the printing of forms, publications and schedules as follows:

| | 1968 | 1969 | Change |
|---|---|---|---|
| Publications: | | | |
| Employment Security Review | $50,400 | $50,400 | ---------- |
| Unemployment Insurance Review | 23,000 | 23,000 | ---------- |
| Benefit Series | 11,000 | 11,000 | ---------- |
| Farm Labor Developments | 8,000 | 8,000 | ---------- |
| Occupational Outlook Handbook | 10,000 | 10,000 | ---------- |
| Forms and schedules | 114,600 | 106,600 | −$8,000 |
| Reproduction services | 39,800 | 35,700 | −4,100 |
| Working capital fund | 125,500 | 133,000 | +7,500 |
| Total | 382,300 | 377,700 | −4,600 |

*Other services, $1,741,800*

This estimate is an increase of $151,000 over the 1968 estimate and provides for the following:

| | 1968 | 1969 | Change |
|---|---|---|---|
| Television and radio spot announcements | $5,000 | $5,000 | ---------- |
| Moving, maintenance, repairs | 40,400 | 51,400 | +$11,000 |
| Visual exhibit services | 10,900 | 11,300 | +400 |
| Health room services | 11,000 | 12,000 | +1,000 |
| Repairs to office machines equipment | 16,500 | 24,900 | +8,400 |
| Security investigations (10 investigations at $415 per) | 4,200 | 4,200 | ---------- |
| Working capital fund | 706,500 | 803,000 | +96,500 |
| Services of other agencies: | | | |
| FBI fingerprint identification cards | 56,300 | 90,000 | +33,700 |
| State merit system | 142,000 | 142,000 | ---------- |
| Machine tabulations | 13,400 | 13,400 | ---------- |
| Automatic data processing | 252,000 | 252,000 | ---------- |
| Contractual services | 110,000 | 110,000 | ---------- |
| Bureau of Census | 222,600 | 222,600 | ---------- |
| Total | 1,590,800 | 1,741,800 | +151,000 |

*Supplies and materials, $133,600*

This estimate is an increase of $19,700 over 1968 and provides for:

| | 1968 | 1969 | Change |
|---|---|---|---|
| Desk top and duplicating supplies | $30,600 | $35,100 | +$4,500 |
| Working capital fund | 83,300 | 98,500 | +15,200 |
| Total | 113,900 | 133,600 | +19,700 |

*Equipment, $92,700*

This estimate is a net increase of $23,100 from 1968 and provides for:

| | 1968 | 1969 | Change |
|---|---|---|---|
| Equipment for new positions | $8,700 | $31,500 | +$22,800 |
| Replacement of worn-out equipment | 60,900 | 61,200 | +300 |
| Total | 69,600 | 92,700 | +23,100 |

*Grants subsidies and contributions, $100,000*

This estimate remains the same as in 1968.

SUMMARY OF NEW POSITIONS

| | Number | Grade | Amount |
|---|---|---|---|
| ACTIVITY 1—UNEMPLOYMENT INSURANCE SERVICE | | | |
| Departmental: | | | |
| Social administration specialist | 1 | GS–15 | $18,404 |
| Supervisory social administration specialist | 1 | GS–14 | 15,841 |
| Social administration specialist | 1 | GS–13 | 13,507 |
| Do | 1 | GS–12 | 11,461 |
| Secretary | 1 | GS–6 | 6,137 |
| Do | 1 | GS–5 | 5,565 |
| Total | 6 | | 70,915 |
| Field offices: | | | |
| Administrative officer | 3 | GS–13 | 40,521 |
| Social administration specialist | 11 | GS–13 | 148,577 |
| Secretary | 1 | GS–5 | 5,565 |
| Clerk-stenographer | 5 | GS–4 | 24,975 |
| Total | 20 | | 219,638 |
| ACTIVITY 2—U.S. EMPLOYMENT SERVICE | | | |
| Departmental: | | | |
| Employment service adviser | 1 | GS–15 | 18,404 |
| Do | 2 | GS–14 | 31,682 |
| Do | 6 | GS–13 | 81,042 |
| Secretary | 1 | GS–6 | 6,137 |
| Do | 2 | GS–5 | 11,130 |
| Total | 12 | | 148,395 |
| Field offices: | | | |
| Administrative officer | 4 | GS–13 | 54,028 |
| Employment service adviser | 11 | GS–13 | 148,577 |
| Do | 11 | GS–12 | 126,071 |
| Clerk-stenographer | 10 | GS–4 | 49,950 |
| Total | 36 | | 378,626 |

SUMMARY OF NEW POSITIONS—Continued

| | Number | Grade | Amount |
|---|---|---|---|
| ACTIVITY 3—ADMINISTRATION AND MANAGEMENT SERVICE | | | |
| Departmental: | | | |
| Administrative officer | 1 | GS–13 | 13,507 |
| Systems accountant | 2 | GS–13 | 27,014 |
| Administrative officer | 2 | GS–12 | 22,922 |
| Computer programer | 2 | GS–12 | 22,922 |
| Systems accountant | 2 | GS–12 | 22,922 |
| Computer programer | 1 | GS–11 | 9,657 |
| Systems accountant | 1 | GS–11 | 9,657 |
| Secretary | 3 | GS–5 | 16,695 |
| Total | 14 | | 145,296 |
| Office of the Administrator: | | | |
| Office Director | 1 | GS–15 | 18,404 |
| Division Director | 3 | GS–14 | 47,523 |
| Digital computer analyst | 11 | GS–13 | 148,577 |
| Do | 7 | GS–12 | 80,227 |
| Do | 6 | GS–11 | 57,942 |
| Secretary | 1 | GS–6 | 6,137 |
| Do | 3 | GS–5 | 16,695 |
| Total | 32 | | 375,505 |
| ACTIVITY 4—MANPOWER DEVELOPMENT TRAINING ACTIVITIES | | | |
| Departmental: | | | |
| Employment service adviser | 1 | GS–13 | 13,507 |
| Manpower development analyst trainee | 1 | GS–9 | 8,054 |
| Manpower development specialist trainee | 1 | GS–9 | 8,054 |
| Clerk-stenographer | 2 | GS–4 | 9,990 |
| Total | 5 | | 39,605 |
| Field offices: | | | |
| Manpower development specialist | 15 | GS–11 | 144,855 |
| Clerk-stenographer | 5 | GS–4 | 24,975 |
| Total | 20 | | 169,830 |
| Grand total | 145 | | 1,547,810 |

PREPARED STATEMENT

Mr. Goodwin. The next appropriation is our salaries and expenses item, Mr. Chairman.

Again, I would like to submit the formal statement in the record.

(The statement follows:)

The fiscal year 1969 estimate for operation of the Bureau of Employment Security is $23,973,000. This is an increase of $2,573,000 over the adjusted appropriation for fiscal 1968. This increase will provide $715,000 for mandatory items, $34,000 for a financing change, and program increases totaling $1,824,000.

Mandatory items include within-grade increases for base staff, pay increases to put the added costs resulting from P.L. 90–206 on a full year basis and an extra work day in 1969, offset by a small reduction in the Bureau's payment to the Federal Employees Compensation Fund. The financing change relates to increased charges for centralized services.

Two of the program increases are required to put fiscal year 1968 supplementals now pending on a full year basis. The Bureau will require $74,000 and $12,000 for the Exemplary Rehabilitation and expanded Veteran's program respectively. We are also requesting an increase of 25 positions and $238,000 to expand our

manpower development and training activities. The remaining program increase, 120 positions and $1,500,000, provides for the coordination and direction of comprehensive management improvements throughout the employment security system. In general, these efforts will result in the establishment of an automated reporting system, the installation of plans of service geared to the needs of local communities, the implementation of a cost accounting system in a number of States, and the further development of the application of automatic data processing technology to employment security operations.

All these efforts will result in a more efficient and effective employment security system to better serve the Nation's workers and employers. The plans of service to be developed at the local and State level will contain evaluations of manpower needs, proposals of actions to be taken, and a program for the greatest level of accomplishment to be achieved with available resources. An automated management information system will provide the information necessary for decision making at all levels of the employment security system on a more timely and consistent basis. It will enable program managers to assess all aspects of administration and management, program achievement, and resource utilization and to take timely action to assure that resources are used most effectively. Compatible systems of financial management and reporting of planned utilization and actual expenditure of funds will insure proper accountability and management. The system being developed will incorporate the ability to accumulate the cost data necessary to identify elements of cost with specific program objectives and evaluate the cost-benefit relationship of employment security programs. In general, the system will provide the basis for both effective planning and control by providing the means to project anticipated activities by appropriation, organizational unit, activity, and program, coupled with quantitative and qualitative controls to compare actual results to planned objectives.

Mr. Chairman, my statement in support of the estimate for Grants to States and the budget estimate itself describe in detail the planned implementation of the recommendations and results of the studies undertaken to improve the management of the employment security system. I will not repeat that information here but I should point out its relevance to the work program and resource needs of the Bureau.

Perhaps the best way to begin is with the observation that a considerable amount of Bureau effort is required before State employment security agencies become heavily involved in many new programs, and additional effort by the Bureau is usually required to assure the active and effective participation of all State agencies in program execution. In total we are requesting 120 new positions, of which 78 will be devoted to management improvement, 36 to direct automation programs, and 6 to coordinate the installation of a cost accounting system.

To apply these observations to the variety of recommendations made in the Cresap, McCormick and Paget study is a logical way to justify the 78 additional positions requested for management improvement efforts in the Bureau.

You may recall that the recommendations of the management consulting firm proposed new methods of program planning, with drastically different methods of evaluation, supported by a greatly modified management information reporting system. The implementation of these recommendations has required a considerable amount of developmental work to be done in the Bureau, which had to be accomplished at the expense of activities which could be postponed temporarily. The developmental work produced the concepts for plans of service, rough techniques and tools for evaluation programs, and an overview of the kind of management information system which was needed. While this preliminary work is necessary and useful, it should be realized that the products resulting were imperfect. Concentrated effort will be required to refine and test techniques and tools in joint efforts with State employment security agencies. When these have been made as sound as possible, they have to be introduced and installed in every State. This requires training of regional office, as well as national office staff members. And, the installation of the programs must be followed up to assure that procedures are operating as planned, with the results desired.

In the several projects involving the automation of employment security operations, the Bureau must take a leadership role. That role requires Bureau staff to maintain continuous liaison with the consulting firm, with the Federal agencies having an interest in the overall project, with the State employment security agencies and particularly with the State agencies serving as models and participating in special developmental efforts. Staff is needed to meet the requests of

State agencies for technical assistance in conduct of feasibility studies for site planning, equipment selection, conversion procedures, and the like. Still undetermined are the most efficient applications of electronic technology to current operations, although great strides have been made in identifying operations where automation will effect economies. Still undone is the difficult job of preparing standards, selecting data elements, defining and coding elements, and constructing a common vocabulary.

For the essential work by the Bureau in the automation programs described in the State grants request, 36 additional positions are needed.

Finally, mention was made in my discussion of the Grants to States estimate of the conditions which resulted in the Department's award of a contract for the design of an accounting system which meets the requirements of the Budget and Accounting Procedures Act of 1950 and the criteria of the Comptroller General. As I indicated, the contractor's work is finished when he has designed the system and has it installed in three model States. At that point it becomes the Bureau's responsibility to take the system into the remaining 55 affiliated agencies, and assure that it is set up and made operative. This responsibility involves the adaptation of the system designed by the contractor to meet any special or unusual requirements of State governments, while maintaining uniformity required to preserve comparability of cost products. In addition, State agency staff must be trained in the mechanics of the system; the operation of the system must be monitored; and the system must be maintained and refined as experience dictates.

The Bureau does not have this kind of an accounting program at the present time, nor does it have the technical staff required to introduce the system into the States and monitor its operation. Therefore, 6 additional positions are requested for the Bureau's supportive effort to the cost accounting project.

Mr. Chairman, I have described to you the planned use of the increased resources requested in the budget estimate. Please rest assured that the Bureau will continue to bend every effort to give imaginative leadership and overall direction to the States in meeting the manpower needs of the Nation.

The major thrust of the Unemployment Insurance Service is to provide economic stability in times of unemployment. The redirection of staff effort begun in fiscal 1967 will be maintained toward the objective of modernizing the system, to find ways to accelerate the claimant's return to gainful employment, and to provide national guidelines and coordinated approaches to the problems of contested claims, research, organizational patterns, etc.

The Nation has come to recognize the need for an active manpower policy. The basic elements of such a policy have been defined and a variety of approaches are rapidly being developed. Within the past four years the Congress has given increasing recognition to the problems of human resource development and has enacted legislation in which there are specific provisions relating to the complex of these problems. In each of these the implementation directly involves the United States Employment Service and it serves as the overall manpower agency to provide leadership, direction and coordination of the operations of public employment service offices. This includes developing policies, procedures, tools and techniques, and guidelines to the States and local offices to carry out the programs of employability development, employer relations and placement, manpower and employment information, and administrative and technical support. These programs entail an efficient job placement service, counseling and testing services to assist workers and employers, intensive services to youth, disadvantaged jobseekers, older workers, handicapped, minority groups and services to smaller communities.

In the agricultural sector, the Bureau's Farm Labor Service will concentrate its main effort on our objective of "self-sufficiency" in meeting seasonal labor needs. This work involves numerous program evaluations in different locations, all with the purpose of improving services to the agricultural public. Even though the year was plagued with the effects of adverse weather conditions in the spring months, fiscal year 1967 was a successful year by all measurements. No crops were reported lost because of insufficient labor, and 10,000 fewer foreign workers were admitted to work on the crops. Additionally, the Bureau's farm staff will continue to expand its program of helping improve worker-employer relationships in fiscal 1969 through foreman training and worker pre-job orientation. This program is meeting with a gratifying response from farm management.

In respect to rural manpower programs, in July 1967, a task force was appointed to make a comprehensive analysis of manpower problems in rural areas, and examine present programs of the Department of Labor's Bureau of Employment Security which serve rural manpower needs. On December 19, 1967, the Secretary of Labor directed the consolidation of Employment Service and Farm Labor Service activities within the Bureau of Employment Security. The report of the task force has been accepted as the basis for implementing the Secretary's decision. A special work group has been established to work out the details for carrying out both the task force recommendations and the Secretary's decision. Our objective is so to organize our resources as to provide the most effective manpower services possible to the rural areas of our Nation. We expect these actions to broaden the opportunity for full employment in both farm and nonfarm work in rural areas. No additional resources are being requested at this time for this expanded rural manpower program.

Fiscal year 1969 will be a year of innovation in improving the basic services provided by the employment security system. Improvements in management will be coupled with a variety of new approaches to continuing problems.

Mr. Chairman, this concludes my statement on the estimate for Bureau of Employment Security, Salaries and Expenses. Mr. Omohundro, Chief of the Veterans Employment Service is here and will be glad to make a statement if the Committee wishes.

### 1968 APPROPRIATION AND 1969 BUDGET REQUEST

Mr. Goodwin. The fiscal year 1969 estimate for operation of the Bureau of Employment Security is $23,973,000. This is an increase of $2,573,000 over the adjusted appropriation for fiscal 1968.

This increase will provide $715,000 for mandatory items, $34,000 for a financing change, and program increases totaling $1,824,000.

The mandatory items include within-grade increases for base staff, pay increases to put the added cost resulting from Public Law 90–206 on a full-year basis, and an extra workday in fiscal year 1969, offset by a small reduction in the Bureau's payment to the Federal employees compensation fund.

Two of the program increases are required to put fiscal year 1968 supplementals now pending on a full-year basis.

The Bureau requires $74,000 and $12,000 for the exemplary rehabilitation and expanded veterans' programs, respectively.

We are also requesting an increase of 25 positions and $238,000 to expand our manpower development and training activity.

The remaining program increase, 120 positions and $1,500,000, provides for the coordination and direction of comprehensive management improvements throughout the employment security system.

In general, these efforts will result in the establishment of an automated reporting system, the installation of plans of service geared to the needs of local communities, and implementation of a cost accounting system in a number of States and the further development of the application of automatic data processing technology to employment security operations.

Mr. Chairman, my statement in support of the estimate of grants to States went into considerable detail about the need for this particular item and I will not go into detail here.

### PERSONNEL REQUESTS

In total we are requesting 120 new positions of which 78 will be devoted to management improvement, 36 to the automation of employment security programs, and six to coordinate the installation of a cost accounting system.

In implementing the several studies involving the improvement of employment security operations, the Bureau must take a leadership role. That role requires Bureau staff to maintain continuous liaison with the consulting firms, with the Federal agencies that have an interest in the program, with the State employment security agencies, and particularly with the State agencies serving as models and participating in special developmental efforts.

The staff is needed to meet the request of State agencies for technical assistance in conduct of feasibility studies, for site planning, equipment selection, conversion procedures and the like.

### AUTOMATION

Still undetermined are the most efficient applications of electronic technology to current operations, although great strides have been made in identifying operations where automation will effect economies.

Still undone is the difficult job of preparing standards, selecting data elements, defining and coding elements, and constructing a common vocabularly.

The cost accounting contractor's work is finished when he has designed the system and has it installed in three model States.

At that point, it becomes the Bureau's responsibility to take the system into the remaining 55 affiliated agencies and assure that it is set up and made operative.

The responsibility involves the adaptation of the system designed by the contractor to meet any special or unusual requirement of State governments, while maintaining uniformity required to preserve comparability of the system throughout the country.

In addition, the State agency staff must be trained and a good deal of effort will be required for that purpose.

This, Mr. Chairman, concludes my statement on salaries and expenses.

## Veterans Employment Service

### STATEMENT BY EDWARD L. OMOHUNDRO, CHIEF

Mr. Goodwin. The Veterans' Employment Service is part of this appropriation. Mr. Omohundro, Chief of the Service, is here. If you wish to hear from him, he will be glad to discuss the veterans' program.

Senator Hill. Does he have a prepared statement?

Mr. Goodwin. Yes. We can submit that for the record.

Senator Hill. We will have that appear at this point in the record.

(The statement follows:)

I am very glad to have the opportunity of appearing before this Committee again. As you may know, the Veterans' Readjustment Benefits Act of 1966, as amended, has had a great effect on the veteran workload of the local public employment offices. The public employment service is making every effort to continue to provide the mandated "maximum of job opportunity in the field of gainful employment".

During fiscal year 1967, 1,762,900 veterans applied for employment assistance at the local public employment offices. This is a 50% increase over the previous year. These veterans were placed in 1,182,200 jobs. Some 157,000 of them needed and received extensive employment counseling concerning such important matters as choice of an occupation, need for job training, and applicability of military skills to civilian occupations. All of these figures represent substantial increases over the previous year.

In addition to referral to jobs, the local offices also refer veterans to job training courses established under the Manpower Development and Training Act. During the period September 1, 1962 (when the Manpower Development and Training Act program began) through October 31, 1967, 117,900 veterans have received classroom training. Veterans represent a third of all, the men enrolled. While their former occupations usually are those for which there is little demand, veterans completing this training have been prepared for short-supply occupations.

The Veterans Employment Service and the State employment service provide specialized assistance to career military retirees. These men have served their country on active military duty at least 20 years. Their average age is 45 years. Employers report that military retirees become valuable employees in civilian jobs. However, many of the approximately 60,000 career military retirees who re-enter civilian life each year need assistance to make a smooth transition to civilian employment. The employment service military retiree program consists of employment briefings on the military installations, followed by individualized assistance in the local public employment offices. In 1967, there were 489 of these employment briefings, held on 300 military installations. The briefings were attended by 29,750 career military men scheduled for separation.

During 1967, more than 600,000 young post-Korean Conflict veterans returned to civilian life. An estimated 830,000 service personnel will become veterans in 1968. On August 14, 1967, the President announced a new program of personalized employment assistance for all returning veterans. Between the President's announcement on August 14, 1967, and January 12, 1968, more than 225,000 recently separated veterans were contacted through this program.

In addition to services provided by the State employment service, about 10,500 veterans visited our State Veterans Employment Representatives, who comprise the field staff of the Veterans Employment Service, to seek employment and related assistance.

The Veterans Employment Service field staff also made about 35,000 contacts with employers, veterans organizations and other agencies to promote employment and job training of veterans. In addition, they made 4,388 local office visits and 1,383 formal evaluations of services to veterans in the local public employment offices.

There currently are about 25.8 million veterans in the population of the United States, approximately 4.5 million of whom are post-Korean Conflict veterans. Veterans, members of their families and surviving dependents make up a total of some 92.3 million individuals.

Mr. Chairman, I am pleased to report again that the American Legion, American Veterans of World War II and Korea, the Disabled American Veterans, the Veterans of Foreign Wars, Jewish War Veterans and other veterans' organizations have expressed their confidence in, and appreciation for, the work of the Veterans Employment Service, the Bureau of Employment Security, and the State employment service agencies by passing resolutions at their last National conventions, endorsing the principle of preferential employment assistance for veterans and urging that the appropriate units of the State employment service and the Department of Labor be adequately staffed for this purpose.

Mr. Chairman, this concludes my statement on the estimate for the Veterans Employment Service.

## Revolving Fund for Advances to Employment Security Administration Account, Unemployment Trust Fund

STATEMENT OF ROBERT C. GOODWIN, ADMINISTRATOR
ACCOMPANIED BY:
W. R. CURTIS, DEPUTY ADMINISTRATOR
THERON J. WILLIAMS, EXECUTIVE ASSISTANT
CHARLES E. ODELL, DIRECTOR, U.S. EMPLOYMENT SERVICE
FOREST L. MILLER, DIRECTOR, UNEMPLOYMENT INSURANCE SERVICE
JACK S. DONNACHIE, DEPUTY DIRECTOR, OFFICE OF FARM LABOR SERVICE
EDWARD L. OMOHUNDRO, CHIEF, VETERANS EMPLOYMENT SERVICE
PHILIP T. LAWLOR, DIRECTOR, OFFICE OF BUDGET ORGANIZATION AND MANAGEMENT
MICHAEL J. NASTICK, CHIEF, DIVISION OF APPROPRIATIONS AND FEDERAL FISCAL ACTIVITIES
STANLEY H. RUTTENBERG, ASSISTANT SECRETARY FOR MANPOWER
RICHARD E. MILLER, DIRECTOR, OFFICE OF PROGRAM AND BUDGET REVIEW

### Appropriation Estimate

"Revolving Fund for Advances to Employment Security Administration Account, Unemployment Trust Fund

*"For an additional amount for capital for the 'Revolving fund for advances to the Employment Security Administration Account,' as authorized by law (42 U.S., 1101(e)(1)), $43,000,000."*

*Summary of changes*

| | |
|---|---|
| 1968 appropriation | ---------- |
| 1969 estimate | $43,000,000 |
| Appropriation, required | 43,000,000 |
| Mandatory Items: | |
| Increase: To provide additional capital funds for the revolving fund to make repayable advances to the Employment Security administration account in the unemployment trust fund until Federal tax receipts are realized in February | +43,000,000 |
| Total increase | +43,000,000 |

### Narrative Justification

Pursuant to the Employment Security Administration Act of 1960 (P.L. 86-778), money is advanced each year to the Employment Security Administration Account in the Unemployment Trust Fund to finance the Bureau of Employment Security appropriation until tax receipts are realized in February of the fiscal year. For the first seven months of the fiscal year the Bureau operates on funds borrowed from the Revolving Fund created for this purpose.

During 1967, $278,742,000 was advanced to the Employment Security Account and was repaid along with $3,545,000 in interest. The actual balance in the fund, including accumulated interest, at the end of fiscal year 1967 was $308,641,000. Adding the estimated interest for 1968 of $3,900,000 brings the amount available for use in fiscal year 1969 to $312,541,000. The anticipated requirement for fiscal year 1969 is $380,106,000, which exceeds the amount available by $67,565,000. It is proposed to realize the additional money from two sources: (1) $43,000,000 in new financing from an appropriation of general funds, and (2) $24,565,000 from an advance of excess 1968 Federal Unemployment Tax Act collections for use in fiscal year 1969, as provided in the appropriation language. This additional money is needed for the continued operation of the employment security program until collections for fiscal year 1969 are realized in February.

The process of advancing money for use in a future year was used in fiscal year 1968 when it was estimated in June of 1967, that the proposed supplemental appropriation for 1968 would cause the estimated amount needed from the Revolving Fund to exceed the amount available. To solve this problem $23,772,000 was advanced from fiscal year 1967 excess collections. At the end of 1967 this money would have reverted to the Federal Unemployment Account (State Loan Fund). The authority for this action is contained in the following language from the Grants-to-States appropriation:

Grants to States, next succeeding fiscal year: For making after May 31 of the current fiscal year, payments to States under title III of the Social Security Act, as amended, and under the Act of June 6, 1933, as amended, for the first quarter of the next succeeding fiscal year, such sums as may be necessary, the obligations incurred and the expenditures made thereunder for payments under such title and under such Act of June 6, 1933, to be charged to the appropriation therefor for that fiscal year: provided, That the payments made pursuant to this paragraph shall not exceed the amount obligated by the United States for such purposes for the fourth quarter of the current fiscal year.

The use of an advance only temporarily postpones the reversion of excess tax collections into the State Loan Account; it does not mean the money is permanently lost to the Loan Account. The money will revert in a future year when an advance is not necessary. For example, the $23,772,000 advanced from 1967 excess collections for use in 1968 reduced the amount of money needed from 1968 collections for the 1968 Bureau of Employment Security appropriations, since the advance will be applied to these appropriations. Thus, if no advance were needed for 1969, the $23,772,000 would be excess in 1968 and would revert to the State Loan Fund at the end of fiscal year 1968.

Since there will be an excess in collections of at least the $23,772,000 that already has been advanced, only $793,000 will actually be needed out of 1968 excess collections for the advance to 1969.

With the exception of its first two years of operation (1961 and 1962), during which amounts of $18,000,000 and $20,000,000 were appropriated as additions to the original $250,000,000 appropriation, the Fund has had an amount adequate to cover needs. The table below shows, for every year of the Funds operation, the amount available for borrowing and the actual amount borrowed. The table also shows how the rapid expansion of the Employment Security program has increased the need for funds from the Revolving Fund at a far greater rate than the amounts available for use from the fund have been increased by the addition of interest. For example, in the period from 1963 to 1969 the amount available has increased by $18,125,000 (6.2 percent), while in the same period, requirements have increased by $206,606,000 (119.1 percent) from $173,500,000 to $380,106,000.

THE EMPLOYMENT SECURITY REVOLVING FUND, 1961–69

[In thousands]

| Year | Amount available | Actual amount advanced to ESA account | Additional appropriation required |
|---|---|---|---|
| 1961 | $268,000 | [1] $301,500 | $18,000 |
| 1962 | 290,992 | [1] 320,312 | 20,000 |
| 1963 | 294,416 | 173,500 | ---------- |
| 1964 | 297,719 | 239,705 | ---------- |
| 1965 | 300,653 | 194,968 | ---------- |
| 1966 | 302,879 | 210,245 | ---------- |
| 1967 | 305,096 | 278,742 | ---------- |
| 1968 | [2] 308,641 | ---------- | ---------- |
| 1969 | [2] 312,541 | ---------- | 43,000 |

[1] The amounts advanced to the Employment Security Administration account from the revolving fund exceeded the amounts available for fiscal years 1961 and 1962 by $33,500,000 and $29,320,000, respectively. This was made possible by loans from the general fund. These loans were repaid out of tax receipts from subsequent years.
[2] Estimated.

BASIS FOR THE ESTIMATE

The estimated need for an advance from the revolving fund is based on requirements for the operation of the employment security program for seven months of the fiscal year (58.3 percent of the total annual requirement). For fiscal year 1969 this estimate by use of funds is as follows:

| | Full-year need | 7-month need |
|---|---|---|
| Salaries and expenses | $20,947,000 | $12,212,000 |
| Grants to States | 616,573,000 | 359,462,000 |
| Interest on advances | 4,000,000 | 2,332 000 |
| Treasury, Office of the Solicitor, Office of the Secretary, Office of Federal Contract Compliance | 10,462,000 | 6,100,000 |
| Total | 651,982,000 | 380,106,000 |

PREPARED STATEMENT

Mr. Goodwin. I have one final brief item, Mr. Chairman, and that has to do with the revolving fund.

Senator Hill. All right, sir.

(The statement follows:)

This estimate provides $43,000,000 to be appropriated from the general fund of the Treasury to the revolving fund established by the Employment Security Act of 1960. This fund makes repayable advances to the Employment Security Administration Account in the Unemployment Trust Fund. The purpose of the revolving fund is to finance the Federal and State administrative costs of the employment security programs on a repayable basis from the beginning of the fiscal year until the Federal Unemployment tax receipts become available in February of the same fiscal year. Thus, for the first seven months of the year the programs will be operating on funds borrowed from the revolving fund and will repay the fund in February along with interest.

This appropriation is a financing device and does not represent any additional monies to be granted to the States or otherwise expended for administration of the employment security program. It is, however, necessary to provide for continuance of the program until fiscal year 1969 tax collections are realized in February of 1969.

With the exception of its first two years of operation the revolving fund has had a balance adequate to cover needs. Our anticipated net requirements for the first seven months of fiscal year 1969 total $355,541,000. The actual balance in the fund, including interest, at the end of fiscal year 1967, was $308,641,000. Adding the estimated interest accrual of $3,900,000 in 1968 makes $312,541,000 available for 1969. The remaining $43,000,000 is requested for appropriation.

Mr. Chairman, this concludes my statement on the estimate for Revolving Fund for Advances to Employment Security Administration Account, Unemployment Trust Fund.

GENERAL FUND

Mr. Goodwin. Mr. Chairman and members of the committee, this estimate provides $43 million to be appropriated from the general fund of the Treasury to the revolving fund established by the Employment Security Act of 1960.

This fund makes repayable advances to the Employment Security Administration account in the unemployment trust fund.

The purpose of the revolving fund is to finance the Federal and State administrative costs of the employment security programs on a repayable basis from the beginning of the fiscal year until the Federal unemployment tax receipts become available in February of the same fiscal year.

REPAYMENT WITH INTEREST

Thus, for the first 7 months of the year the program will be operating on funds borrowed from the revolving fund and will repay the fund in February along with interest.

Senator Hill. Will pay it back with interest?

Mr. Goodwin. Yes, sir.

This appropriation is a financing device and it does not represent any additional money to be granted to the States or otherwise expended for administration of the employment security program.

It is, however, necessary to provide for continuance of the program until the fiscal year 1969 tax collections are realized in February of 1969.

BUDGET REQUEST

With the exception of its first 2 years of operation, the revolving fund has had a balance adequate to cover needs. Our anticipated net requirements for the first 7 months of fiscal year 1969 total $355,541,000.

The actual balance in the fund, including interest, at the end of fiscal year 1967 was $308,641,000.

Adding the estimated interest accrual of $3,900,000 in 1968 makes $312,541,000 available for 1969.

The remaining $43 million is requested for appropriation.

Mr. Chairman, this concludes my statement on the estimate for the revolving fund for advances to the Employment Security Administration account, unemployment trust fund.

Senator Hill. Is there anything you gentleman would like to add?

Mr. Aller. No, Mr. Chairman.

EXPRESSIONS OF APPRECIATION TO SENATOR HILL

Mr. Ruttenberg. I would like to add one word on behalf of my colleagues and myself and the Department.

It has been a great pleasure to be able to work with you as chairman to this committee over the many years. We regret your decision to retire from the Senate.

Senator HILL. Thank you, sir.

Mr. RUTTENBERG. We will miss you.

Senator HILL. I deeply appreciate your very kind and generous words.

Mr. MURPHY. I join my colleague, Mr. Chairman, and say you are one of the most courteous chairman of any committee I have ever encountered.

Senator HILL. I certainly appreciate it.

Mr. GOODWIN. I certainly want to add my words to this, too, Mr. Chairman. I have been coming before your committee for a good many years.

Senator HILL. You have been coming a long time.

Mr. GOODWIN. Longer than these young fellows.

Senator HILL. How long have you been in this position, Mr. Goodwin?

Mr. GOODWIN. Titles change a little but it has been essentially the same job for the last 22 years, something like that.

Senator HILL. Gentlemen, we thank you very, very much.

Mr. RUTTENBURG. Thank you, Mr. Chairman.

## President's Committee on Employment of the Handicapped

**STATEMENT OF HAROLD RUSSELL, CHAIRMAN**
**ACCOMPANIED BY:**
**WILLIAM P. McCAHILL, EXECUTIVE SECRETARY**
**BERNARD POSNER, DEPUTY EXECUTIVE SECRETARY**
**RICHARD E. MILLER, DIRECTOR, OFFICE OF PROGRAM AND BUDGET REVIEW**

PREPARED STATEMENT

Senator Hill. Mr. Russell, I understand you have a very urgent engagement to be in Boston. We will hear you now.

Mr. Russell. Senator, we appreciate this opportunity to appear at this moment and the opportunity of appearing before this committee.

I have quite a lengthy statement which I will submit for the record, if I may, but I have a short summary I would like to give.

Senator Hill. Proceed in your own way.

(The statement follows:)

I appreciate your invitation to appear before you today.

The President's Committee has built up a great record of achievement over the years. It has made many contributions in breaking down barriers against employment of physically and mentally handicapped citizens. However, I have no intention of reciting past history to you. You are fully aware of it. You have supported us generously year after year. You have always displayed a deep understanding of what we do. We shall always be grateful for your support and your confidence.

What I want to do today is suggest that at the present time the President's Committee plays a somewhat different and more crucial role in America than it has in past years.

This present-day role is one that merits your continued full support.

In these times of national concern with the disadvantaged of society, we must not forget that the poor have far more than their just share of the physically and mentally handicapped. Someone has estimated that there are three times more handicapped persons among the disadvantaged than among the rest of the American population.

As we promote jobs for the handicapped, we make certain that we do not overlook the disadvantaged handicapped, with the multiplicity of problems they face. We realize how important proper training and proper attitudes are in today's job market—and so we try to motivate the handicapped themselves to prepare for jobs and to adopt a healthy attitude toward jobs. For example, we recently published a booklet on how to get a job, written for the mentally retarded themselves. The advice in the booklet is sound; and now we find it is in great demand in secondary schools in the slums of our cities—a "bonus benefit."

As you so well know, even though there is poverty, there also is great national affluence. There are job shortages in many categories. "Help Wanted" signs are on the doorways of many employment offices. The times are ripe, we believe, to promote jobs for seriously handicapped men and women who, in a loose job market, would not have much of a chance of finding jobs. If a person offers the right skills and the right attitudes, he should not have too much difficulty finding an opening—handicapped though he may be.

Therefore, the President's Committee has offered to join forces with the nation's voluntary health agencies, to engage in joint promotional efforts in behalf of the more seriously handicapped among us—epileptics, the cerebral

palsied, those with multiple sclerosis and muscular dystrophy, the blind, the deaf, all the others with severe disabilities. I include, of course, those seriously disabled veterans coming back in greater numbers from the war in Viet Nam.

These people—with the proper training and motivation—can become a valuable manpower resource in the America of the Sixties and Seventies and, hopefully, beyond. They deserve our intensive promotional efforts.

I have given you some of our major thrusts for the years ahead because I feel you would be interested in knowing that the President's Committee is very much in the mainstream of our nation. You can look over the details at your leisure—in the brief narrative description of our program which you have, and in the kits of our recent material which we have prepared for you. I particularly call your attention to the excellent reports of four standing committees of the President's Committee (Women, Student Competition, Rural Areas, and Mentally Handicapped) which were presented at the November 29 meeting of our Executive Committee. I should like to respectfully request permission of the Chairman to have these four reports (but not pamphlets) placed in the Record of these hearings following my remarks.

Yet all of this material, and all of these pamphlets, and all of the narrative descriptions of our activities, and all of my testimony here today cannot begin to sum up America's activities in behalf of job opportunities for her disabled veterans and other handicapped citizens. All these are the one-fifth of the iceberg that shows above water. There is so much more that we cannot possibly show in so brief a time.

I have in mind the individual efforts of the 600 member organizations and individuals of the President's Committee, engaged in scores of projects of various kinds.

And I have in mind the dedicated efforts of Governors' Committees on Employment of the Handicapped in all the States of the Union and in Puerto Rico, the Virgin Islands and the District of Columbia—carrying on at the State level the same kind of promotional efforts that the President's Committee carries on nationally.

And I have in mind the approximately 1,000 to 1,500 local community committees across our vast country—a tremendous grass roots effort bringing promotional activities to the level where employers are and where workers are.

And I have in mind the fine efforts of the major Federal agencies with which we work closely—both their headquarters and field offices—doing so much to create fuller opportunities for the handicapped.

And I also have in mind our own dedicated staff of 34 employees of the President's Committee with a record of accomplishments that is almost unbelievable.

And I also have in mind the Congress of the United States—in particular, this Committee—for supporting our work with sympathy and understanding for so many years.

I pledge to you that we shall move ahead in the months to come, attempting to be even more effective than we have in the past. To this end, we are engaged in some hard soul searching and self evaluation after our twenty years of serving America; and we have enlisted the voluntary services of six evaluation groups to recommend what we should do in the areas of internal organization, membership, State relationships, public information, basic programs, and our Executive Committee.

Based on the findings of these evaluation groups, based on our own assessment of what is needed for the handicapped and for America, based on the wishes of the Congress and the people of America, we shall move ahead in those areas of greatest urgency and greatest need. This will involve modifying our present programs and shifting our present personnel—operating within our present level of resources.

And this brings us to a problem.

In these times of stress, of bold new approaches to age-old problems of society, of urgent needs for expanded opportunities—the President's Committee finds itself hampered by an artificial appropriations ceiling which not only prohibits any expansion but actually forces us above our statutory ceiling in order to take care of mandatory increases.

When I last appeared before Congress, I said that I had asked for relief from our ceiling. The President made such a request to Congress, and Congressman Perkins and Senator Hill introduced legislation calling for removal of the ceiling. No action has been yet taken on either the House or Senate bills. No hearings have been scheduled. I am certain that action will be forthcoming this ses-

sion—but it will come too late in terms of the current budget as submitted by the President.

In this year of fiscal austerity, I do not know whether we would have been able to make a case for even a modest increase in our funds. The point is, even if a modest increase were warranted—and I feel it is—we are in no position to suggest it.

Saving this, I wish to thank members of this Committee for the extra $38,000 granted to the President's Committee over last year's basic budget presentation. But I should like to remind you that this increase was at the expense of our good friends in the Bureau of Labor Standards. I hope that for the 1969 budget, the $38,000 given us last year will not again be charged against the appropriation and personnel ceiling of our friendly neighbors, Labor Standards Bureau.

We observed our twentieth anniversary this past September. Speaker McCormack and Senator Randolph were kind enough to place in the Congressional Record summaries of our two decades of service. In closing, I refer you particularly to an editorial in America Magazine, which I also would appreciate being placed in the record of these hearings.

This America editorial expresses a great truth that has dominated the President's Committee these past 20 years: there is no limit to the amount of good that mankind can accomplish.

I hope that all of us working together can continue to do great good for mankind in the years ahead. Our efforts are needed. I know we can rise to the challenge.

[From America, the national Catholic review]

PRESIDENT'S COMMITTEE ON THE HANDICAPPED

Accustomed as we are to charges of failure, corruption and bureaucratic bungling in government welfare departments, it is pure refreshment to run across one Federal agency that no one attacks. The President's Committee on Employment of the Handicapped is unique among government agencies, and its 20th anniversary cannot be allowed to pass unnoticed.

How can any part of government escape criticism for 20 years? First of all, the committee has no natural enemies. Liberals appreciate its humanitarian goals; conservatives approve of its removing men from welfare rolls; State governments welcome its co-operation; employers find following its advice a path to public service that, incidentally, supplies them with skilled labor. And, of course. the handicapped appreciate its help in maintaining their dignity.

Secondly, it is successful. This fall the President's Committee can celebrate its 20th anniversary with pride. The organization was founded in the fall of 1947 at the suggestion of President Truman. The President's major concern was to help veterans permanently maimed in World War II to find job opportunities and training. Each President since has expanded the program. Eisenhower asked it to include civilian handicapped; Kennedy included the mentally retarded. Johnson announced a new Federal hiring policy (the Federal government now employs some 17,000 handicapped men and women).

Perhaps the committee's most successful undertaking, to date, has been its campaign to reduce psychological barriers among employers. Intensive studies supported by the committee have convinced many skeptical businessmen of the often superior capabilities of partially disabled workers. Another campaign still in progress is aimed at reducing architectural barriers in public buildings and schools, particularly universities.

A third reason the committee has no enemies is that it is not political. The chairman and vice chairman are appointed by the President to serve without compensation (though the staff is supported by Congress). The committee itself has no facilities to train or place personnel. Rather, it works in a public relations capacity. It also serves as a focal point and clearinghouse for interested Federal, State and local organizations, of which there are now more than 600.

Finally, the cost of the committee is almost nominal. Operating this year on a budget of $463,000, it will more than pay for itself in the income taxes it brings. (It is estimated that the handicapped wage earners helped over the past two decades have paid nearly $200 billion in taxes into the Federal Treasury.)

The President's Committee for the Employment of the Handicapped now faces two challenges. The integration of mentally retarded persons into the work force at job levels they can handle is a momentous task. Secondly, the stream of disabled veterans returning from Vietnam must be rehabilitated and placed.

The success of the committee depends on its keeping other organizations informed of the rights and needs of handicapped persons. In its 20 years of existence it has proved that a Federal agency, co-operating with State and local organizations, can advance the cause of justice. We hope its next 20 years will be equally successful.

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THE PRESIDENT'S COMMITTEE ON EMPLOYMENT OF THE HANDICAPPED,
WASHINGTON, D.C.

REPORT OF WOMEN'S COMMITTEE TO THE EXECUTIVE COMMITTEE

The Women's Committee presents the following report of accomplishments and developments:

(1) Mrs. Jayne Baker Spain succeeded Dr. Dorothy C. Stratton as Chairman of the Women's Committee on April 26, 1967. Dr. Stratton, who remains on the Committee as Chairman Emeritus, received the President's Committee Distinguished Service Award from Chairman Harold Russell at the Women's Committee Banquet in April. In July 1967, Mrs. Spain received one of the "Top Hat Awards" given by the National Federation of Business & Professional Women's Clubs for her contribution toward advancing the status of employed women.

(2) Miss Chloe Gifford resigned as Vice Chairman at the April Meeting. She continues as an individual members of the Women's Committee.

(3) Dean Virginia Y. Trotter of the University of Nebraska has replaced Dr. Elizabeth E. May as head of the former Handicapped Homemaker subgroup, now called *Homemaker Rehabilitation.*

(4) Two more distinguished women have accepted membership on the Women's Committee as individual members: *Mrs. David Chavez, Jr.* of Sante Fe, New Mexico, wife of the Chief Justice of the State Supreme Court; and *Mrs. Erwin Griswold,* wife of the newly-appointed Solicitor General and Dean of the Harvard Law School for the past 21 years—the Griswolds have just moved to Washington, D.C., from Belmont, Massachusetts. Mrs. Chavez has long been interested in problems of the handicapped and Mrs. Griswold, a polio victim since 1937, is internationally known for her travels with her husband and her many activities despite her physical limitations.

(5) The Fall Meeting was held in Washington, October 10–11, 1967. The main theme of the meeting was to promote cooperative endeavors by the member organizations in order to better serve the needs of the handicapped. Speakers included Miss Mary Hallaren, Execuitve Director of WICS (Women in Community Service), and Miss Jayne Shover, Associate Director of the National Society for Crippled Children and Adults, Inc., who told of their interagency cooperation. Miss Mary Switzer, first Administrator of the newly-formed Social & Rehabilitation Service (SRS), HEW, gave the members a general overview of her new responsibilities. The members were enthusiastic about the possibilities of more community involvement to assist the handicapped in the future. The Honorable J. Edward Day, former Postmaster General, was the guest speaker at the dinner in the Diplomatic Rooms of the State Department. His theme was "One Day's Look at Women's Organizations."

(6) Project Earning Power became a corporate body in the District of Columbia in April 1967 and Mrs. W. Willard Wirtz was selected Chairman of the Board of Directors. Mr. Thorburn Reid was selected as President of Project Earning Power, Inc., in September with new headquarters at 1824 Jefferson Place, N.W., Washington, D.C. The National Society for Crippled Children and Adults will transfer control and funds to the new corporation when final arrangements are completed. The VRA and OMPER grants were renewed for another year in the amounts of $76,800 and $177,000, respectively.

The Los Angeles Task Force, known as Phoenix Products, Inc., now in the pilot commercial phase, received additional funds amounting to $250,000 to provide technical assistance through December 1967. The gift housewares which passed the pilot marketing tryout so successfully last Christmas, are now being sold in about 15 large cities in their leading stores. Three of the Women's Committee member organizations—Altrusa International, Quota International, and the National Council of Catholic Women—

have contacted their members through their publications and special letters, urging them to encourage purchases of the attractive gift items for Christmas. This is just a starter for the big job ahead, and Mr. Gordon Petrie, President of Phoenix Products, Inc., will be in Washington during the State Chairmen and Secretaries meeting this week, to work out plans for their assistance in expanding their base of operations which will lead to more employment of the severely handicapped.

Phoenix Products were introduced in Washington on November 14, 1967 at a brunch given by Woodward & Lothrup who are the exclusive outlet for the products. The affair was co-hosted by Mrs. W. Willard Wirtz, Chairman of Project Earning Power, Inc. Board of Directors, and D. Randolph Buckinham, Senior Vice President of Woodward & Lothrop. Attending were Secretary Wirtz, wives of the Secretaries of Commerce, Interior, and Transportation, and other prominent public and private individuals who have been working with the program.

7. *Architectural Barriers*—a five-year progress report and the state of Women's Committee organizations' related programs was presented in October with particular emphasis on the fine work of the Junior Leagues, in publishing citywide directories for handicapped travelers. The status of Federal legislation was also discussed and the members agreed to support the achitectural barriers bill currently before the House Public Works Committee. The pending final report of the National Commission on Architectural Barriers, due about the first of the year, was discussed with its expected mandate to the Women's Committee to become more deeply involved in the informational program to reduce architectural and environmental barriers. The 1968 "Ability Counts" theme—"The Challenge of Employment Barriers to the Handicapped—A Community Survey"—was presented and the conferees expressed their interest in supporting the contest at the local and State level.

8. *Homemaker Rehabilitation*—Dean Trotter presented the film, "Homemaker Unlimited" made through the Nebraska Heart Association. This film has excellent potentials for use by the Women's Committee organizations but the two existing prints are too worn for use and need to be replaced. Dr. Trotter hopes to find the means of re-making the whole film with revisions aimed at nationwide usage. Funds will probably be requested from the Social & Rehabilitation Service of HEW if they cannot be obtained elsewhere. The organizational members were very enthusiastic about using such a film to inform their members about the importance of Homemaker Rehabilitation, and how it can be accomplished.

9. The Women's Committee will hold its next meeting on *May 1, 1968*. The Fall Meeting is scheduled for *November 19–20, 1968*.

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THE PRESIDENT'S COMMITTEE ON EMPLOYMENT OF THE HANDICAPPED, WASHINGTON, D.C., 20210

REPORT OF THE STUDENT COMPETITION COMMITTEE TO THE EXECUTIVE COMMITTEE, NOVEMBER 29, 1967

A mail survey has just been completed among the State winners of the "Ability Counts" Contest to get some idea of the influence this project has had on those students who placed first in their statewide judging during the past five years.

Admittedly, these are years of rapid mobility for these young people, with college, career, military, or marriage demanding their prior attention. It was gratifying, nonetheless, to receive a return rate of about one-third to our questionnaire. The responses were so satisfying that our conviction in the benefit of this program has been renewed and strengthened.

The long-range advantage of acquainting high school students with the abilities of handicapped workers has been apparent since the first annual contest was conducted twenty years ago. It now seems obvious that more immediate and deeper influences from this contest are encouraging young people to take an active interest in community programs for the handicapped, and to even direct their choice of careers.

Without exception the replies (which were unstructured) gave assurance that participation in the contest had helped to form a healthy and realistic attitude toward the problems of the handicapped, an understanding of their needs, and a conviction of their abilities.

As one young man said, "I believe it to be one of the finest programs of its type in America today, for, through it, one is able to gain, perhaps for the first time, a true insight into the problems of the physically handicapped. A vital part of the contest is the unequaled opportunity it affords to meet and talk with handicapped people. It is through this personal contact that one is made aware of the great contributions which the handicapped have to offer our society." His comments are typical of almost every respondent.

By far the majority of those replying to our survey told of volunteering their spare time in working with the handicapped. They have been working as counselors in summer camps with handicapped children; they have been donating their services to local health agencies; they have been tutoring retarded children and acting as their teachers in Sunday school. Some have influenced their college sororities to take on specific projects with handicapped children. They have taken an increased interest in the work of Goodwill Industries, the Red Cross, the mental health agencies. Some rather poignant letters describe how the contest has brought about a deeper understanding of a close family member who is handicapped. A few students told how, for the first time, they learned of the problem of architectural barriers to the handicapped, and how they have been trying to create an awareness of this problem in their home communities. One said, "I am certain that as a future architect I will take their problems into consideration, creating designs fully accessible to the physically handicapped."

Perhaps most meaningful of all are those replies which describe how the contest has dictated a choice of career in health and rehabilitation. Several have become nurses; some are planning to become physicians. Quite a few are planning careers in special education, where they will be teaching handicapped children. Some plan to become rehabilitation counselors, speech therapists, and physical therapists.

A typical reaction is described by one young student: "Since my visit to Washington in April 1966, I have performed physical therapy on a brain damaged child in our neighborhood. I have visited hospitals and tried to keep abreast of discoveries and advancements made in the field of treatment and rehabilitation of the handicapped. I have delivered a speech to a group of businessmen of a Rotary Club. Finally, I am presently enrolled as a sophomore where my major is biology and which, I hope, will prepare me for participation in the medical field."

The effects of the contest are summed up by one correspondent: "The most important feature of the contest was that it did not just affect my family or myself. It caused a change in the attitudes of many of my friends and classmates. It is the young people whose attitudes are just beginning to take specific directions that this program influences the most."

### REPORT TO THE EXECUTIVE COMMITTEE

Rural Areas Committee—Roy Battles, Chairman—At a meeting of the Rural Areas Committee in Washington on November 6, 1967, a subcommittee was named to prepare recommendations for a pilot project in rural areas, and report back to the full committee at its next meeting in Washington on March 4, 1968.

Leon Urben of the National Safety Council was named Chairman. Committee members are: J. K. Stern, American Institute of Cooperation; Edward W. Kiley, National Rural Electric Cooperative Association, and Dr. Bond Bible, American Medical Association.

Consultants to the subcommittee are Norman L. Harvey, U.S. Department of Labor; E. J. Niederfrank and Mrs. Helen Turner, U.S. Department of Agriculture, and Milton L. Shurr, U.S. Department of Health, Education, and Welfare.

The subcommittee was asked to develop recommendations to the full committee in two areas:

(1) Formulate guide posts for a pilot project or projects including tentative recommendations as to where those pilot projects might be located, in order that these projects would serve the purpose of providing a pool of experience useful in setting up a national program to bring about location, training and employing the handicapped.

(2) Formulate recommendations as to how all segments of rural America may become acquainted with the employment problems of the handicapped and facilities now available for solving these problems.

Things that must be done are:

(1) Identify the handicapped.
(2) Inform the handicapped.
(3) Rehabilitate and assist the handicapped that are interested.
(4) Find employment for those rehabilitated.

The subcommittee will hold its first meeting in Washington at the Department of Labor Building on December 13, 1967, starting at 10:00 a.m.

COMMITTEE ON THE MENTALLY HANDICAPPED

Following are highlights of actions by the Committee on the Mentally Handicapped in promoting jobs for the mentally retarded and the mentally restored:

*I. Projects*

1. "*How to Get a Job.*" This is the first publication in the country ever written specifically for mentally retarded adults. It contains sound advice on job-seeking. It never mentions the words "mentally retarded." Just off the press, it already is in heavy demand.

2. *Teachers' Guide.* A companion Teachers' Guide has been prepared. Its purpose is to help special education teachers introduce "How to Get a Job" into the curriculum as required reading for retarded students. Through this, not only will the retarded read the pamphlet; they will discuss it in class.

3. *National Association of State Mental Health Directors.* This organization has been urging State mental hospitals throughout America to take aggressive steps to involve local employers in their activities—as a first move to improving job prospects for ex-mental patients. Response has been fine.

4. *National Association for Retarded Children.* This organization is continuing its promotional efforts for jobs for the retarded. Highlights: an "Employer of the Year" awards program which this year drew 70 entries; mass media promotion; emphasis on employment by local chapters everywhere.

5. *Manpower Projects.* The Institute of Industrial Launderers is continuing its project to train and sire 1,000 retarded workers in laundries all over America. The NARC also is continuing its manpower project of opening up 2,000 jobs for the retarded in retail and service industries everywhere. Both projects are finding the retarded to be outstanding workers for many kinds of jobs.

6. *National Association for Mental Health.* This organization is considering the possibility of a nationwide awards program honoring employers who have done most to open up opportunities for the mentally restored.

7. *Mass Media Promotion.* The Advertising Council has been stressing employment in its current campaign for the retarded. As a result of Ad Council ads, businessmen have been writing in for further information about setting up hiring programs for the retarded. Also, magazines and TV networks have approached the President's Committee for assistance in preparing features about employment of the retarded.

8. *Federal Government.* More than 3,000 retarded workers now are employed by the Federal Government under a special hiring program. The Government also has stepped up employment of the mentally restored.

*II. Plans*

1. "*Fifty-Three Jobs.*" This will describe successful placements of the mentally restored in every one of America's States and Territories. It will demonstrate to employers the wide scope of employment that's possible for ex-mental patients.

2. *Aiming for Professionals.* "Memo to Psychiatrists," a pamphlet describing facilities available to train and employ ex-mental patients, was very well received. Similar pamphlets are planned for other categories of professionals: social workers, clinical psychologists, others who come in contact with ex-mental patients.

3. *Employer Involvement.* Greatest success in jobs for the mentally restored comes when employers become definitely involved in the affairs of nearby mental hospitals. We plan to encourage further involvement in communities everywhere. One device: the President's Committee newsletter "Involvement." Another: serving as an "Idea Exchange," through which hospitals can share experiences and ideas.

4. *Policy Statements.* We want to encourage more employers to adopt written policy statements calling for job equality for the mentally retarded and/or mentally restored—such as the statement of the W.T. Grant Company.

DISADVANTAGED HANDICAPPED

Mr. RUSSELL. I have Mr. William McCahill, our executive secretary with me.

In these times of national concern with the disadvantaged we must not forget that the poor have far more than their share of the handicapped.

Therefore, in our promotional efforts we must make certain that we devote certain efforts to the disadvantaged handicapped with their multiplicity of problems. Although there is poverty there is also affluence in America. We believe that times are ripe to promote jobs for the seriously handicapped who in a loose job market might not have much of an opportunity.

Therefore, the President's Committee has offered to join forces with the Nation's voluntary health agencies to engage in joint promotional efforts in behalf of the seriously handicapped.

I specifically mean the epileptics, the cerebral palsied, those with multiple sclerosis and muscular dystrophy, the blind, the deaf, and others.

DISABLED VETERANS

We include, of course, in our program, with a great deal of emphasis, our very seriously disabled veterans who are coming back in greater numbers from the war in Vietnam.

All of these efforts represent the combined energies of many people in many organizations, specifically the 600 members of the President's Committee, the Governors' committees in all the States, the 1,500 local committees, major Federal agencies concerned with the handicapped—and I might add they are doing a magnificent job—our staff of which we are very proud and the Members of Congress, including you, Senator Hill, who have been most generous in support and assistance.

Therefore, with all these people with us, I pledge we shall move ahead in the months to come.

ARTIFICIAL APPROPRIATION CEILING

We do have one problem I would like to mention. We are hampered by an artificial appropriation ceiling which prohibits expansion and prohibits orderly planning for the future.

Before coming here today we testified before the House Select Committee on Education on Senator Hill's Senate Joint Resolution 108 and Congressman Perkins' House Joint Resolution 111, identical bills which will remove our ceiling limit on the amount authorized on employment of handicapped and for other purposes.

I feel quite sure we will have a favorable resolution of our ceiling problem. Of course, it will not be in time to do us any good this coming appropriation year if the past is any guide to the 1969 budget.

PROPOSED PROGRAM EXPANSION

This committee and the House subcommittee are considering major expansions of the Nation's vocational rehabilitation and manpower programs for the handicapped and the disadvantaged, expansions

which the President's Committee must support at the bar of public opinion with essentially the same funding as in this year.

It is hard to rush forward in program terms while standing still fiscally.

I am sure all of us working together can continue to do good for mankind in the years ahead.

I know our efforts are needed. Thank you, Mr. Chairman.

Senator HILL. You very much need this increase, don't you?

Mr. RUSSELL. We do, sir. With all the programs on manpower rushing ahead we are not able to keep up with them.

Senator HILL. To do the job you have to have that additional money.

Mr. RUSSELL. We are confident that our ceiling will be removed this year which will give us an opportunity for expansion and orderly planning for the future.

Senator HILL. You have been doing a very fine job. I congratulate you on that.

INTRODUCTION OF WITNESSES

Mr. RUSSELL. Thank you. I neglected to introduce Mr. Bernard Posner, our Deputy Executive Secretary.

Senator HILL. We are glad to have you here. Is there anything you would like to add?

Mr. POSNER. No, sir.

Mr. MCCAHILL. I have been coming up here for 21 years. We have enjoyed working with you, Senator, and with Mr. Downey and the staff.

As you know, we have brought some materials for the Members of the Senate to take back to their staffs. We regret to see you leave, also, but I am sure you will be very useful and busy where you will be.

Senator HILL. Thank you. I appreciate that very much. I will miss all of you. I was talking to my friend Mr. Russell yesterday and reminded him of the fact that the first time I saw him was in a movie. He said that was 20 years ago.

Mr. RUSSELL. That is a long time ago.

Senator HILL. It did not seem that long to me.

Mr. RUSSELL. It does not seem that long to me either.

Mr. MCCAHILL. He is still on the late, late show.

Senator HILL. I think it is wonderful to see the job you have done. I warmly and heartily congratulate you.

Mr. RUSSELL. Thank you, sir.

Senator HILL. Is there anything you would like to add?

Mr. MCCAHILL. No, thank you.

Senator HILL. I congratulate you on what you have done.

## Labor-Management Services Administration

**STATEMENT OF THOMAS R. DONAHUE, ASSISTANT SECRETARY FOR LABOR-MANAGEMENT RELATIONS**

**ACCOMPANIED BY:**

**JOHN C. SHINN, DEPUTY ASSISTANT SECRETARY FOR LABOR-MANAGEMENT RELATIONS**

**FRANK M. KLEILER, DIRECTOR, OFFICE OF LABOR-MANAGEMENT AND WELFARE-PENSION REPORTS**

**HUGH W. BRADLEY, DIRECTOR, OFFICE OF VETERANS' REEMPLOYMENT RIGHTS**

**ALBERT L. MOORE, JR., DIRECTOR, OFFICE OF ADMINISTRATION AND MANAGEMENT**

**RICHARD E. MILLER, DIRECTOR, OFFICE OF PROGRAM AND BUDGET REVIEW**

### Appropriation Estimate

"Labor-Management Services Administration, Salaries and Expenses

"For necessary expenses to carry out the provisions of the Welfare and Pension Plans Disclosure Act and the Labor-Management Reporting and Disclosure Act; expenses of commissions and boards to resolve labor-management disputes and other expenses for improving the climate of labor-management relations; and to render assistance in connection with reemployment under the several provisions of law respecting reemployment after active military service, [$8,533,000] *$9,063,000.*"

AMOUNTS AVAILABLE FOR OBLIGATION

| | 1968 | 1969 |
|---|---|---|
| Appropriation or estimate | $8,533,000 | $9,063,000 |
| Amount reserved under H.J. Res. 888 (Public Law 90-218) | −232,000 | ---------- |
| Amount of reserve applied to increased pay costs | 232,000 | ---------- |
| Proposed transfer from "Office of Manpower Administrator, Salaries and Expenses" for pay increases (Public Law 90-206 effective Oct. 8, 1967) | 25,000 | ---------- |
| Nonrecurring rental costs transferred to GSA | −1,000 | ---------- |
| Appropriation or estimate, revised | 8,557,000 | 9,063,000 |

OBLIGATIONS BY ACTIVITY

| Description | Appropriation revised, 1968 | | Estimate, 1969 | | Change, 1969 | |
|---|---|---|---|---|---|---|
| | Positions | Amount | Positions | Amount | Positions | Amount |
| 1. Labor-management relations services | 17 | $349,400 | 17 | $355,800 | ---------- | +$6,400 |
| 2. Labor-management policy development | 18 | 262,400 | 18 | 272,000 | ---------- | +9,600 |
| 3. Administration of reporting and disclosure laws | 505 | 6,557,700 | 505 | 6,819,100 | ---------- | +261,400 |
| 4. Promotion of compliance and assistance to veterans | 54 | 763,600 | 65 | 971,100 | +11 | +207,500 |
| 5. Executive direction and administrative services | 61 | 623,900 | 61 | 645,000 | ---------- | +21,100 |
| Total obligations | 655 | 8,557,000 | 666 | 9,063,000 | +11 | +506,000 |

## OBLIGATIONS BY OBJECT

| | Appropriation revised, 1968 | Estimate, 1969 | 1969 change |
|---|---|---|---|
| Total number of permanent positions | 655 | 666 | +11 |
| Positions other than permanent | 9 | 9 | |
| Average number of all employees | 632 | 640 | +8 |
| 11 Personnel compensation | $6,659,500 | $7,101,910 | +$442,410 |
| 12 Personnel benefits | 529,600 | 549,290 | +19,690 |
| 21 Travel and transportation of persons | 454,400 | 418,400 | −36,000 |
| 22 Transportation of things | 28,300 | 30,800 | +2,500 |
| 23 Rent, communications, and utilities | 265,500 | 300,000 | +34,500 |
| 24 Printing and reproduction | 122,700 | 150,200 | +27,500 |
| 25 Other services | 106,800 | 108,900 | +2,100 |
| Services of other agencies | 291,500 | 298,000 | +6,500 |
| 26 Supplies and materials | 81,600 | 85,500 | +3,900 |
| 31 Equipment | 17,100 | 20,000 | +2,900 |
| Total obligations | 8,557,000 | 9,063,000 | +506,000 |
| Working capital fund items included above | (324,500) | (337,800) | (+13,300) |

## SUMMARY OF CHANGES

| | Position | Amount |
|---|---|---|
| 1968 enacted appropriation | 655 | $8,533,000 |
| Amount reserved under H.J. Res. 888–Public Law 90–218 | | −232,000 |
| Amount of reserve applied to increased pay costs | | 232,000 |
| Proposed transfer from "Office of Manpower Administrator" for pay increases–Public Law 90–206 effective Oct. 8, 1967 | | 25,000 |
| Nonrecurring rental costs transferred to GSA | | −1,000 |
| 1968 appropriation, revised | 655 | 8,557,000 |
| 1969 estimate | 666 | 9,063,000 |
| Total change | +11 | +506,000 |
| Mandatory items: | | |
| Increases: | | |
| Net additional pay increase costs not completely funded in 1968 | | +296,900 |
| Net additional cost of within-grade promotions effective for part year in 1968 | | +25,100 |
| Net cost of within-grade promotions becoming effective in 1969 | | +31,400 |
| To provide for 1 extra day of pay in 1969 for current year staff | | +29,650 |
| Subtotal increases | | +383,050 |
| Decreases: To provide for a net decrease in contributions to the Federal Employees Compensation Fund | | −4,850 |
| Total, mandatory items | | +378,200 |
| Financing items: To provide for full cost of centralized services purchased from the working capital fund | | +4,800 |
| Program items: | | |
| Increases: To provide for increased workloads in the veterans' reemployment rights program resulting from revised Department of Defense-Department of Labor referral procedures and over 40-percent increase in releases from the Armed Forces ($94,700 personal services; $85,300 nonlabor) | +11 | +180,000 |
| Decreases: Management improvement and cost reduction from travel and transportation of persons ($45,000); printing and reproduction ($12,000) | | −57,000 |
| Total, program items | +11 | +123,000 |
| Total change | +11 | +506,000 |

## MANDATORY AND FINANCING CHANGES BY ACTIVITY

| Type of change | Activity 1 | | Activity 2 | | Activity 3 | | Activity 4 | | Activity 5 | | Total | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | Position | Amount | Position | Amount | Position | Amount | Position | Amount | Position | Amount | Position | Amount |
| Mandatory items: | | | | | | | | | | | | |
| Net additional pay increase costs | | +$6,827 | | +$5,790 | | +$247,681 | | +$18,346 | | +$18,256 | | +$296,900 |
| Net additional cost of within-grade promotions effective for part year in 1968 | | +1,100 | | +1,400 | | +17,700 | | +3,100 | | +1,800 | | +25,100 |
| Net within-grade promotion costs initially effective in 1969 | | +1,500 | | +2,400 | | +20,000 | | +3,500 | | +4,000 | | +31,400 |
| Extra day of pay for current year staff | | +973 | | +910 | | +22,819 | | +2,554 | | +2,394 | | +29,650 |
| Contributions to FEC fund | | | | | | | | | | −4,850 | | −4,850 |
| Subtotal, mandatory items | | +10,400 | | +10,500 | | +308,200 | | +27,500 | | +21,600 | | +378,200 |
| Financing items: | | | | | | | | | | | | |
| Cost of centralized services | | | | | | +4,800 | | | | | | +4,800 |
| Total | | +10,400 | | +10,500 | | +313,000 | | +27,500 | | +21,600 | | +383,000 |

*Mandatory and financing changes for 1969*

| | |
|---|---|
| Mandatory items: | |
| Increases: To provide for full year cost of pay increases effective Oct. 8, 1967, and to provide full funding of part-year costs | $296,900 |
| Within-grade promotion costs: | |
| 1969 net additional cost of within-grade promotions effective for part-year in 1968: | |
| Personnel compensation | 54,902 |
| Deduct lapse | −1,921 |
| Deduct savings due to turnover | −20,822 |
| Personnel benefits | +2,441 |
| Net cost | +34,600 |
| Absorption of a portion of above increases | −9,500 |
| Adjusted net additional cost of within-grade promotions effective for part-year in 1968 | 25,100 |
| Net cost of within-grade promotions becoming effective during 1969: | |
| Personnel compensation | 65,024 |
| Deduct lapse | −2,276 |
| Deduct savings due to turnover | −24,660 |
| Personnel benefits | +2,812 |
| Net cost | +40,900 |
| Absorption of a portion of above increases | −9,500 |
| Adjusted net cost of within-grade promotions becoming effective during 1969 | 31,400 |
| Extra day pay for current year staff | 29,650 |
| Decreases: To reduce the level of contributions to the Federal employees' compensation fund | −4,850 |
| **Total,** mandatory items | +378,200 |
| Financing items: | |
| Amount originally in base budget | 318,700 |
| Amount currently required in base budget | 323,500 |
| Changed financing required | +4,800 |

Changes in fees charged for centralized services (such as visual exhibits or reproduction) and changes in anticipated services rendered by the working capital fund require adjustments to the funds provided in the base budget.

PROGRAM CHANGES BY ACTIVITY

| Object classification | Activity 1 | | Activity 2 | | Activity 3 | | Activity 4 | | Activity 5 | | Total | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | Position | Amount | Position | Amount | Position | Amount | Position | Amount | Position | Amount | Position | Amount |
| 11 Personnel compensation | | | | | | | +11 | +$83,604 | | | +11 | +$83,604 |
| 12 Personnel benefits | | | | | | | | +11,096 | | | | +11,096 |
| 21 Travel and transportation of persons | | −$4,000 | | −$900 | | −$39,600 | | +9,000 | | −$500 | | −36,000 |
| 22 Transportation of things | | | | | | | | +2,500 | | | | +2,500 |
| 23 Rent, communications, and utilities | | | | | | | | +26,400 | | | | +26,400 |
| 24 Printing and reproduction | | | | | | −12,000 | | +38,200 | | | | +26,200 |
| 25 Other services | | | | | | | | +3,900 | | | | +3,900 |
| 26 Supplies and materials | | | | | | | | +2,400 | | | | +2,400 |
| 31 Equipment | | | | | | | | +2,900 | | | | +2,900 |
| Total | | −4,000 | | −900 | | −51,600 | +11 | +180,000 | | −500 | +11 | +123,000 |

*Activity 1. Labor-management relations services*

| | |
|---|---|
| 1968 (positions, 17) | $349,400 |
| 1969 (positions, 17) | 355,800 |

NARRATIVE DESCRIPTION OF PROGRAM

This program provides for staff support to the Secretary in the performance of key responsibilities in the area of labor-management relations. Appropriate staff aid and support in particular dispute and problem situations is provided to the Secretary, Under Secretary, Assistant Secretary, to other Government agencies, and to panels, boards or commissions established by the President or the Secretary to act in such matters.

Provision is made for review and approval of employee protection arrangements proposed in conjunction with applications for Federal grants and loans under the Urban Mass Transportation Act of 1964.

The program also provides for execution of responsibilities of the Secretary under Executive Order 10988, Employee-Management Cooperation in the Federal Service.

*In 1967*, accomplishments were made in developing and maintaining an "early warning system" to anticipate labor-management disputes in key industries and to identify and monitor for the Secretary developing and active critical bargaining situations. This included developing information on the technical aspects of issues in dispute, obtaining and summarizing a wide variety of comparative data acquired from sources both within and outside the Department. Critical to this function is the ability to assemble adequate and accurate information on short notice, to organize it in a form to relate to the issues in the specific cases and yet be sufficiently concise as to be readily usable by the Secretary, and to have it available when needed.

The area of studies of problem areas in key industries with a history of labor relations conflict was represented by the examination in detail of the collective bargaining structure of the East and Gulf Coast longshore industry. The objective is to determine the reasons for the repeated breakdowns of labor-management relations which have resulted in prolonged strikes following each contract expiration in the past ten years. The study progressed more slowly than expected but will be completed in 1968. Other such problem areas in need of this sort of study were considered for future planning.

Other accomplishments included handling a number of requests for technical assistance and advice from labor, management, the mediation services, and other government agencies to deal with specific labor-management problems; providing staff support to several Presidential Emergency Boards.

Under the Urban Mass Transportation Act of 1964, the Department of Housing and Urban Development referred 45 applications for review and approval or other appropriate action, of plans for employee protection. Review and processing of 36 applications was completed and 19 applications were pending at the close of the fiscal year.

The review of agency practices under Executive Order 10988 continued, new procedures in this regard were developed and recommended, advice and counsel was given to parties seeking to resolve problems, and a roster of qualified arbitrators was maintained.

*In 1968*, it is planned to continue the limited study of problem areas in key industries with a history of labor relations conflicts. The East and Gulf Coast longshore industry study is expected to be completed by the end of the year. Another such study is being started of wage compression among shopcraft workers in the railroad industry, pursuant to the recommendations of the special Presidential Board of which Senator Wayne Morse was Chairman.

We expect to respond to the growing workload in the program of employee-management cooperation in the Federal service. Since issuance of Executive Order 10988 in 1962, the number of employees in the Federal service represented by labor organizations has expanded rapidly—from 19,000 covered by exclusive units in 1961 to well over one million in 1966. Requests for advice and assistance received by the Office are increasing from year to year, but of greater significance is the fact that the complexity of these inquiries continues to grow as the scope of union organization increases and as employee representatives gain in sophistication. Increasingly, Federal agencies are looking to the Department for guidance in dealing with the more complicated problems which are appearing.

Organizational activity among public employees is taking place to an unprecedented degree over the Nation. Strikes and upheavals involving nurses, teachers and firemen are major problems. In the context of these developments, the Department is mindful of the need for the Federal Government to become a model for state and local governments. To provide this example it will be necessary to assure that policy and procedures exist and are followed, which will lead to a constructive and orderly relationship between Federal agencies and employee organizations.

On September 8, 1967, the President established a Review Committee, chaired by the Secretary of Labor, to consider possible changes in the existing program. The Staff Director for the Review Committee was appointed from this program as well as some of the staff members rendering support to the Committee. The scope and nature of the future responsibilities and activities of the Federal Employee-Management Relations program may be strongly affected by the recommendations of this Committee.

The "early warning system" and status reports on problems in key industries will be maintained and may assume greater importance in 1968 as contracts will be expiring in a number of major industries such as aluminum, steel, aircraft, East Coast longshore, shipping, railroads and most major airlines. Staff support and special analyses are expected to be needed in a number of these situations.

Review of employee protection plans in applications under the Urban Mass Transportation Act will continue at about the 1967 level.

*In 1969*, it is planned to maintain the 1968 level of overall activity with the principal functional areas continuing to be responsive to priority needs as dictated by the wide variety of factors present in the national economic scene and the labor-management relations area.

The program will provide technical, statistical or advisory assistance upon request to labor, management, the mediation services and other Government agencies for dealing with specific problems. There will be developed or otherwise provided basic information as well as technical tools and other material to guide and assist involved parties in use of such data in problems with serious labor force, work rules and collective bargaining implications.

In cooperation with the mediation agencies and other Government agencies, forecasts will be made of impending labor-management problems and situations of a critical nature from a national interest standpoint. The objective is to develop such forecasts with sufficient leadtime as will permit providing the technical data, and other information and services before contract negotiations break down or a work stoppage ensues.

In collaboration with other units of the Department, detailed technical analyses will be developed for key industries in the economy. This involves study of labor force requirements, employment trends, current or potential impact of technological changes, adjustment procedures, and the labor-management relations mechanics for adjusting to changes.

Staff support will be provided to various Boards and Commissions appointed in major labor disputes. Due to the emergency nature of such disputes, no accurate forecast of future needs is possible. Disputes in any of the major industries, if a work stoppage should occur, could have a serious effect on the national interest and on the President's efforts to maintain stability in the economy. In such a case it can be anticipated that the Secretary of Labor would become involved and staff service from this program would be required.

At the discretion of the President and of the Secretary, the services of recognized experts and consultants may be required in certain major problem situations. Included in the total budget estimate is $150,000 for the temporary employment of the labor-management consultants and other expenses incurred in such circumstances. Direct staff costs and other expenses of the President's Advisory Committee on Labor-Management Policy also are drawn from this fund.

In view of the proposed budget increase in the Department of Housing and Urban Development for grants and loans under the Urban Mass Transportation Act, some increase can be expected in the number of employee protection plan reviews. Moreover, there has been a noticeable change in the nature of the projects proposed in the applications and more large cities, regional authorities and interstate agencies are now participating in the program.

As a consequence, the review of applications and the related administrative and liaison activities will involve many more technical problems than have been present in this activity.

*Changes for 1969*

| | |
|---|---|
| Mandatory changes amount to | +$10,400 |
| Program changes amount to | —4,000 |

BASIS FOR THE ESTIMATE

The functions of the Office of Labor-Management Relations Services are set forth above. Since these activities are of a staff nature, are not readily quantifiable and are directed toward ever-changing circumstances, estimates must be based on judgements as to effective performance as derived from past experience, and as to sound determinations of priorities and distribution of available resources. Experience during fiscal year 1967 indicates that the present staff of 17 positions is adequate to reasonably perform most of the activities outlined. Staff support and related costs, including contingent expenses of experts and consultants and special dispute boards, panels and commissions are estimated as $355,800.

*Activity 2. Labor-management policy development*

| | |
|---|---|
| 1968 (positions, 18) | $262,400 |
| 1969 (positions, 18) | 272,000 |

NARRATIVE DESCRIPTION OF PROGRAM

This program provides for research and policy development relating to the Department's labor-management relations responsibilities. The Office of Labor-Management Policy Development develops and analyzes policy recommendations on basic labor-management relations issues, and on issues relating to the Labor-Management Reporting and Disclosure Act, the Welfare and Pension Plans Disclosure Act, and Executive Order 10988. The Office provides research and technical assistance in litigation, as requested.

*In 1967*, accomplishments were made in providing research assistance in litigation and for administrative determinations under the two disclosure Acts. A number of legislative proposals dealing with emergency disputes were analyzed, and a study was made of recent State legislation guaranteeing to public employees the right to organize and to bargain collectively. An analysis of dispute settling procedures and experience under the Railway Labor Act was begun. Other major studies started during the year dealt with union constitution procedures relating to collective bargaining and contract ratification; employee bargaining unit determinations under Executive Order 10988; the financial structure of large pension plans; and party-in-interest transactions reported under the Welfare and Pension Plans Disclosure Act. Support services were provided to task forces or committees working on pension plans and public policy.

*In 1968*, it is planned to continue and complete by the end of the year, work on the studies begun in 1967. The major new studies to be started include one on the structure and financial resources of large local unions and one on qualifications for union office as seen through the Labor-Management Reporting and Disclosure Act court cases. Providing research and technical assistance for litigation and administrative determinations will continue to account for a significant proportion of staff time. A number of special reports on union procedures, collective bargaining, strikes, and employee benefit plans are being prepared. Analysis of legislative proposals and legislative actions will continue at previous levels. The Office continues to provide technical and consultative services with reference to the Department's responsibilities in the field of international labor affairs and training.

*In 1969*, it is planned to:

1. Continue analysis of emergency dispute provisions and experiences.

In view of the increasing interest and concern with work stoppages and their impact on the national economy, it is anticipated that the Office will be called upon, to an increasing degree, to evaluate legislative proposals and to provide policy guidance in this area.

2. Study other issues in the field of labor-management relations with a view towards policy development. Attention will be concentrated in newly-emerging problem areas, such as nonprofit hospitals, public service, and agriculture. Such issues as restrictions on technological change, membership rejection of negotiated settlements, and discriminatory practices will be regularly reviewed.

3. Increase efforts toward providing research advice and assistance to other Government agencies involved in labor-management relations matters.

The Office will continue to support the development of research in the field of labor-management relations, and the coordination of research activities among Government agencies, with the purpose of achieving the maximum utilization of resources.

4. Increase research and policy development activities in support of the Department's Older Worker Program.

5. Maintain activities directly related to the administration of the Labor-Management Reporting and Disclosure Act, involving litigation assistance and the preparation of studies for policy decisions within the Department. Special attention will be directed to a study of the participation of retired members in the affairs of unions.

6. Initiate, as required, similar support activities related to the administration of the Welfare and Pension Plans Disclosure Act. Congressional interest in the private pension system, as evidenced by several recent legislative proposals and hearings on this subject, enhances the need for research and policy analysis.

7. Increase attention to problems in labor-management relations in the public service. The Office will continue its analysis of statutes governing labor-management relations in the public sector, and of experiences under these statutes. The effectiveness of particular procedures, such as those dealing with the settlement of disputes and the determination of appropriate bargaining units, will be continuously studied.

8. Participate as requested in the development and presentation of seminars for foreign nationals representing labor, management, and the public, and provide technical and consultative services to individuals and groups visiting the United States under private or Government sponsorship.

*Changes for 1969*

| | |
|---|---|
| Mandatory changes amount to | +$10,500 |
| Program changes amount to | −900 |

BASIS FOR THE ESTIMATE

The functions and objectives of this activity are outlined in the narrative above. Such activities are of a staff nature directed toward a variety of changing factors and consequently cannot realistically be stated quantitatively. Estimates are, therefore, derived from a bend of managerial decisions as to effective performance as developed from experience factors and considered sound judgments of priorities and the distribution of available resources. From this, it has been determined that the present staff level of 18 positions is adequate to satisfactorily accomplish these functions and the estimate of $272,000 for fiscal year 1969 therefore contemplates a continued level of accomplishment.

*Activity 3. Administration of reporting and disclosure laws*

| | |
|---|---|
| 1968 (positions, 505) | $6,557,700 |
| 1969 (positions, 505) | 6,819,100 |

NARRATIVE DESCRIPTION OF PROGRAM

This program provides for the Department's functions in the administration of the Labor-Management Reporting and Disclosure Act and the Welfare and Pension Plans Disclosure Act.

The Labor-Management Reporting and Disclosure Act is designed to protect the rights of some 16,000,000 union members, to safeguard their dues money by requiring reporting and disclosure of union financial operations, establishing fiduciary standards for union officers and employees and requiring them to be bonded, to insure democracy within unions by requiring periodic elections under reasonable conditions, and to protect dissenters against arbitrary or improper reprisals.

The Welfare and Pension Plans Disclosure Act is designed to protect the interests of participants in and beneficiaries of welfare and pension plans principally by requiring reporting and disclosure of plan provisions and financial operations and other limited information with respect to such plans and by requiring bonding of plan administrators. This Act applies to almost all private employee welfare and pension benefit plans covering more than 25 participants.

*In 1967*, accomplishments were made in the major area of operation under this program which related to controlling, processing, examining, and coding of re-

ports filed under the Labor-Management Reporting and Disclosure Act and the Welfare and Pension Plans Disclosure Act; comprehensive analyses and audits of selected reports; administering the disclosure provisions of the Acts, including functional direction of the field in this regard; conduct of statistical programs; and replying to inquiries on the coverage and reporting provisions of the two Acts.

Slightly less than 180,000 reports were received in fiscal year 1967.

Almost 100,000 plan descriptions, labor organization reports, annual financial reports, and special reports received (e.g., employers, consultants, etc.) underwent summary examination. Desk audits were completed. Special reports and complex reports underwent detailed analyses. Notices were mailed to delinquent and deficient filers. Reports were reproduced for sale in response to disclosure requests. Welfare and pension plan addresses were updated.

The survey of the reports processing activities (including related automatic data processing operations in the Bureau of Labor Statistics), which was conducted by consultants from private industry was completed and work begun on the proposed implementation of the new procedures. The management consultants and assigned Government personnel have been engaged in this effort. The new system will provide for greater efficiency and effectiveness with respect to processing and controlling of reports filed and more prompt and accurate identification of delinquencies and deficiencies. Automatic data processing involvement and utilization will be greatly increased. Accomplishments also included the issuance of a total of 507 administrative rulings which related to both Acts. A new form, LMSA Form S–1, for the surety company reporting requirements was developed and its use initiated. Revisions were made in Forms D–1, LM–10, LM–15, and LM–15A to alleviate some of the burden on the persons responsible for filing in complying with the requirements of the Acts and to simplify processing within the Office of Labor-Management and Welfare-Pension Reports. Exceptions were granted from the bonding provisions of the Welfare and Pension Plans Disclosure Act to savings and loan associations regulated by the Federal Home Loan Bank Board. Arrangements were made to have the interpretative manuals available to the public under the Freedom of Information amendment to the Administrative Procedure Act (P.L. 90–23).

Accomplishments were made in programs of technical guidance and assistance which promoted voluntary compliance with the reporting requirements of both Acts. Inquiries totaling 111,150 were handled by National Office and Field personnel. These were received from union members, welfare-pension plan participants, members of the Congress, and from the general public. A total of 329 clinics, meetings, work shops, etc., were conducted under programs of group technical assistance. Personal contacts with key individuals having responsibility under either of the Acts totaled 5,116. Publications were issued to aid persons having rights and duties under the Acts.

Investigations of alleged violations under both Acts were conducted and training seminars for compliance officers were held providing instruction on the use of new investigation techniques. As a result of the continuing investigation under the Labor-Management Reporting and Disclosure Act of labor-management practices in the pipeline construction industry, two more union officers were convicted and another one was indicted for embezzlement and/or falsifying union records, bringing to more than $100,000 the total uncovered by this investigation. Federal indictments were returned against two city officials, five pipeline corporations and four company executives. Grand jury action was pending against other pipeline company and union representatives (indictments were actually returned early in fiscal year 1968). The total of indictments and criminal informations numbered 69, while 55 persons were convicted. The total number of investigations under the Welfare and Pension Plans Disclosure Act was increased while the emphasis of investigations under the Labor-Management Reporting and Disclosure Act was shifted to areas which should secure more accurate reports and deal with more serious violations of the Act.

*In 1968,* it is planned to continue with the same functions outlined for fiscal year 1967. Most activities and accomplishments during fiscal year 1968 are projected at a higher level than in fiscal year 1967. It is estimated that 198,800 reports will be received—141,800 under the Welfare and Pension Plans Disclosure Act and 57,000 under the Labor-Management Reporting and Disclosure Act. Summary examinations are projected at 125,000, an increase of 25 percent over fiscal year 1967. The Form D–3 information report will be subject to

examination for the first time to determine compliance with the bonding statute. Desk audits will increase slightly. The followup correspondence program on delinquencies and deficiencies will increase. Reporting forms will be reviewed, with possible revisions during the year to simplify use by the public. The consultants from private industry and assigned Government personnel will continue with their work on the proposed implementation of the new reports processing procedures.

It is expected that 555 rulings will be issued by the end of the year, an increase of 48 units over the previous year. An anticipated 80 new entries will be made in the Labor-Management Reporting and Disclosure Act and the Welfare and Pension Plans Disclosure Act interpretative manuals. A complete revision of bonding regulations under the Welfare and Pension Plans Disclosure Act will be promulgated. Legislative support will be provided as needed for proposed changes in existing legislation.

The program for the promotion of voluntary compliance through technical assistance will be continued. There are indications that interest throughout the country in the two Acts may result in the group technical assistance work expanding during the year. This interest will generate a continued high level of inquiries both at the National Office and the Field offices.

It is planned to continue emphasis on investigations under the Welfare and Pension Plans Disclosure Act. This emphasis is necessary to reduce the number of delinquent and deficient reports.

In anticipation of a reduction in the number of delinquent reports, planned investigation emphasis under the Labor-Management Reporting and Disclosure Act is in the areas of deficient reports, financial investigations and basic investigations. Frequent by-products of these investigations are indications that other violations of the Act may have taken place. Development of these cases contributes to uncovering corruption and unlawful practices in the organized labor movement. Election cases will be developed to obtain further court interpretations of the issues clarified by recent Supreme Court decisions.

Scheduled refresher training for compliance officers will continue as a means of apprising them of new developments in investigative techniques, and of current and prospective policy and investigation emphasis.

*In 1969*, it is planned to continue with the major area of operations which relate to the function of receiving, controlling, processing, examining, and coding of reports filed under the Acts. Operations during fiscal year 1969 are scheduled at same levels, in almost every instance, as in fiscal year 1968. The estimated workload is based upon the fact that resources available will be at about the same level as in fiscal year 1968. It is anticipated, however, that the quality of the processing activities which are performed and resulting services to the public will be much higher because of increased use of automated processes and generally improved procedures resulting from the consultant-recommended system. Although the new system will be in effect most of fiscal year 1969, it will be necessary to operate both the new and old systems in some areas until the new system has been perfected.

It is planned to issue 600 administrative rulings and to make 90 new entries in the Labor-Management Reporting and Disclosure Act and Welfare and Pension Plans Disclosure Act interpretative manuals. A complete revision will be made of the General Statement on Bonding under the Labor-Management Reporting and Disclosure Act (29 CFR 453). All reporting forms will be reviewed to determine whether it is possible to alleviate further the reporting burden on the persons required to file, to eliminate technical problems and to provide the best vehicle possible for disclosure.

Emphasis will be placed upon improved internal procedures and improving relations with filing parties. Technical assistance publications addressed to the special needs of persons having rights and duties under both the Labor-Management Reporting and Disclosure Act and the Welfare and Pension Plans Disclosure Act will be issued as required. Publications already in circulation and those that will be issued initially in fiscal year 1968 will be revised as necessitated by changes in administrative policy, opinions of the Solicitor, and court decisions. No new publications are planned for fiscal year 1969. Continuing publications, i.e., the yearly editions of the information reports on operations under each Act, will be issued as usual.

It is planned that the investigation program outlined above for 1968 will be continued.

Workload Tables I through IV reflect selected workload.

*Changes for 1969*

| | |
|---|---|
| Mandatory changes amount to | +$308,200 |
| Financing changes amount to | +4,800 |
| Program changes amount to | −51,600 |

BASIS FOR THE ESTIMATE

The volume of activity has been relatively stable for the past several years and represents minimum acceptable levels with regard to the requirements for administering most provisions of the two Acts. The overall planned level of operation for fiscal year 1969 is approximately the same as for fiscal year 1968. Estimates are, therefore, based upon a continuation of the 1968 level with minor adjustments to meet program needs.

TABLE I.—REPORTS AND ANALYSIS, SELECTED WOR D

| | 1966 actual | 1967 actual | 1968 estimate | 1969 estimate |
|---|---|---|---|---|
| Reports received (total) | 199,927 | 179,747 | 198,800 | 198,800 |
| Labor-Management Reporting and Disclosure Act | 60,070 | 56,095 | 57,000 | 57,000 |
| Welfare and Pension Plans Disclosure Act | 139,857 | 123,652 | 141,800 | 141,800 |
| Summary examinations (total) | 185,820 | 99,442 | 125,000 | 125,000 |
| Registration-type reports | 31,385 | 27,726 | 39,000 | 29,250 |
| Annual reports | 154,435 | 71,716 | 86,000 | 95,750 |
| Desk audits | 2,570 | 2,448 | 2,570 | 2,800 |
| Detailed analyses (total) | 1,030 | 1,781 | 1,600 | 1,600 |
| Special reports | 800 | 991 | 900 | 900 |
| Complex reports | 230 | 790 | 700 | 700 |
| Deficiency and delinquency notices mailed (total) | 10,310 | 9,843 | 22,500 | 22,500 |
| Deficiency notices | 4,480 | 7,620 | 10,000 | 10,000 |
| Delinquency notices | 5,830 | 2,223 | 12,500 | 12,500 |
| Disclosure activities: | | | | |
| Number of reporting entities for which disclosure is made | 37,220 | 40,035 | 45,000 | 45,000 |
| Pages reproduced for sale | 111,840 | 89,166 | 120,000 | 120,000 |
| Number of visitors | 1,580 | 1,434 | 2,000 | 2,000 |
| Correspondence (total) | 10,230 | 12,000 | 15,000 | 15,000 |
| Composed replies | 5,230 | 5,500 | 8,000 | 8,000 |
| Form and checklist letters (other than delinquency and deficiency notices) | 5,000 | 6,500 | 7,000 | 7,000 |

TABLE II.—REGULATIONS AND ADMINISTRATIVE RULINGS, WORKLOAD

| | Actual, 1966 | Actual, 1967 | Estimate, 1968 | Estimate, 1969 |
|---|---|---|---|---|
| Action on requests for variation on reports and exemptions on bonding | 52 | 6 | 6 | 6 |
| Administrative rulings | 443 | 507 | 555 | 600 |
| Regulations and interpretative bulletins | 3 | 7 | 7 | 5 |
| Administrative policy studies | 8 | 12 | 10 | 8 |
| Forms | 3 | 6 | 3 | 2 |
| Staff manual entries | 26 | 117 | 80 | 90 |

TABLE III.—TECHNICAL ASSISTANCE, WORKLOAD

| | 1966 actual | 1967 actual | 1968 estimate | 1969 estimate |
|---|---|---|---|---|
| Inquiries | 105,168 | 111,150 | 117,000 | 120,000 |
| Group technical assistance: | | | | |
| (Total) | 252 | 317 | 200 | 175 |
| Conventions and meetings | 178 | 92 | 125 | 100 |
| Labor-management reporting and disclosure act clinics | 63 | 98 | 50 | 50 |
| Welfare and pension plans disclosure act clinics | 11 | 127 | 25 | 25 |
| Contacts | 5,593 | 5,116 | 4,000 | 4,000 |
| Publications: | | | | |
| Labor-management reporting and disclosure act | 4 | 8 | 9 | 12 |
| Welfare and pension plans disclosure act | 6 | 7 | 7 | 8 |

TABLE IV.—COMPLIANCE OPERATIONS, WORKLOAD

| | Units— | | | |
|---|---|---|---|---|
| | Actual 1966 | Actual 1967 | Estimate 1968 | Estimate 1969 |
| Labor-Management Reporting and Disclosure Act investigations: | | | | |
| National investigations (field) [1] | 150 | 31 | 68 | 50 |
| Election investigations | 146 | 92 | 115 | 135 |
| Election reruns | 41 | 35 | 31 | 35 |
| Delinquent reports | 5,882 | 5,184 | 3,240 | 2,500 |
| Deficient reports | 88 | 265 | 930 | 1,000 |
| Financial investigations | 405 | 301 | 551 | 750 |
| Basic investigations | 525 | 478 | 632 | 525 |
| Welfare and Pension Plans Disclosure Act investigations: [1] | | | | |
| Delinquent reports | 470 | 617 | 818 | 820 |
| Deficient reports | 84 | 234 | 304 | 310 |
| Financial investigations | 22 | 21 | 17 | 15 |
| Basic investigations | 17 | 37 | 44 | 100 |

[1] Includes investigations participated in by national office personnel.

*Activity 4. Promotion of compliance and assistance to veterans*

1968 (positions, 54) ..... $763,600
1969 (positions, 65) ..... 971,000

NARRATIVE DESCRIPTION OF PROGRAM

This program provides for direct assistance in connection with the reemployment rights of ex-servicemen, reservists and members of the National Guard, and in promoting employer compliance with the reemployment provisions of the Military Selective Service Act of 1967, formerly the Universal Military Training and Service Act.

The primary objectives are:

(1) to promote a better understanding of the reemployment program by alerting ex-servicemen and employers to their rights and obligations provided in the law;

(2) to prevent to the extent possible, through emphasis on disclosure and promotion of compliance, complaints and disputes from arising;

(3) to provide prompt and effective action on all complaints requiring investigation and negotiation;

(4) to provide prompt and effective processing of cases for referral to the Department of Justice.

*In 1967*, accomplishments were made in improving the dissemination of information to those persons having rights and to those persons and organizations having obligations under the law. This resulted mainly from the issuance by the

Department of Defense of instructions to all branches of the armed forces requiring universal use of the reemployment referral forms (OVRR–2). This enabled the Office of Veterans' Reemployment Rights to provide authoritative information about the law to most veterans and employers at the time of the veterans's release from the service—the most effective time to promote voluntary compliance by alerting both parties to the benefits and requirements of the law.

New or revised pamphlets were published explaining the reemployment rights of (a) veterans generally, (b) disabled veterans who can no longer perform the duties of their pre-service jobs, (c) National Guardsmen and Reservists who must be absent from work for short tours of training duty, and (d) persons who are rejected for military service. The first major revision of the Reemployment Rights Handbook since 1954 was begun.

As a result of the turnover in the armed forces in 1967, 408,392 Forms OVRR–2 were received from the Department of Defense and processed, resulting in mailing of informational material to 404,400 ex-servicemen and to 215,000 employers. Also 11,129 specific inquiries (compliance reviews) and 434 employer misunderstandings (compliance cases) were processed. Additionally 1,432 cases involving veterans' formal complaints against employers were closed and 108 such cases were referred to the Department of Justice.

*In 1968*, it is planned to maintain the most effective services possible in the face of increasing workload. The increases will result from (1) the full year universal use by the Department of Defense of the reemployment referral forms. and (2) an increase of 43 percent in the turnover in armed forces. The latter reflects the expiration of terms of service for many persons who entered the military services when the build-up for Vietnam began about two years ago. These two factors directly relate to all work functions of this activity. It is estimated that 603,390 Forms OVRR–2 will be received from the Department of Defense and processed, resulting in mailings to 596,460 veterans and to 290,660 employers. From these activities, we expect to process 21,270 compliance reviews and 605 compliance cases. Also, 2,122 complaint cases will be closed and 86 referred to the Department of Justice.

The revision of the Reemployment Rights Handbook will be completed. Demand for the Handbook has risen with the increased induction of employees into the armed forces and will undoubtedly continue to rise with the release and return of these men to civilian pursuits.

*Changes for 1969*

| | |
|---|---|
| Mandatory changes amount to | +$27,500 |
| Program changes amount to | +$180,000 |
| Positions | +11 |

PROPOSAL

It is planned to increase the staff by 11 positions (6 professional and 5 clerical). The professional positions and three clerical positions will be assigned to the Field to assist in the promotion of compliance and the handling of the complaint caseload. The remaining two positions will be in the National Office to help with the receiving and processing of the Forms OVRR–2.

THE NEED

This program needs to be expanded solely because of the increased workload as projected in the selected workload table. The increased separations and resultant activities in fiscal year 1968 will overtax the current staff. Additional staff is needed to reasonably assure that the higher number of veterans returning to civilian life in 1969 receive the same services and assistance with the same degree of promptness and effectiveness, as has been available to those who preceded them.

THE PROGRAM

The program remains unchanged except as to the volume of the several functions. Each veteran will be supplied with information directed to his home address of the general details of reemployment rights, including the activities he must take to qualify for statutory protection, as well as the location of offices where he may obtain more information or assistance about reemployment and

training. In addition, employers of the 60 to 70 percent of veterans who had pre-service jobs will be informed of the veteran's discharge from the service and will be provided general information concerning an employer's obligation under the reemployment law. They will be advised of the appropriate Field office where questions will be answered and will be asked to inform the Office of Veterans' Reemployment Rights if the veteran applies for reemployment and is denied for any reason.

The informational mailings—to the veteran and employer—are the foundation of the reemployment rights program which relies on courses of action which will result in a high degree of voluntary compliance with the law, maximum protection of the rights of exservicemen, optimum avoidance of formal adversary action, and minimum involvement of and cost to the Federal Government. The series of steps in this program—informational mailings, compliance reviews, compliance cases, and complaint cases—reflect this policy. Nevertheless, experience has shown clearly that a small proportion of the total reemployment situations ultimately will develop into one or more of the other categories. A very small number (but usually involving issues of great consequence) cannot be settled in the complaint case stage by Department intervention and mediation and must be referred to the Department of Justice for litigation consideration. The projected workloads in all these categories are based on the experience mentioned above. Logically, the most difficult—and the most time-consuming—cases are the complaints. These also are most important when the case is one in which the veteran has been denied reemployment.

BASE

Positions: 54. Estimated Cost: $763,600.

ADDITIONAL COST

Positions: 11. Man-years: 9.9. Estimated Cost: $180,000.

BASIS FOR THE ESTIMATE

The derivation of the workload and the staff emphasis have been explained above and are supported by the selected workload table. The staff and selected resources requested will enable the Office to carry out its primary objectives and to partially cope with the increased workload in all categories. It is pointed out that the complaint case workload is expected to rise to 2,800 during fiscal year 1969 and in order to maintain a normal backlog each professional employee will be required to process 100 complaint cases per year. For fiscal year 1969 it is proposed to increase the staff by 11 positions (6 professional and 5 clerical). The 6 additional professional positions and 3 clerical positions will be assigned to the Field to assist in the handling of the complaint caseload. The remaining 2 clerical positions will be in the National Office to help with the receiving and processing of the Forms OVRR–2.

SELECTED WORKLOAD

| | 1966 actual | 1967 actual | 1968 estimate | 1969 estimate [1] |
|---|---|---|---|---|
| Forms OVRR–2 received | 238,000 | 408,392 | 603,390 | 650,000 |
| Processed to veterans | 235,500 | 404,400 | 596,460 | 645,000 |
| Processed to employers | 125,000 | 215,000 | 290,660 | 330,000 |
| Total processed | 360,500 | 619,400 | 887,120 | 975,000 |
| Promotion of compliance: | | | | |
| Compliance review processed | 11,521 | 11,129 | 21,270 | 24,000 |
| Compliance cases processed | 455 | 434 | 605 | 675 |
| Complaint cases: | | | | |
| Carryover at beginning of year | 636 | 460 | 593 | 1,141 |
| Received | 1,648 | 1,565 | 2,670 | 2,800 |
| Closed | 1,824 | 1,432 | 2,122 | 2,700 |
| Pending at end of period | 460 | 593 | 1,141 | 1,241 |
| Pending with OVRR | 353 | 426 | 953 | 1,033 |
| Referred for litigation | 74 | 108 | 86 | 85 |

[1] The workloads to be accomplished are those which are believed to be within the capability of the augmented staff proposed in this estimate. Unless additional staff is available to prevent it, significant backlogs will accumulate in all categories but especially in complaint cases which could exceed 1,600 by the end of fiscal year 1969.

*Activity 5. Executive direction and administrative services*

| | |
|---|---|
| 1968 (positions, 61) | $623,900 |
| 1969 (positions, 61) | 645,000 |

NARRATIVE DESCRIPTION OF PROGRAM

This program provides for the direction and coordination of the functions of the Labor-Management Services Administration; for the coordination of all Department programs and activities which bear directly on the labor-management relations field; and for the management and administrative services in support of the programs of the Labor-Management Services Administration. The Secretary has designated the Assistant Secretary for Labor-Management Relations as the Administrator and has delegated to him the authority and responsibility to carry out the program.

*In 1967*, accomplishments were made in achieving an integrated, balanced and comprehensive labor-management relations program by providing a coordinated focus of operational capabilities on national needs and improved and effective service to the public.

Accomplishments also were reflected in continued and improved application of the Department of Labor Management System to programs of the Labor-Management Services Administration, the initiation of positive programs for employee utilization and competitive recruitment, improvement in financial management, assistance in the development and implementation planning of the new system for control and processing of reports under the Labor-Management Reporting and Disclosure Act and the Welfare and Pension Plans Disclosure Act and generally assisting program managers to improve management, reduce costs and provide more effective service to the public.

Action was continued to extend and improve the application of the Department of Labor Management System in the Labor-Management Services Administration. Guidance and technical assistance to program officials in all areas of the system was continued. Limited training in the Planning-Programming-Budgeting System was provided on a selective basis directed initially to employees directly involved with the application of the system and assisting program officials.

A limited but positive program was initiated in fiscal year 1967 to attain maximum utilization of employee skills. Special emphasis was placed on locating under-utilized employees and increasing their effectiveness by all available and appropriate means, including specialized training.

The Records Management Program instituted within the Labor-Management Services Administration was extended through the initiation of a total review and updating of existing schedules for the retention and disposition of records of the Office of Veterans' Reemployment Rights.

*In 1968*, it is planned to provide executive assistance and staff coordination to the President's cabinet-level committee reviewing the program for Federal employee-management cooperation.

Further attention will be directed to the planning and development of coordinated studies designed to provide the President with additional alternatives for

use in labor-management problems of national significance and to insure that existing alternatives meet current economic and social needs. New legislation or changes in existing legislation which affects labor-management relations will be recommended as deemed necessary to achieve the objective.

Continuing direction will be provided to the activities of the Labor-Management Services Administration to insure coordinated functioning and improved and effective service to the public. Increased emphasis will be placed on assuring the most effective use of available resources among the great variety of needs, while maintaining at minimum levels necessary to preserve the integrity of the statutes being administered, the services and other functions required or authorized by those laws. Particular stress in fiscal year 1968 will be placed on the systems improvement for controlling and processing of disclosure reports, the management of the significantly increasing workloads in the Veterans' Reemployment Rights program, and the application, refinement and utilization of Planning-Programming-Budgeting System principles in the management and operation of the programs of the Labor-Management Services Administration.

The program for maximum utilization of employee skills will be continued with continued special emphasis on locating the under-utilized employees and increasing their effectiveness.

Financial management emphasis will include participation with the Department in the development of the Department-wide computerized cost accounting system, and extension and improvement of internal program financial management in conjunction with the accounting functions of the Department and program managers in the Labor-Management Services Administration.

Further extension of the Records Management System for the Labor-Management Services Administration will be accomplished with the completion and issuance of a functional files classification guide as well as completion of the scheduling of appropriate records of the Office of Veterans' Reemployment Rights. Assistance will be continued to operating managers to improve management, reduce costs and provide more effective service to the public. In addition some special study effort is anticipated on matters arising out of the implementation of the new system for reports processing, control and paperwork management functions under the Labor-Management Reporting and Disclosure Act and the Welfare and Pension Plans Disclosure Act.

*In 1969*, it is planned to continue and, where possible, improve the activities outlined above for fiscal year 1968.

*Changes for 1969*

| | |
|---|---|
| Mandatory changes amount to | +$21,600 |
| Program changes amount to | −500 |

BASIS FOR THE ESTIMATE

The estimate for this activity is based upon maintaining the staff levels of the past several years that are required to provide executive direction to and coordination of the programs administered by the Labor-Management Services Administration, and those required to perform the administrative and management services needed by the program activities and required by the Administration and the Department of Labor.

ACTIVITY 3.—ADMINISTRATION OF REPORTING AND DISCLOSURE LAWS

DISTRIBUTION OF FIELD STAFF

| | 1968 | | | 1969 | | |
|---|---|---|---|---|---|---|
| | Professional | Clerical | Total | Professional | Clerical | Total |
| REGIONAL OFFICES | | | | | | |
| I. New York, N.Y. | 4 | 3 | 7 | 4 | 3 | 7 |
| II. Atlanta, Ga. | 3 | 3 | 6 | 3 | 3 | 6 |
| III. Chicago, Ill. | 3 | 2 | 5 | 3 | 2 | 5 |
| IV. Kansas City, Mo. | 3 | 3 | 6 | 3 | 3 | 6 |
| V. San Francisco, Calif. | 3 | 2 | 5 | 3 | 2 | 5 |
| Total, regional offices | 16 | 13 | 29 | 16 | 13 | 29 |
| AREA OFFICES | | | | | | |
| Region I: | | | | | | |
| New York, N.Y. | 21 | 6 | 27 | 21 | 6 | 27 |
| Boston, Mass. | 10 | 3 | 13 | 10 | 3 | 13 |
| Newark, N.J. | 9 | 2 | 11 | 9 | 2 | 11 |
| Philadelphia, Pa. | 9 | 2 | 11 | 9 | 2 | 11 |
| Buffalo, N.Y. | 8 | 2 | 10 | 8 | 2 | 10 |
| Pittsburgh, Pa. | 6 | 2 | 8 | 6 | 2 | 8 |
| Washington, D.C. | 7 | 2 | 9 | 7 | 2 | 9 |
| Region II: | | | | | | |
| Atlanta, Ga. | 5 | 1 | 6 | 5 | 1 | 6 |
| Nashville, Tenn. | 4 | 1 | 5 | 4 | 1 | 5 |
| Miami, Fla. | 5 | 1 | 6 | 5 | 1 | 6 |
| Santurce, P.R. | 4 | 1 | 5 | 4 | 1 | 5 |
| Region III: | | | | | | |
| Chicago, Ill. | 17 | 6 | 23 | 17 | 6 | 23 |
| Minneapolis, Minn. | 4 | 1 | 5 | 4 | 1 | 5 |
| Detroit, Mich. | 8 | 3 | 11 | 8 | 3 | 11 |
| Cleveland, Ohio | 14 | 4 | 18 | 14 | 4 | 18 |
| Region IV: | | | | | | |
| Kansas City, Mo. | 5 | 1 | 6 | 5 | 1 | 6 |
| Denver, Colo. | 4 | 2 | 6 | 4 | 2 | 6 |
| St. Louis, Mo. | 5 | 1 | 6 | 5 | 1 | 6 |
| Dallas, Tex. | 6 | 1 | 7 | 6 | 1 | 7 |
| New Orleans, La. | 4 | 1 | 5 | 4 | 1 | 5 |
| Region V: | | | | | | |
| San Francisco, Calif. | 9 | 2 | 11 | 9 | 2 | 11 |
| Seattle, Wash. | 4 | 1 | 5 | 4 | 1 | 5 |
| Los Angeles, Calif. | 9 | 2 | 11 | 9 | 2 | 11 |
| Honolulu, Hawaii | 1 | 1 | 2 | 1 | 1 | 2 |
| Total, area offices | 178 | 49 | 227 | 178 | 49 | 227 |
| Total, field staff | 194 | 62 | 256 | 194 | 62 | 256 |
| FIELD OFFICES | | | | | | |
| Atlanta, Ga. | 2 | 2 | 4 | 2 | 2 | 4 |
| Boston, Mass. | 1 | 1 | 2 | 1 | 1 | 2 |
| Chambersburg, Pa. | 3 | 2 | 5 | 5 | 3 | 8 |
| Chicago, Ill. | 3 | 2 | 5 | 3 | 2 | 5 |
| Cleveland, Ohio | 2 | 2 | 4 | 3 | 3 | 6 |
| Dallas, Tex. | 2 | 2 | 4 | 2 | 2 | 4 |
| Denver, Colo. | 1 | 1 | 2 | 1 | 1 | 2 |
| Kansas City, Mo. | 2 | 2 | 4 | 2 | 2 | 4 |
| New York, N.Y. | 3 | 3 | 6 | 5 | 3 | 8 |
| San Francisco, Calif. | 3 | 2 | 5 | 4 | 3 | 7 |
| Total, field staff | 22 | 19 | 41 | 28 | 22 | 50 |

EXPLANATION OF ESTIMATE BY OBJECT

*Personnel compensation, $7,101,910*

The estimate will provide 666 full-time positions of which 306 are assigned to the field service and 360 to the departmental service. The man-year equivalent of these positions will be 630.7. In addition there will be 9.0 man-years of temporary employment. The total estimate includes net increases in mandatory costs totaling $442,410, which includes 10 percent reduction of pay increase costs. (Current year staffing $349,873; program increase of 11 positions, $92,537.)

*Personnel benefits, $549,290*

The 1969 estimate is distributed as follows:

| | |
|---|---|
| Civil service retirement fund | $427,390 |
| Employee group life insurance | 23,800 |
| Employee health benefits | 44,850 |
| Federal Insurance Contributions Act | 4,800 |
| Incentive awards program | 5,000 |
| Employee injury compensation benefits | 250 |
| Relocation allowance | 43,200 |
| Total | 549,290 |

*Travel and transportation of persons, $418,400*

The estimate provides for per diem, mileage, and related transportation costs for 52 departmental and 219 field travelers, and for relocation travel costs. The net decrease of $36,000 is a Management Improvement and Cost Reduction savings of $45,000 in the base plus $9,000 program increase. The following table shows the derivation of these costs:

| | 1968 | 1969 | Change |
|---|---|---|---|
| Number of travelers | 277 | 271 | +6 |
| Number of days traveled | 11,275 | 10,395 | −880 |
| Estimated cost | $454,400 | $418,400 | −$36,000 |

*Transportation of things, $30,800*

The estimate provides for the movement of household goods for 27 employees at an experience factor of $800 per move for this object class; and for the shipment of supplies, equipment, reporting forms, technical assistance and educational exhibits and information materials to field installations. The estimates provide for the following:

| | 1968 | 1969 | Change |
|---|---|---|---|
| Number of household moves | 23 | 27 | +4 |
| Cost of household moves | $18,800 | $21,300 | +$2,500 |
| Other transportation costs | 9,500 | 9,500 | |
| Total | 28,300 | 30,800 | +2,500 |

*Rent, communications, and utilities, $300,000*

The estimate provides for departmental and field communications costs, paid official mail and rental of equipment. The increase of $2,300 in the Working Capital Fund provides for $1,500 mandatory increase and $800 for program increase. The increase of $24,400 in paid official mail is adjustment for imple-

mentation of P.L. 90–206 and $16,400 for the program increase. The increase in Federal telecommunications costs is for the program increase. Additional cost for rental of space is for the program increase.

| | 1968 | 1969 | Change |
|---|---|---|---|
| Working capital fund | $45,300 | $47,600 | +$2,300 |
| Federal telecommunications services | 46,700 | 47,900 | +1,200 |
| Field telephone costs | 62,000 | 62,000 | |
| Paid official mail | 76,700 | 101,100 | +24,400 |
| Rental of equipment | 34,800 | 34,800 | |
| Rental of space | | 6,600 | +6,600 |
| Total | 265,500 | 300,000 | +34,500 |

*Printing and reproduction, $150,200*

The estimate provides for the printing of rules, regulations and interpretation material, new or revised technical assistance pamphlets, informational and educational materials, and publications of special reports and research studies. The increase of $2,500 in the Working Capital Fund provides for $1,600 mandatory increase and $900 program increase. Other printing changes is for the program increase less 10 percent Management Improvement and Cost Reduction savings ($12,000).

| | 1968 | 1969 | Change |
|---|---|---|---|
| Working capital fund | $54,800 | $57,300 | +$2,500 |
| Other printing | 67,900 | 92,900 | +25,000 |
| Total | 122,700 | 150,200 | +27,500 |

*Other services, $406,900*

The estimate provides for advances and reimbursements to other organizations and agencies for services performed, training services, and other miscellaneous services. The increase of $5,700 in Working Capital Fund provides for $2,900 mandatory increase and $2,800 program increase. The increase in BLS-Contract Data Processing Services is for increased pay costs. The change in miscellaneous contractual services is for the program increase.

| | 1968 | 1969 | Change |
|---|---|---|---|
| Working capital fund | $166,400 | $172,100 | +$5,700 |
| BLS—Contract data processing services | 122,700 | 123,500 | +800 |
| Miscellaneous contractual services | 109,200 | 111,300 | +2,100 |
| Total | 398,300 | 406,900 | +8,600 |

*Supplies and materials, $85,500*

The estimate provides for the usual desktop and office supplies required by program operation and support services. The increase of $2,800 in Working Capital Fund provides for $1,800 mandatory increase and $1,000 program increase. The change in other supply costs is for the program increase.

| | 1968 | 1969 | Change |
|---|---|---|---|
| Positions | 655 | 666 | +11 |
| Working capital fund | $58,000 | $60,800 | +$2,800 |
| Other supply costs | 23,600 | 24,700 | +1,100 |
| Total | 81,600 | 85,500 | +3,900 |

*Equipment, $20,000*

The estimate provides for equipment for new positions and for replacement of equipment meeting General Services Administration replacement standards.

| | 1968 | 1969 | Change |
|---|---|---|---|
| Positions | 655 | 666 | +11 |
| Equipment costs | $17,100 | $20,000 | +$2,900 |

SUMMARY OF NEW POSITIONS

| | Number | Grade | Amount |
|---|---|---|---|
| ACTIVITY 4 | | | |
| Field offices: | | | |
| Reemployment rights compliance officer | 6 | GS-12 | $68,766 |
| Secretary | 1 | GS-5 | 5,565 |
| Clerk or stenographer | 2 | GS-4 | 9,990 |
| Total | 9 | | 84,321 |
| Departmental: Clerk | 2 | GS-2 | 8,216 |
| Grand total | 11 | | 92,537 |

INTRODUCTION OF WITNESSES

Senator HILL. Mr. Donahue. We are glad to have you back with us.

Mr. DONAHUE. I might introduce Mr. John Shinn, Deputy Assistant Secretary; Mr. Frank Kleiler, Director, Office of Labor-Management and Welfare-Pension Reports; Mr. Albert Moore, Director, Office of Administration and Management; and Mr. Hugh Bradley, Director, Office of Veterans Reemployment Rights.

PREPARED STATEMENT

I appreciate the opportunity to appear before you. I have a full statement which details the activities which we proposed to carry out.

I will submit that for the record and make a few comments on it.

Senator HILL. We will have that appear in full in the record at this point.

(The statement follows:)

I appreciate this opportunity to appear before the Committee in behalf of an appropriation estimate for the Labor-Management Services Administration.

The Labor-Management Services Administration has been delegated authority and assigned responsibility for essentially all of the labor-management functions vested in the Secretary of Labor. These include administration of the Labor-Management Reporting and Disclosure Act, the Welfare and Pension Plans Disclosure Act, and the provisions of law pertaining to the reemployment rights of veterans; determinations of the appropriateness and equity of employee protective provisions of proposals under the Urban Mass Transportation Act; and responsibilities assigned to the Secretary by Executive Order 10988 which established a formal program of employee-management cooperation in the Federal service. In addition, the Labor-Management Services Administration discharges a wide range of responsibilities for providing appropriate staff assistance and guidance to a variety of parties in particular dispute and problem situations. Such services are provided to the Executive Office of the President, the Secretary and Under Secretary of Labor, legislative committees, other Federal agencies including those with specific labor-management relations functions, and to panels, boards and commissions established to cope with such problems and situations.

For fiscal year 1969, the appropriation request for all activities of the Labor-Management Services Administration is $9,063,000—a net increase of $506,000

over the comparatively adjusted appropriation for the current year. The number of permanent positions financed by the estimate is 666—an increase of 11 over the 655 authorized by the fiscal year 1968 appropriation. The budgeted increase of $506,000 consists of mandatory and financing items which total $383,000, and program changes which total $123,000. The major portion of the mandatory increase is for increased costs under the Postal Revenue and Federal Salary Act of 1967. The increase for program changes reflects $180,000 to finance the 11 new positions which are needed to meet the requirements of increased workload in the Veterans' Reemployment Rights program, partially offset by cost reduction savings of $57,000.

The organization structure and the functional responsibilities of the Labor-Management Services Administration have remained relatively stable over the past four years and are expected to continue essentially unchanged in the foreseeable future. The distribution of resources and the highlights of recent and anticipated functioning of the five major activities of the Administration are these:

LABOR-MANAGEMENT RELATIONS SERVICES

This activity is the Office formerly designated "Employee-Management Relations Services." The Office is maintaining an effective system of reporting on the issues and status of significant dispute situations and is providing special analyses and staff assistance to parties engaged in efforts to resolve some of the more critical collective bargaining and labor relations problems. In this regard reports and analyses were prepared in connection with negotiations in major industries, including auto manufacturing, trucking, rubber, nonferrous metals, and railroads. Staff support was provided to several Presidential Emergency Boards. Work on the study of the longshore industry in East and Gulf Coast ports continues and should be completed this year. Also, an in-depth study of the problems related to the recent dispute involving the railroad shopcrafts currently is under way.

Work continues on review of the employee protective arrangements required by the Urban Mass Transportation Act of 1964, as amended. In cooperation with the Department of Housing and Urban Development, the Office of Labor-Management Relations Services examines and approves proposed employee protective plans and provides assistance to labor and management in meeting and carrying out their responsibilities under the Act.

Last September the President appointed a committee of Cabinet officers to review the status of Federal employee-management relations as they had developed under Executive Order 10988. This committee held 5 days of hearings and currently is examining the problems discussed at the hearing and is analyzing the various recommendations for changes in the Government's system. Staff support is being supplied to the Review Committee by the Office of Labor-Management Relations Services.

In 1969 this Office will perform these and other functions with 17 permanent positions and $355,800. These figures include 3 positions assigned to the President's Advisory Committee on Labor-Management Policy and $150,000 which is used primarily as a contingency fund for the temporary employment and related expenses of experts or consultants and other unanticipated or extraordinary expenses which become necessary in the uncontrollable and unpredictable area of labor-management relations and in efforts to improve the "climate" of collective bargaining.

No additional positions are requested for 1969. A net increase of $6,400 over the 1968 Appropriation principally relates to mandatory salary costs.

LABOR-MANAGEMENT POLICY DEVELOPMENT

This activity is responsible for developing and analyzing policy recommendations on basic labor-management issues and on those relating to Executive Order 10988 and to the statutes administered by other Offices of the Administration. In support of legislative and policy evaluation or development, research in labor-management relations field is conducted, assisted or coordinated as appropriate and possible. Specific issue studies are conducted for use in administrative policy development, in litigation support under the Labor-Management Reporting and Disclosure Act and the Welfare and Pension Plans Disclosure Act, and, to the extent possible, in support of the aims of these two statutes.

Analyses are being made of the emergency disputes provisions of the Railway Labor Act and the Labor-Management Relations Act. The study will include review of experiences in the applications of these provisions with a view to developing an objective assessment of the effectiveness of such provisions and a basis for evaluating recommendations for legislative amendment. Increasing public concern and the impact of work stoppages throughout the economy not only support the need for the ongoing studies but suggest that the Department will have greater need for evaluation and policy guidance in a wide-ranging search for possible solutions to this problem. In other broad problem areas in the labor-management relations field, both in the private and public sector, we plan to study the issues and develop policy recommendations for legislative or administrative action which will promote effectiveness in this field.

We will continue our policy of encouraging, assisting and coordinating as appropriate, the development of meaningful and timely labor-management relations research. Much time continues to be needed for specific issue research and litigation assistance in matters arising in administration of the reporting and disclosure laws and the Federal employee-management relations program under Executive Order 10988.

These and other functions are performed by this Office with a staff of 18 permanent positions and $262,400. For fiscal year 1969, no staff increase is proposed and the estimated $272,000 reflects only a net increase of $9,600 over the 1968 Appropriation which principally relates to mandatory increases.

ADMINISTRATION OF REPORTING AND DISCLOSURE LAWS

This activity consists of the Office of Labor-Management and Welfare-Pension Reports which administers the Labor-Management Reporting and Disclosure Act and the Welfare and Pension Plans Disclosure Act. The program of this Office emphasizes informational and technical assistance activities to promote a high degree of voluntary compliance with the various provisions of the two laws. Spot-checking in detail of reports filed and of books and records required to be maintained in support of such reports, helps to encourage timely and accurate filing of required reports and thus assure their availability for disclosure. Discovered or alleged violations are investigated and willful violators or those otherwise not willing to comply voluntarily with applicable provisions of the laws become the subject of litigation as appropriate.

A major effort for the past year is one—with cooperation and assistance of a management consulting firm under contract—to improve our system of reports control and processing and thereby increase its effectiveness and efficiency. The receipt and control of some 200,000 reports a year is a demanding task in itself. Also involved is coding for data processing, and otherwise utilizing the information contained therein as authorized by the statutes, and assuring that they are complete, at least reasonably accurate, and—above all—available for disclosure as the laws provide. Frankly, we felt our system was not working either well enough or fast enough and sought expert advice on what might be done to improve the situation. The advice we received was to increase our use of automatic data processing methods and systems. A revised processing and control system to do that is being developed for installation in fiscal year 1969. A significant by-product of the improved processing system will be earlier and more accurate knowledge of those reports which are delinquent or deficient as related to organizations, plans or individuals that have filed reports at some time. As a result of quickly providing accurate data on the status of reports, the improved accuracy and control aspects of the new system will increase the efficiency and effectiveness of disclosure to the public—a major purpose of both laws.

It should be clearly understood that these efforts and their ultimate results will produce no tangible savings but rather will permit a better job to be done in the limited areas of receipt, processing, control and disclosure of the reports filed.

The 1969 level of activity throughout all the functions of this Office is projected at approximately the same as planned for the current year. Efforts will continue to improve management and reduce costs in order that as much as possible of the available work may be accomplished. Priorities and administrative decisions on cut-off points for various functions are employed and reviewed frequently. We believe that we are administering these laws in the most effective manner feasible in the circumstances. It is our view also that a reasonably high level of voluntary compliance with the laws continues to be manifest among a majority of the organizations and plans covered by the statutes.

The estimate for fiscal year 1969 for this Office involves 505 positions and $6,819,100, reflecting the same number of positions as for 1968 and a net increase of $261,400 over the 1968 Appropriation principally relates to mandatory costs.

VETERANS' REEMPLOYMENT RIGHTS

This activity consists of the Office of Veterans' Reemployment Rights which provides information and assistance to veterans, reservists, members of the National Guard, and persons rejected for military service, and to their employers. The objective is to assure that these workers understand what rights are guaranteed them by law and how these rights may be exercised, and to promote employer compliance with the reemployment provisions of the Military Selective Service Act of 1967, formerly the Universal Military Training and Service Act.

We are now encountering increased workload in this activity as forecast last year, primarily resulting from two factors. First, the annual rate of releases from the armed forces has risen sharply, reflecting the expiration of required terms of service for those whose military careers began with the expansion of our forces about two years ago. Separations are expected to peak in late fiscal year 1968 and to maintain approximately an 840,000 annual rate through FY 1969. Secondly, the Department of Defense has issued instructions requiring all branches of the armed forces to use the reemployment referral form. In this way, the Office of Veterans' Reemployment Rights receives a form from nearly all veterans being released from active duty, and is thereby enabled to provide authoritative and useful information on the law's benefits and requirements to each veteran and to the employers of those who indicate pre-service employment. On the other hand, the experience of recent years has included a large number of cases involving qualification for and length of vacations, pension plan participation and similar matters relating to proper placement of the veteran on the employment ladder. Significant court decisions have been made in this regard.

Although the workload has grown rapidly in all areas during the first six months of this year, plans have been implemented for increased mechanization of informational mailings, and improved techniques in handling compliance reviews and compliance cases, thereby enabling us to keep pace with work intake in these respects. However, complaint case backlog has increased more that 50 percent over that at the beginning of the year, and at present we cannot process these cases within the desired 90 days or less. The backlog now represents four months' work at present capability levels. At current rates, this is expected to accumulate further to about five and one-half months' work by June 30, 1968.

It is in this context then that our estimate before you today includes an increase of 11 positions and $180,000 to expand the staff and resources of the Office of Veterans' Reemployment Rights so that timely and effective assistance is rendered to those workers whose civilian employment is disrupted in order to meet military commitments. The total estimate for 1969 for this activity is $971,100, providing for 65 positions.

The estimated $971,100 for fiscal year 1969 is an increase of $207,500 over the 1968 request of $763,600. This amount reflects the $180,000 program increase and an increase of $27,500 principally related to mandatory salary costs.

EXECUTIVE DIRECTION AND ADMINISTRATIVE SERVICES

This activity includes my immediate staff assistants, and the Office of Administration and Management. I believe the functions and responsibilities are relatively standard and self-explanatory, and need not be repeated here.

The 1969 estimate provides 61 positions and $645,000, the same as for 1968 except for a net increase of $21,100 over the 1968 Appropriation principally relates to mandatory salary costs.

The Wage and Hour Division which also comes under my supervision is scheduled for appearance later and Mr. Lundquist will make the statement for that organization.

Gentlemen, I, or staff members of the Labor-Management Services Administration here present, will be happy to answer any questions you may have or to provide such additional information as you may wish.

BUDGET REQUEST

Mr. DONAHUE. Mr. Chairman, the Labor-Management Services Administration has authority and responsibility in the Department of Labor for programs which provide specific services to unions and to employers in their roles as participants in the collective bargaining process and in their broader roles as institutions for membership or for employment.

The appropriation request for this year is $9,063,000 which would cover 666 positions. That request, sir, is just about a half million dollars above last year's budget and provides an increase of 11 positions in one element of the administration to which I will address myself later.

Senator HILL. All right, sir.

ADMINISTRATION COMPONENTS

Mr. DONAHUE. The Labor-Management Services Administration is composed of five components. Four of those we propose to continue in 1969 with the same number of personnel and at about the same level of activity as in fiscal year 1968.

In the Office of Labor-Management Services, Office of Labor-Management Policy Development, Office of Labor-Management Welfare and Pension Reports, and Office of Administration and Management, we would hope to be able to maintain the level of activity which has existed in fiscal 1968.

The slight increases in the budget for each of those activities cover only mandatory increases.

OFFICE OF VETERANS REEMPLOYMENT RIGHTS

The only area within the Administration where there is a specific request for a program increase is in the Office of Veterans Reemployment Rights.

Our budget for fiscal year 1968 for this activity covered 54 positions and some $763,000.

The request for fiscal year 1969 would cover 65 positions at $971,000.

Senator HILL. You have a bigger job now.

Mr. DONAHUE. That is right, sir. Very simply, the numbers of servicemen being released has increased. The familiarity of those servicemen with their rights and the obligations of their employers to offer them reinstatement has grown.

As more services are provided, the demand, obviously, increases. We are faced with a situation now where our complaint caseload in the first 6 months of calendar year 1968 is running about 80 percent of our caseload for last year.

We are developing a backlog of complaints that we cannot handle without the increase of 11 people to perform the basic work of veterans' reemployment rights.

This would provide for the addition of six professional and five clerical jobs. It is the bare minimum that we would need to maintain the current level of activity.

VETERANS' ASSISTANCE CENTERS

I might note additionally, Mr. Chairman, that the Office of Veterans' Reemployment Rights is involved in the program that the President announced on January 30 in the development of the one-stop veterans' assistance centers referred to earlier by Mr. Goodwin.

In that operation, sir, we will need additional staff of 21 people to staff those centers. That requirement is not part of this budget request and will be the subject of a supplemental request which is now being developed and will go forward to the committee.

Senator HILL. It will appear in the supplemental?

Mr. DONAHUE. Yes, sir. The request at this time is for a budget that will approximate the fiscal year 1968 budget with the single change being the addition of 11 jobs in the Office of Veterans' Reemployment Rights.

I think that would conclude any comments I wish to make. I will be happy to respond to any questions you wish to ask.

EXPRESSION OF APPRECIATION TO SENATOR HILL

Senator HILL. Mr. Bradley, do you have any comment you wish to make?

Mr. BRADLEY. I will confess that I am one of the oldtimers. This is my 20th appearance before this committee. I certainly want to say to you, Senator, how much we in the Office of Veterans' Reemployment Rights have appreciated your understanding and the assistance which this committee has given us over the years.

You may be sure that thousands of veterans throughout the Nation will be in your debt. It is a pleasure to have worked with you.

Senator HILL. Thank you, sir. The very fine and outstanding service you have rendered our veterans has certainly invited that cooperation, I will say that.

You have done a mighty fine job.

Is there anything you other gentlemen would like to add?

Mr. DONAHUE. While I am not an old-timer, I echo Mr. Bradley's sentiments and regret your decision to retire.

Senator HILL. I appreciate your comments.

You have been doing a good job. We appreciate it very much.

## Wage and Labor Standards Administration

STATEMENT OF MRS. ESTHER PETERSON, ASSISTANT SECRETARY FOR LABOR STANDARDS

ACCOMPANIED BY:

TIMOTHY McGINLEY, ACTING DEPUTY ASSISTANT SECRETARY FOR LABOR STANDARDS
NEAL HERRICK, DIRECTOR, OFFICE OF PLANNING
LARRY GOLD, BUDGET OFFICER
DAVID SWANKIN, ACTING DIRECTOR, BUREAU OF LABOR STANDARDS
ROBERT GIDEL, ASSISTANT DIRECTOR FOR SAFETY, BUREAU OF LABOR STANDARDS
ROBERT VAN ZANT, ADMINISTRATIVE OFFICER, BUREAU OF LABOR STANDARDS
MRS. MARY D. KEYSERLING, DIRECTOR, WOMEN'S BUREAU
MRS. MARY HILTON, DEPUTY DIRECTOR, WOMEN'S BUREAU
THOMAS TINSLEY, DIRECTOR, BUREAU OF EMPLOYEES' COMPENSATION
MRS. CHARLOTTE BOWERS, BUDGET OFFICER, BUREAU OF EMPLOYEES' COMPENSATION
THEODORE SCHWARTZ, CHAIRMAN, EMPLOYEES' COMPENSATION APPEALS BOARD
RICHARD E. MILLER, DIRECTOR, OFFICE OF PROGRAM AND BUDGET REVIEW

### Appropriation Estimate

*"Wage and Labor Standards Administration, Salaries and Expenses*

*"For expenses necessary for the Wage and Labor Standards Administration, including not less than $518,000 for the President's Committee on Employment of the Handicapped, as authorized by the Act of July 11, 1949 (63 Stat. 409), $12,177,000: Provided, That no part of the appropriation for the President's Committee shall be subject to reduction or transfer to any other department or agency under the provisions of any existing law."*

### APPROPRIATION ESTIMATE

"[Bureau of Labor Standards, Salaries and Expenses]

"[For expenses necessary for the Bureau of Labor Standards, including the promotion of industrial safety, employment stabilization, and amicable industrial relations for labor and industry; performance of safety functions of the Secretary under 5 U.S.C. 7902, and the Longshoremen's and Harbor Workers' Compensation Act, as amended (33 U.S.C. 941); and not less than $500,000 for the work of the President's Committee on Employment of the Handicapped, as authorized by the Act of July 11, 1949 (63 Stat. 409); $4,429,000: *Provided*, That no part of the appropriation for the President's Committee shall be subject to reduction or transfer to any other department or agency under the provisions of any existing law.]"

APPROPRIATION ESTIMATE

"[WOMEN'S BUREAU, SALARIES AND EXPENSES]

"[For expenses necessary for the work of the Women's Bureau, as authorized by the Act of June 5, 1920 (29 U.S.C. 11–16), including purchase of reports and material for informational exhibits, $912,000.]"

APPROPRIATION ESTIMATE

"[BUREAU OF EMPLOYEES' COMPENSATION, SALARIES AND EXPENSES]

"[For necessary administrative expenses, $5,408,000, together with not to exceed $68,000 to be derived from the fund created by section 44 of the Longshoremen's and Harbor Workers' Compensation Act, as amended (33 U.S.C. 944).]"

EXPLANATION OF LANGUAGE CHANGES

A new appropriation, "Wage and Labor Standards Administration, Salaries and Expenses," is proposed for 1969. This new appropriation is composed of the Bureau of Labor Standards, Women's Bureau, and Bureau of Employees' Compensation, Salaries and Expenses Accounts, which are no longer shown as separate appropriations in 1969, and funds from other account. Additional funds are requested to finance this new administration.

The transfer of administrative and a portion of benefit costs for the Longshoremen's Rehabilitation Program to Activity 6, "Providing Compensation for Persons Covered by Federal Workmen's Compensation Laws" is also proposed. This program has been financed by reimbursement and payments from the Longshoremen's and Harbor Workers' Trust Fund created by Section 44 (33 U.S.C. 944).

A detailed explanation of this change follows in Activity 6 of the budget justification.

INTRODUCTORY STATEMENT

The Wage and Labor Standards Administration, Salaries and Expenses, appropriation request for 1969, submitted in this form for the first time, represents a proposed consolidation of three existing appropriations within the Department of Labor. These appropriations are:

Bureau of Labor Standards, Salaries and Expenses.

Women's Bureau, Salaries and Expenses.

Bureau of Employees' Compensation, Salaries and Expenses.

In addition, the Employees' Compensation Appeals Board, which was formerly in the "Office of the Secretary, Salaries and Expenses" appropriation, is proposed for incorporation in this account. The amounts in the 1968 column of this submission are shown as comparative transfers.

This consolidation is proposed to implement the objectives of the new Wage and Labor Standards Administration which was created by the Secretary of Labor. A major reason for the creation of this Administration is the inter-relationship of the programs involved and the need for coordinating their common problems and activities. The three bureaus and the Federal Employees' Compensation Appeals Board retain their separate organizational identity within the Administration and are shown as separate activities within the new budget structure.

The proposed activity structure is as follows:

1. Executive direction, planning and evaluation. (This activity includes the immediate Office of the Administrator and the Office of Planning.)

2. Appeals from determinations of Federal employee claims. (This activity describes the Employees' Compensation Appeals Board.)

3. Improving safety and other working conditions of wage earners. (This activity describes the work of the Bureau of Labor Standards and comprises activities 1, 3 and 4 of the 1968 Bureau of Labor Standards, Salaries and Expenses Appropriation.)

4. Promoting employment of the handicapped. (This activity describes the President's Committee on Employment of the Handicapped, and was activity 2 of the 1968 Bureau of Labor Standards, Salaries and Expenses Appropriation.)

5. Advancing opportunities and status of women. (This activity describes the Women's Bureau program.)

6. Providing compensation for persons covered by Federal Workmen's Compensation Laws. (This activity describes the administration of the Bureau of Employees' Compensation.)

AMOUNTS AVAILABLE FOR OBLIGATION

| | 1968 | 1969 |
|---|---|---|
| Appropriation or estimate | | $12,177,000 |
| Comparative transfers from: | | |
| Bureau of Labor Standards, salaries and expenses | $4,419,000 | |
| Bureau of Employees' Compensation, salaries and expenses | 5,425,000 | |
| Longshore Trust Fund | 68,000 | |
| Women's Bureau, salaries and expenses | 920,300 | |
| Office of the Secretary, salaries and expenses | 247,970 | |
| Amount reserved under H.J. Res. 888 (Public Law 90–218) | [1] —290,000 | |
| Amount of reserve applied to increased pay costs | [1] 290,000 | |
| Appropriation or estimate, revised | 11,080,270 | 12,177,000 |

[1] Bureau of Labor Standards, $121,000; Women's Bureau, $19,000; Bureau of Employees' Compensation $150,000.

OBLIGATIONS BY ACTIVITY

| Description | Appropriation revised, 1968 | | Estimate, 1969 | | 1969 change | |
|---|---|---|---|---|---|---|
| | Position | Amount | Position | Amount | Position | Amount |
| 1. Executive direction, planning and evaluation | 9 | $147,770 | 19 | $417,500 | +10 | +$269,730 |
| 2. Appeals from determinations of Federal employees claims | 9 | 142,700 | 9 | 149,800 | ---- | +7,100 |
| 3. Improving safety and other working conditions of wage earners | 300 | 3,886,100 | 313 | 4,313,200 | +13 | +427,100 |
| 4. Promoting employment of the handicapped | 34 | 512,400 | 34 | 518,000 | ---- | +5,600 |
| 5. Advancing opportunities and status of women | 76 | 920,300 | 76 | 967,000 | ---- | +46,700 |
| 6. Providing compensation for persons covered by Federal workmen's compensation laws | 579 | 5,471,000 | 579 | 5,811,500 | ---- | +340,500 |
| Total obligations | 1,007 | 11,080,270 | 1,030 | 12,177,000 | +23 | +1,096,730 |

OBLIGATIONS BY OBJECT

| | Appropriation revised, 1968 | Estimate, 1969 | 1969 Change |
|---|---|---|---|
| Total number of permanent positions | 1,007 | 1,030 | +23 |
| Average number of all employees | 929 | 985 | +56 |
| 11 Personnel compensation | $8,588,991 | $9,415,692 | +$826,701 |
| 12 Personnel benefits | 710,574 | 774,621 | +64,047 |
| 21 Travel and transportation of persons | 499,370 | 572,070 | +72,700 |
| 22 Transportation of things | 38,850 | 38,250 | —600 |
| 23 Rent, communications, and utilities | 337,392 | 364,014 | +26,622 |
| 24 Printing and reproduction | 352,811 | 380,575 | +27,764 |
| 25 Other services | 155,340 | 196,354 | +41,014 |
| Services of other agencies | 194,026 | 236,530 | +42,504 |
| 26 Supplies and materials | 118,318 | 133,196 | +14,878 |
| 31 Equipment | 84,598 | 59,698 | —24,900 |
| 42 Insurance, claims and indemnities | | 6,000 | +6,000 |
| Total obligations | 11,080,270 | 12,177,000 | +1,096,730 |
| Working capital fund items included above | (454,850) | (550,450) | (+95,600) |

SUMMARY OF CHANGES

| | Appropriation | | Trust fund | | Total available | |
|---|---|---|---|---|---|---|
| | Positions | Amount | Positions | Amount | Positions | Amount |
| 1968 enacted appropriation | | | | | | |
| Comparative transfers from— | | | | | | |
| Bureau of Labor Standards, salaries and expenses | 336 | $4,419,000 | | | 336 | $4,419,000 |
| Women's Bureau, salaries and expenses | 76 | 920,300 | | | 76 | 920,300 |
| Bureau of Employees' Compensation, salaries and expenses | 574 | 5,425,000 | | | 574 | 5,425,000 |
| Longshore Trust Fund | | | 7 | $68,000 | 7 | 68,000 |
| Office of the Secretary, salaries and expenses | 14 | 247,970 | | | 14 | 247,970 |
| Amount reserved under H.J. Res. 888 (Public Law 90-218) | | [1] −290,000 | | | | −290,000 |
| Amount of reserve applied to increased pay costs | | [1] 290,000 | | | | 290,000 |
| 1968 appropriation, revised | 1,000 | 11,012,270 | 7 | 68,000 | 1,007 | 11,080,270 |
| 1969 estimate | 1,030 | 12,177,000 | | | 1,030 | 12,177,000 |
| Total change | +30 | +1,164,730 | −7 | −68,000 | +23 | +1,096,730 |
| Mandatory items: | | | | | | |
| Increases: | | | | | | |
| Net additional pay increase costs not completely funded in 1968 | | | | | | +380,930 |
| Net additional costs of within-grade promotions effective for part year in 1968 | | | | | | +46,600 |
| Net cost of within-grade promotions becoming effective in 1969 | | | | | | +77,500 |
| To provide for one extra day of pay in 1969 for current year staff | | | | | | +37,500 |
| Subtotal, increases | | | | | | +542,530 |
| Decreases: | | | | | | |
| Decreased cost for Federal Telecommunications System services | | | | | | −11,800 |
| To provide for a net decrease in contributions to the Federal Employees' Compensation Fund | | | | | | −1,500 |
| Subtotal, decreases | | | | | | −13,300 |
| Total, mandatory items | | | | | | +529,230 |
| Financing items: To provide for full cost of centralized services purchased from the working Capital Fund | | | | | | +77,200 |
| Program Items: | | | | | | |
| Increases: | | | | | | |
| To provide additional staff for policy development, program coordination and research ($168,100 personal services; $95,500 nonlabor costs) | | | | | +10 | +263,600 |
| To expand safety and health inspection to additional establishments covered by Federal procurement contracts ($157,600 personal services; $56,400 nonlabor costs) | | | | | +13 | +214,000 |
| To provide for general fund financing for the administration of the Longshoremen's and Harbor Workers' Act ($60,030 personal services; $7,970 nonlabor costs) | | | | | +7 | +68,000 |
| To provide for the cost of benefits for compensation under section 44 of the Longshoremen's and Harbor Workers' Act ($6,000 nonlabor costs) | | | | | | +6,000 |
| Net full year cost of new positions approved in 1968 ($40,620 personal services; $7,280 nonlabor costs) | | | | | | +47,900 |
| Subtotal, increases | | | | | +30 | 599,500 |
| Decreases: | | | | | | |
| Decrease in the transfer from the Longshoremen's and Harbor Workers' Trust Fund ($60,030 personal services $7,970 nonlabor costs) | | | | | −7 | −68,000 |
| Nonrecurring costs of new positions approved in 1968 ($41,200 nonlabor costs) | | | | | | −41,200 |
| Subtotal, decreases | | | | | −7 | −109,200 |
| Total, program items | | | | | +23 | +490,300 |
| Total change | | | | | +23 | +1,096,730 |

[1] Bureau of Labor Standards, $121,000; Women's Bureau, $19,000; Bureau of Employees' Compensation, $150,000.

MANDATORY AND FINANCING CHANGES BY ACTIVITY

| Type of change | Activity 1 | | Activity 2 | | Activity 3 | | Activity 4 | | Activity 5 | | Activity 6 | | Activity, total | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | Positions | Amount | Positions | Amount | Positions | Amount | Positions | Amount | Positions | Amount | Positions | Amount | Positions | Amount |
| Mandatory items: | | | | | | | | | | | | | | |
| Net additional pay increase costs | | +$3,730 | | +$4,000 | | +$148,100 | | +$5,600 | | +$26,000 | | +$193,500 | | +$380,930 |
| Net additional cost of within-grade promotions effective for part year in 1968 | | +450 | | +350 | | +19,200 | | | | +4,400 | | +22,200 | | +46,600 |
| Net within-grade promotion costs initially effective in 1969 | | +900 | | +2,300 | | +34,200 | | | | +3,300 | | +36,800 | | +77,500 |
| Contributions to FEC fund | | | | | | −1,000 | | | | +100 | | −600 | | −1,500 |
| To provide for 1 extra day of pay in 1969 for current year staff | | +1,050 | | +450 | | +12,700 | | +1,200 | | +3,000 | | +19,100 | | +37,500 |
| Decreased costs for Federal telecommunication services | | | | | | −8,800 | | | | −100 | | −2,900 | | −11,800 |
| Subtotal, mandatory items | | +6,130 | | +7,100 | | +204,400 | | +6,800 | | +36,700 | | +268,100 | | +529,230 |
| Financing items: Cost of centralized services | | | | | | +18,100 | | | | +10,000 | | +49,100 | | +77,200 |
| Total | | +6,130 | | +7,100 | | +222,500 | | +6,800 | | +46,700 | | +317,200 | | +606,430 |

*Mandatory and Financing Changes for 1969*

MANDATORY ITEMS

| | |
|---|---|
| Increases: To provide for full year cost of pay increases effective Oct. 8, 1967 and to provide full funding of part-year costs | $380,930 |
| Within-grade promotion costs: 1969 net additional cost of within-in-grade promotions effective for part-year in 1968 | +50,400 |
| Personnel compensation | 59,935 |
| Deduct lapse | −1,819 |
| Deduct savings due to turnover | −11,616 |
| Personnel benefits | 3,900 |
| Net cost | 50,400 |
| Absorption of a portion of above increases | −3,800 |
| Adjusted net additional cost of within-grade promotions effective for part year in 1968 | 46,600 |
| Net cost of within-grade promotions becoming effective during 1969 | +80,900 |
| Personnel compensation | 97,340 |
| Deduct lapse | −7,734 |
| Deduct savings due to turnover | −15,306 |
| Personnel benefits | 6,600 |
| Net cost | 80,900 |
| Absorption of a portion of above increases | −3,400 |
| Adjusted net cost of within-grade promotions becoming effective during 1969 | 77,500 |
| To provide for 1 extra day of pay in 1969 for current year staff | 37,500 |
| Decreases: Decreased cost for Federal Telecommunications Systems Services | −11,800 |
| Decreased contributions to FEC Fund | −1,500 |
| Total, mandatory items | +529,230 |

FINANCING ITEMS

| | |
|---|---|
| Amount originally in base budget | 445,030 |
| Amount current required in base budget | 532,230 |
| Changed financing required | +77,200 |

NOTE.—Changes in fees charged for centralized services (such as visual exhibits or reproduction) and changes in anticipated services rendered by the working capital fund require adjustments to the funds provided in the base budget.

## PROGRAM CHANGES BY ACTIVITY

| | | Activity 1 | | Activity 2 | | Activity 3 | | Activity 4 | | Activity 5 | | Activity 6 | | Activity, total | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | | Positions | Amount | Positions | Amount | Positions | Amount | Positions | Amount | Positions | Amount | Positions | Amount | Positions | Amount |
| 11 | Personnel compensation | +10 | +$158,600 | | | +13 | +$146,500 | | | | | +$37,800 | | +23 | +$342,900 |
| 12 | Personnel benefits | | +9,500 | | | | +11,100 | | | | | +2,900 | | | +23,500 |
| 21 | Travel and transportation of persons | | +38,300 | | | | +36,400 | | | | | −2,000 | | | +72,700 |
| 22 | Transportation of things | | | | | | +8,000 | | | | | −8,600 | | | −600 |
| 23 | Rent, communications, and utilities | | +11,800 | | | | +3,000 | | | | | +6,000 | | | +20,800 |
| 24 | Printing and reproduction | | +2,500 | | | | +1,000 | | | | | +300 | | | +3,800 |
| 25 | Other services | | +38,400 | | | | +2,000 | | | | | +700 | | | +41,100 |
| 26 | Supplies and materials | | +2,000 | | | | +2,800 | | | | | +200 | | | +5,000 |
| 31 | Equipment | | +2,500 | | | | −6,200 | | −$1,200 | | | −20,000 | | | −24,900 |
| 42 | Insurance claims and indemnities | | | | | | | | | | | +6,000 | | | +6,000 |
| | Total | +10 | +263,600 | | | +13 | +204,600 | | −1,200 | | | +23,300 | | +23 | +490,300 |

*Activity 1. Executive direction, planning and evaluation*

| | |
|---|---|
| 1968 (positions, 9) | $147,770 |
| 1969 (positions, 19) | 417,500 |

NARRATIVE DESCRIPTION OF PROGRAM

The Wage and Labor Standards Administration was established by Secretary's Order No. 15–67 on July 21, 1967. The Order delegated to the Assistant Secretary for Wage and Labor Standards the authority vested in the Secretary of Labor for wage and labor standards programs and established a Wage and Labor Standards Administraiton. The Assistant Secretary serves as Administrator.

In establishing the Administration the Order noted that there is need for one central body in the Federal Government to identify and monitor those working conditions, problems and needs of the American worker, that fall within the Wage and Labor Standards area. The bureaus that are a part of this Administration have responsibilities in such areas as occupational safety and health, workmen's compensation, equal pay, child labor, status of women workers and consumer problems of workers. The immediate Office of the Administrator and the Office of Planning have been established to provide unified executive direction, policy planning and budgeting for the entire Wage and Labor Standards Program.

In 1968 steps have already been taken to assure that the inter-relationships of the several wage and labor standards programs are taken into account in formulating consistent Administration policies and in developing unified approaches to problems cutting across bureau lines. A wage and labor standards policy development committee, chaired by the Administrator, has been established. In addition, a number of research and cost benefit analysis projects are being developed dealing with major problems (e.g., reducing the time-lag between the date Federal employees are injured and the date they receive compensation, exploring the potential of a youth wage policy for increasing youth employment.) A consolidated budget is being presented and an Administration-wide research inventory is being developed to avoid duplication of research. It is expected that this inventory will eventually embrace all research, both governmental and non-governmental, in the wage and labor standards area.

*Changes for 1969*

| | |
|---|---|
| Mandatory changes amount to | +$6,130 |
| Program changes amount to | +263,600 |
| Positions | +10 |

The Administration has begun—with a small staff and very limited resources—to carry out some of its responsibilities. However, it has not been able to undertake many of the activities and projects which are vital to its effective operation. An additional ten positions and $263,600 is requested for:

1. A program officer and three program analysts who will conduct a continuing review and analysis program, identify program problems and participate in the development of solutions; recommend, in conjunction with the bureaus, new legislative proposals to the Administrator; and initiate and coordinate bureau research projects. Among the projects planned are on-site evaluations of bureau operations and the development of a coordinated wage and labor standards research program. Specific studies planned, for accomplishment in conjunction with the bureaus, are: a review of the need for extending Federal workmen's compensation coverage to "left out" workers who are not presently covered by any workmen's compensation law, an identification from inadequate working conditions, and an examination of the Federal role in the setting of occupational safety standards.
2. A budget officer to coordinate all Administration budget activities.
3. A special assistant to the Administrator to work on consumer and other major problems of workers and on an Administration-wide information system.
4. Four clerical positions to support the above professional positions.

BASE

Positions: 9. Estimated cost: $147,770.

ADDITIONAL COST

Positions: 10. Man-years: 8.9. Estimated cost: $263,600.

BASIS FOR THE ESTIMATE

This estimate is based upon the resources being used to accomplish the very limited objectives for Fiscal Year 1968. The current volume of special projects, reports, evaluations, legislative proposals, budget documents, correspondence, and liaison contacts with other agencies—governmental and non-governmental—indicates that the requested positions and funds will be needed to sustain an even moderately effective Office of the Administrator and Office of Planning. Savings will be realized through using permanent staff rather than consultants to the maximum extent possible in the conduct of evaluations.

*Activity 2. Appeals from determinations of Federal employee claims*

| | |
|---|---|
| 1968 (Positions 9) | $142,700 |
| 1969 (Positions 9) | 149,800 |

NARRATIVE DESCRIPTION OF PROGRAM

The Employees' Compensation Appeals Board hears and decides appeals from decisions of the Bureau of Employees' Compensation and of the Governor of the Canal Zone in cases arising under the Federal Employees' Compensation Act. The jurisdiction includes, among several other special categories, all civil officers and employees of all branches of the Government of the United States, including the Canal Zone Government, Panama Canal Company, and District of Columbia Government, except members of the Police and Fire Departments.

WORKLOAD STATISTICS

| | Actual, 1966 | Actual, 1967 | Estimate, 1968 | Estimate, 1969 |
|---|---|---|---|---|
| Pending cases, beginning of period | 97 | 68 | 88 | 75 |
| Appeals docketed | 298 | 288 | 300 | 300 |
| Cases closed | −327 | −268 | −313 | −300 |
| Pending cases, end of period | 68 | 88 | 75 | 75 |
| Cases in which hearings were held | 66 | 37 | 50 | 50 |
| Opinions rendered | 267 | 221 | 250 | 250 |

*Changes for 1969*

| | |
|---|---|
| Mandatory changes amount to | +$7,100 |
| Program changes | None |

BASIS FOR ESTIMATE

This estimate is based on the number of cases, the complexity of each case and the estimated man-hours needed for each determination.

*Activity 3. Improving safety and other working conditions of wage earners*

| | |
|---|---|
| 1968 (positions, 300) | $3,886,100 |
| 1969 (positions, 313) | 4,313,200 |

NARRATIVE DESCRIPTION OF PROGRAM

This program provides for carrying out safety promotional and inspectional activities in the maritime industries; providing consultative services to Federal agencies and serving as secretariat for the Federal Safety Council; providing safety engineering, consulting and training services for personnel of State governments, private industry, municipal, public and labor organizations; conducting research directed toward establishment of safety codes and standards; obtaining compliance with minimum safety standards which are applicable to contractors engaged in performing services or furnishing goods to the Government; serving as a national resource for technical information on all types of labor laws and administrative techniques; reviewing economic and legal developments and appraising State experience as a basis for development of new or improved standards for giving advisory technical assistance to State labor departments; and directing the work of the Bureau of Labor Standards.

In 1967 under the *Maritime Safety program* preliminary figures indicate that man-hours of covered employment will equal or exceed the all-time high of 234 million reached in 1966. In 1965 total man-hours were 206 million. These continuing increases reflect higher employment, longer hours and multiple shifts.

In terms of specific actions and results:

1. Accident rates in the shipyard industry declined 9 percent, employers report ing a rate of 23.6 in 1966 as opposed to 25.9 in 1965. Accident frequency rates in longshoring decreased 6 percent in 1966 to a rate of 81.4 comparable with 86.9 in 1965 per million hours of work. This still represents the highest injury rate of any industry.

2. Based on the 1960 accident rates, it is estimated that 22,051 additional injuries would have occurred up to 1966. Many authorities set the medical and compensation costs of the average injury at $1,500. On the basis of this figure the program saved for employers $33,076,500 in the first 6 years of operation. During this same period, administrative costs have totaled $7 million in appropriated funds.

3. A total of 24,834 work operations were inspected; 4,857 violation notices issued; and 8 legal actions instituted.

In *contract safety* specific enforcement actions for approximately 400,000 employees of Public Contracts Act suppliers provided improved safety and health conditions.

Twenty-four hearing actions were conducted to enforce compliance under the Public Contracts Act. As a result, 3 firms became ineligible to receive Federal supply contracts for a period of 3 years.

The Bureau took the following steps to implement and improve the Contract Safety program:

1. Developed safety and health regulations for the Vocational Rehabilitation Act and assisted Health, Education and Welfare in recruiting consultants to make safety inspections of workshops under the Act.

2. Developed safety and health regulations for the Arts and Humanities Act.

3. Conducted a public hearing and then implemented safety and health regulations for the Service Contracts Act.

4. Conducted a series of meetings with State officials and interested groups from the private sector on the actions and plans under the Contracts Safety program.

5. Participated in the Secretary's issuance of a Federal standard for radiation exposures in uranium mining.

6. Began joint inspections of over 150 uranium mines with U.S. Bureau of Mines personnel and instituted action to bring mines into conformance with the Federal radiation standard.

*Federal Employee Safety.*—Mission SAFETY–70 was initiated on February 16, 1965, by the President at which time he stated "further improvement in the safety record of individual agencies as well as the Federal Government as a whole must be attained." He called for a 30-percent reduction in work injuries and their costs by 1970. The program currently covers 2.8 million Federal civilian employees.

During 1967—

1. An overall improvement of 5.5 percent in the Federal injury frequency rate occurred with a total improvement of 12.7 percent recorded toward the President's 30 percent goal.

2. Estimated direct savings of nearly $8 million have been achieved, exclusive of avoidance of costly damage to equipment, materials, and facilities. (Number of injuries averted (10,628) times average compensation cost case ($720) equals $7,652,160.)

*Research and Training.*—The Bureau gave 25,443 trainee hours of safety training to State employees, labor unions, and industrial groups; and 55,513 trainee hours were given to Federal employees.

A total of 31 new safety texts, bulletins, and data sheets were published, most of which were put on sale by the Superintendent of Documents and given national circulation.

A comprehensive State safety law library and index was developed and made available and used by the general public, institutions, members of Congress, States, industry, and unions.

The technical staff participated as working members of the Federal Radiation Council in reviewing and analyzing matters concerned with safety and health problems arising out of the use of high energy sources.

Staff participated in almost 200 standards-setting and development activities with United States of America Standards Institute to strengthen national safety codes.

*Other Labor Standards.*—The bureaus' promotion of improved wage and labor standards by State legislative enactment has a greater impact on the disadvantaged than on high wage workers, conferring on them relatively greater protection than on other segments of the population, which are more apt to be enjoying the benefits of collective bargaining agreements or more favorable employer practices. This is especially true of minimum wage laws which bring the lowest wage earners in the economy closer to a decent standard of living.

In February 1967, State minimum wage laws covered over 3 million of the 11.4 million nonsupervisory employees not covered by the Federal Fair Labor Standards Act. In addition, State laws also covered millions of the 41.4 million Federally covered employees. Moreover, the majority of the State laws contain one or more standards that exceed Federal standards, thereby providing more favorable wage, overtime or trip-allowance protection to employees covered by State law irrespective of Federal coverage. In February 1967, 8.3 million nonsupervisory employees were not covered by either Federal or State laws. Since that time, 19 States and Puerto Rico took minimum wage action, disproving earlier forecasts that extension of the Federal law would deter State activity in this field. This recent State action thus reached a portion of the 8.3 million employees not covered by either law in February 1967 and dipped further into the millions already covered by Federal law, but a quantitative measure of this change has not yet been determined.

1967 was a very active year both in the volume and range of legislation enacted in the States and in the demands made on the Bureau for technical information and advisory services. Almost 3,200 specific labor proposals (incorporated in some 6,000 bills) were introduced into the 47 State legislatures and Puerto Rico which met in regular session. Six hundred laws had been enacted. These represented a broad spectrum of improved laws. Especially impressive are the gains made in States west of the Mississippi. Illustrative of the legislative accomplishments are:

A new minimum wage law in Nebraska and substantial wage improvements in Minnesota, Connecticut, Idaho, Indiana, Maine, Maryland, Nevada, New Mexico, Rhode Island, Vermont, Washington.

Increased protection either in State safety or workmen's compensation laws for workers exposed to ionizing radiation in 17 State. Four of the New England States have entered into the New England Compact on Radiological Health Protection to share information, personnel and resources to promote such programs.

A ban on discharges because of wage garnishment in Hawaii and Connecticut, and increased wage protection for garnished workers in Arkansas, Connecticut, Maine, and Tennessee.

Improved labor relations for public employees in Hawaii, Montana, Minnesota, New Jersey, New York, North Dakota, Rhode Island, Vermont, and Washington.

A new State labor relations act in Vermont, a first-time prevailing wage law in Wyoming.

Wage assignment authority on wage claims in Idaho and Montana.

Improved workmen's compensation protection in about half the States.

The Bureau's staff gave 1,180 on-the-spot technical services in 41 State government agencies on almost all aspects of labor administration.

Services were also provided to such non-government groups as unions, employer associations, church, civic, and consumer groups in an effort to develop interest in and support for improvements in State laws and their administration.

Other activities included participation in Departmental activites relating to (1) a Federal proposal to prohibit age discrimination in employment; (2 )a reassessment of Federal child labor standards; (3) a study and evaluation of women's protective laws in the light of Title VII of the Civil Rights Act; and (4) leadership in a detailed examination of wage granishment problems and activities. A revised issue of the popular bulletin "Growth of Labor Law in the United States" was prepared, as was a draft bill to regulate the commercial practice of debt-pooling and another covering a suggested prevailing wage bill. On-site consultative follow-up service was provided the Territory of Guam in establishing a labor department and drafting a labor code.

The Bureau's standards-setting responsibilities under the Fair Labor Standards Act affect, directly or indirectly, over 6 million boys and girls 14 through 17 years of age who worked at some time during the past year. These regulations serve to prevent exposure to injuries in certain specific hazardous occupations without substantially affecting overall youth employment opportunities. Effective January 1, 1968 nearly 800,000 youngsters under 16 who work in agriculture will be protected from exposure to injuries in particularly hazardous agricultural occupations. This extended coverage will not unduly retrict agricultural employment opportunities for youth.

To implement its new responsibilities under the 1966 amendments to the Fair Labor Standards Act, the Bureau:

Initiated, in cooperation with the States, procedures to issue Employment Certificates to minors under 16 employed in agriculture.

Investigated work situations in schools, hospitals, hotels and motels, and amusement and receration facilities to determine suitable areas for employment of 14- and 15-year olds.

Developed and held public hearings on a *proposed* interim Hazardous Occupations Order in Agriculture for employment of youth under 16.

Completed an initial investigation of school bus drivers under 18 years of age, as part of a comprehensive revision of hazardous orders.

The most significant proposals resulting from review of the Hazardous-Occupations Orders and child labor regulations are those of general application designed to encourage the wider use of formal training programs as an avenue of possible increased employment of youth, consistent with adequate considerations for their health, education and general well-being.

In *1968*, in *maritime safety*, under newly-appropriated funds, maritime safety specialists will be recruited, trained and stationed in district offices where workload pressures are greatest.

Some 355,000 maritime employees covered by the Safety Act represent every mechanical craft. Last year over 400,000 longshore operations and 35,000 shipyard work operations in some 500 large and small ports took place on ocean coasts, inland waterways and the Great Lakes.

An overall 6 percent reduction of injuries will be sought during fiscal year 1968 to continue the downward trend which began with the onset of the program seven years ago.

Developmental work will be initiated for regulations covering new hazards arising out of change in industry technology, particularly with regard to the increasing use of container-type ships, representing a new and complex series of work operations in longshoring.

*Contract Safety.*—Existing staff of Public Contracts field safety engineers permits no more than a token inspectional and compliance effort. Deployment of the 10 engineers throughout the country must necessarily be responsive to critical or complaint situations rather than to any sort of systematized inspectional plan. To the extent possible—and feasible—scheduling of inspections will take into account particularly hazardous operations, larger Federal contractor plants, increased work assignments, and utilization of other (e.g., maritime) inspectors to cover Public Contracts Act work in shipbuilding or similar activities. In Service Contracts, inspectional activity will be initially directed at a cross section of diverse activities to determine the most effective way to cover the broad Federal procurement area.

*Federal Employee Safety.*—Major emphasis will continue to be placed on services tied into Mission SAFETY–70. Despite decreases in the Federal injury rate in the 1964–1966 period, Bureau of Employees' Compensation data for the first six months of 1967 indicate a 10–15 percent increase in employee injuries, attributable in part at least to higher employment levels.

Program objectives include:

1. Further percent reduction of Federal work injuries.
2. Seminars and training sessions stimulating off-the-job safety where maximum results are obtainable.
3. Initiating improved methods for Federal accident reporting and accounting systems.
4. Increase coordination between the Civil Service Commission training program and the Bureau's Federal safety training activities.

*Research and Training.*—Training and educational programs for Federal, State, and local governments, unions, special industry associations and management groups will continue at approximately the fiscal year 1968 level.

Participation on safety standards setting committees and boards will be continued and direct promotional activities undertaken to establish new and updated national safety standards.

Participation with individual agencies and working committees at the setting of radiation hazards and exposure standards by the Federal Radiation Council.

Compile and analyze employee radiation exposure records reported by employers to determine adequacy of standards and worksite protection needs.

State safety code comparison studies will concentrate on high-hazard industries such as construction.

Continue service as a national safety informational center by enlarging technical library and abstracts.

*Other Labor Standards.*—The Bureau will intensify its promotional and resource role in achieving corrective action to remedy wage garnishment problems. Information and technical advisory services to the States will be continued through the Bureau's field consultants.

A major program activity of the Bureau will be to stimulate and expand research at all levels—Bureau, State, and local—on existing working conditions of minors. These program plans include collection of data on work injuries of minors and information about on-the-job supervision of young workers, particularly those from underprivileged economic surroundings.

In addition, program plans include publication of increased employment opportunities in nonhazardous occupations and further investigation of new or changing occupations warranting coverage as a result of changing technology in industrial processes.

A private contractor is now studying Federal-State relationships in the labor standards area to recommend possible improvements (e.g., methods of dealing with the problems caused by dual coverage). When field interviews now nearing completion in the 12 States under intensive study are analyzed, detailed information will have been compiled from 30 jurisdictions and partial information from 10 more. Some 34 labor and business groups from 25 States have replied to questionnaires as "consumers" of Federal-State labor administration. Work on initial drafts of the final report and recommendations will start in January 1968. Much of the follow-up coordination will fall on the Bureau.

*Changes in 1969*

| | |
|---|---|
| Mandatory changes amount to | +$204,400 |
| Financing changes amount to | +18,100 |
| Program changes amount to | +204,600 |
| Positions | +13 |

Program expansions and accurate workload measurements have indicated a doubling of the workload in the Contracts Safety Program. The Department has established new regulations for radiation in the mining industry which because of the technical aspects of inspection and enforcement require above-normal-manhour-per-case time. This budget request for 13 safety engineers assist the Bureau in carrying out the Contract Safety Program somewhat closer to minimum acceptable levels.

The extent of expanded program workloads can be seen by the following indicators:

Public Contracts Act contract awards in Department of Defense alone are up from 100,000 in 1965 to 225,000 in fiscal year 1967.

Workers covered under Public Contracts Act are up from 15 million in fiscal year 1966 to more than 27 million in fiscal year 1968, an 80 percent increase of required worker protection.

In fiscal year 1967, initial Service Contract workload estimates were projected to be 14,000 work locations and approximately $15 billion for all Government agencies. Reports from Department of Defense indicate that it alone allotted that amount for contracts valued at $10,000 or more.

Antiquated, reopened plants and "pressure production" require more inspection hours per plant, thus reducing total inspection output coverage of our safety engineers.

The cumulative impact of these facts has caused a serious dilution of an already vastly-understaffed operation.

The minimum frequency of inspectional service for a regulatory function recommended by States, regulatory agencies, and insurance companies calls for at least an annual inspection and preferably quarterly inspections where high-hazard ratings are involved.

At the present award level, this would require 75,000 worksite inspections per year for Department of Defense awards alone. Existing staff allows only 2,550 inspections per year for all Government contractors.

Limited inspection activities to date reveal:

Every plant inspected large or small operates with hazardous violations.

There are still many conditions existing long identified as killers, i.e., (lead poisoning, asbestosis, toxic atmospheres, etc.), which are ignored by plant operators.

Conditions that repeatedly take their toll go uncorrected, i.e., just recently one plant with a long series of arm and hand amputations had no intention of corrective action until Department enforcement action was instituted.

Staff limitations necessitate concentration in large employment centers, but experience has shown that small plants offer little hazard control and have high unreported incidents.

Present capabilities limit inspection to prime contractors to exclusion of subcontractors, i.e., General Motors has 127 plants working on contracts, with 36,000 small companies subcontracting.

The proposed increase is for 13 additional safety engineers to work in the Public Contracts program area, and will provide a staff of 23 engineers. It is anticipated the overall inspection ratio will increase from 2 to 4 percent of total worksite operations. A doubling of activity will also require follow-up and reinspections in pursuing legal actions of a time-consuming nature.

In the scheduling, priority will be given to high-hazard operations and operations with high incidence of injuries.

Utilization of the safety inspection services of the six operating States will be expanded and the cooperation of other qualified States will be sought.

BASE

Positions: 300. Estimated cost: $3,886,100.

ADDITIONAL COST

Positions: 13. Man-years: 13. Estimated cost: $204,600.

BASIS FOR THE ESTIMATE

Using our latest firm figure on the number of worksites, 75,000 and setting a modest target of inspectional activity (10 percent of worksites), the Bureau would require a Public Contract Inspection staff of 50 safety engineers. The 13 additional positions requested will allow us to inspect about 4 percent of the worksites involved, a significant step toward our eventual goal of 10 percent.

WORKLOAD STATISTICS

| | Actual, 1966 | Actual, 1967 | Estimate, 1968 | Estimate, 1969 |
|---|---|---|---|---|
| Maritime: | | | | |
| Number of inspections | 23,521 | 24,384 | 29,900 | 29,900 |
| Number of corrective actions | 3,103 | 4,857 | 5,000 | 5,000 |
| Trainee hours | 21,826 | 31,202 | 31,700 | 31,700 |
| Number of technical services given to State agencies, union, others | 129 | 552 | 550 | 550 |
| Trainee hours | 37,664 | 25,443 | 25,500 | 25,500 |
| Individual technical services given to Federal agencies | 431 | 684 | 685 | 685 |
| Trainee hours | 52,727 | 55,513 | 55,500 | 55,500 |
| Inspections under Contracts Acts | 1,577 | 1,339 | 2,550 | 3,850 |
| Violations | 1,480 | 1,283 | 2,346 | 3,542 |
| Number of safety standards and materials produced | 1,975 | 1,820 | 1,900 | 1,900 |
| Reports prepared and services given to States | 1,969 | 2,170 | 2,060 | 2,060 |
| Draft laws prepared | 73 | 80 | 98 | 98 |

*Activity 4. Promoting employment of the handicapped*

1968 (positions, 34) ..... $512,400
1969 (positions, 34) ..... 518,000

NARRATIVE DESCRIPTION OF PROGRAM

This program provides for services for the President's Committee on Employment of the Handicapped, which develops and stimulates interest in employment of the mentally and physically handicapped through work with Federal agencies, State Governors' Committees, and Committee member organizations and cooperates with a variety of organizations working in the international field.

In *1967*, a long-range campaign for jobs for the very severely handicapped and efforts to remove architectural and transportation barriers was launched with major national health agencies.

A Retail Merchandising Committee held its first meeting with the President of W. T. Grant Company presiding and adopted a program for promoting jobs among the Nation's retailers.

The Education Committee obtained adoption by several national education associations of resolutions favorable to employing handicapped persons in education. AMVETS National Service Foundation made available to the Committee two $1,000 scholarships for a handicapped young man and woman.

The Committee continued guidance to and cooperation with the National Association for Retarded Children in its intensive awards and job promotion campaigns. With Committee assistance, several firms entered into Federal contracts to train the retarded. Aimed at the mentally retarded, a pioneering guide "How To Get a Job" is useful to anyone.

The Nation's mental hospitals were encouraged to organize employers' groups as a link between hospitals and communities and to give valuable job-seeking guidance to patients.

Project Earning Power, a project enlisting the Nation's top designers to create products that can be made by the handicapped in sheltered workshops, rapidly moved forward during the year. Funding has been provided by Rehabilitation Services Administration and the Department of Labor; also funds for a pilot commercial demonstration have been furnished by non-profit corporation, Phoenix Products, developed a beautiful line of coordinated gift housewares for sale in leading department stores.

The Committee consultations with foreign government experts greatly increased and international contacts were expanded.

In *1968*, a second conference with national volunteer health agencies has produced much greater involvement with the President's Committee. The National Multiple Sclerosis Association has engaged in a joint promotional effort with the Committee to create more job opportunities for employable multiple sclerosis victims.

The Transportation Committee is encouraging mass urban transportation facilities and other public transportation systems to consider the needs of the handicapped in future planning. Also, the Committee has proved an effective catalyst in encouraging appropriate Federal agencies to conduct research and demonstration projects in the transportation needs of the handicapped.

The Committee is working with General Services Administration on subcontracts, Department of Commerce on procurement clinics, and Small Business Administration on management training and counseling, to encourage more Federal assistance for sheltered workshops serving the handicapped.

The Rural Areas Committee plans a pilot study in five States to determine the rehabilitation and employment needs of the handicapped. Comprehensive guidelines in hiring the handicapped, prepared by the Department of Agriculture in cooperation with the President's Committee, will be widely distributed.

The Committee will accelerate its cooperative efforts (Operation Transition) with the employment service, veterans organizations, Veterans Administration and the military medical officials to insure that severally disabled veterans from Vietnam receive all necessary medical rehabilitation and employment assistance required and seek to remove roadblocks such as the architectural barriers presently found on nearly all college campuses which effectively bar disabled veterans in wheel chairs from continuing their college education.

Assistance is being given Governors' Committees in sponsoring employer seminars, exploring insurance aspects, selective placement problems, and labor-management cooperation. A 2-day workshop provided 52 Governors' Committee spokesmen from 39 States an opportunity to discuss plans and problems with Washington officials.

A project with the National Association of State Mental Health Program Directors encourages more community involvement in employment problems and more workshops at mental institutions. A new thrust in employment of the mentally restored includes the need for good work habits and good work attitudes and proper work motivation. The guide "How to Get a Job" is the first step to reaching the retarded directly through promotional material.

The President's Committee pamphlet for psychiatrists describing rehabilitation and employment programs for the mentally restored was so well received that similar ones will be prepared for social workers, psychologists, educators, clinical psychiatrists, and hospital administrators.

The Committee is encouraging other agencies to develop programs similar to the Federal Aviation and Post Office awards programs which recognize outstanding handicapped workers.

*Changes for 1969*

| | |
|---|---|
| Mandatory changes amount to | +$6,800 |
| Program changes amount to | —1,200 |
| Positions | 0 |

With experience in putting the mentally restored to work, America must now evaluate their capabilities for employment. The Committee will encourage research organizations and others to study work capabilities and capacities of the retarded on the job. Similar studies of the mentally restored will be encouraged.

Jointly with the National Institute of Mental Health, we will encourage newly-established community mental health centers to engage in campaigns urging acceptance of the mentally restored in jobs.

A campaign will be conducted to encourage employers to redesign jobs so that the mentally retarded (and physically handicapped) can perform them.

The Committee will undertake to enlist the Nation's youth in service projects aiding rehabilitation of handicapped workers. This ambitious drive envisions harnessing the vast reservoir of youthful volunteers through a "Handbook for Youth".

Joint meetings of labor, employer and medical representatives in the workmen's compensation field should produce improved State legislation, increase emphasis on rehabilitation in compensation and increased education of all involved groups.

A major program will be engaged in with the Insurance Rehabilitation Study Group to promote wider acceptance of physically and mentally handicapped persons in the casualty, life and health insurance fields.

The Speakers Bureau should be set up and operating as a useful national tool for securing speakers for business and other groups.

WORKLOAD STATISTICS

| | Actual, 1966 | Actual, 1967 | Estimate, 1968 | Estimate, 1969 |
|---|---|---|---|---|
| Reports prepared and services given to the States | 902 | 1,091 | 1,200 | 1,200 |

BASIS FOR THE ESTIMATE

The Committee arrived at the above estimate based on priorities decided upon by the Chairman, Vice Chairman, Executive Committee and staff working in close harmony with the public and private groups cooperating in this national effort. Priorities are recommended by standing committees, reviewed by the staff and decided upon by the Chairman with or without consultation with the Executive Committee, depending upon urgency, newness, or expense of the involvement.

*Activity 5. Advance opportunities and status of women*

| | |
|---|---|
| 1968 (positions, 76) | $920,300 |
| 1969 (positions, 76) | 967,000 |

NARRATIVE DESCRIPTION OF PROGRAM

This program provides for promoting the welfare of wage earning women. While particular objectives have changed with changing ecomonic and social developments over the years since the Women's Bureau's establishment in 1920, the basic purpose of its program remains unchanged and the need for a focal point of concern within the Federal Government continues.

The Women's Bureau is primarily a promotional and service agency, the methods through which its expertise and knowledge become effective are technical assistance and consultative, information, and advisory services. Its program is largely an outreach operation which informs, interests and involves ever increasing numbers of organizations and individuals in achieving national objectives related to needed advances in the status of women. Working through its national office and its five regional offices, the Bureau stimulates—at the national, State and local levels—interest in, and activity toward bringing about, needed changes in institutions, attitudes and laws affecting women's status and their opportunities in employment, education, and civil and political life.

The Bureau serves as the focal point of informed concern, policy advice and leadership within the Federal Government on questions relating to the utilization of womanpower and the economic, legal and civil status of women. It provides the secretariat and serves as the staff resource for the Interdepartmental Committee and Citizens' Advisory Council on the Status of Women. Its program emphasizes the stimulation and promotion of efforts to implement the recommendations of the President's Commission on the Status of Women. It assists and cooperates with State commissions on the status of women, national women's organizations, unions, employers, educational institutions, communications media, and other State and local groups and individuals concerned with improving women's economic, civil and political status. It also furnishes consultative services and prepares technical reports for specialized international agencies and for use of United States delegates at international conferences such as International abLor Organization and the United Nation's Status of Women Commission.

Today, with more than 28 million women in the labor force and the likelihood that nine out of every 10 girls will engage in paid employment at some time in their lives, the Bureau's work is relevant to practically all women in the country. Reflecting the national need for fuller utilization of all our human resources, a major focus of the Bureau's present program is on the special employment-related problems of low-income women and girls and the underutilization of American woman power generally.

Nearly 12 million women, including girls 16 years of age and over, live in poverty in the United States. Of these, 1.9 million are heads of families, 40 percent of whom work but still are unable to lift their families out of poverty. Of all families living in poverty in the United States, 28 percent are headed by a woman. Of all nonwhite families in poverty, 37 percent have women heads. Many others are working wives in families in which the husband also works and still the family is poor. There are nearly 1 million such families. In addition, in many impoverished families, women and girls need and want work but are often unable to find it. The unemployment rate (annual average as of November 1967) is especially severe for nonwhite girls 16 to 19 years—29.5 percent as compared with 23.9 percent for nonwhite boys. For nonwhite women 20 years of age and over the unemployment rate is 7.1 percent and for nonwhite men, 4.3 percent. In some cases these women in poverty lack the essential education and training to qualify for a job even though job openings might be available in the community. In other cases child care or other supportive services are lacking in the area where they live. Moreover, many of the women who work and still are poor are engaged in very low-paid, relatively less skilled occupations.

Many of the employment related problems of women in poverty are reflections of the underutilization of womanpower resources generally. Although over 28 million women are in the labor force—representing 36 percent of the total labor force and 47 percent of all women 18–64 years of age—they are increasingly and disproportionately concentrated in the less skilled, less rewarding, and less rewarded occupations. The gap between men's and women's earnings has widened, as revealed by the fast that among full-time year-round wage and salary workers, women's median wage was 60 percent that of men's in 1963, 1964, and 1965, and only 58 percent in 1966. In 1955 it was 65 percent. Twenty-six percent of the women working year-round full-time had incomes of less than $3,000 in 1966, as compared with about 9 percent of men with similar income.

The staff and resources available for carrying out the Bureau's program are limited and emphasis has been placed on developing innovative approaches and techniques to maximize program effectiveness. Especially in recent year the Women's program has been substantially redirected to employ multiplier techniques which involve the participation of ever-widening circles of organizations and individuals. Among the factors necessitating this approach were the issuance of the report of the President's Commission of the Status of Women,
which brought the problems and potential contribution of women to a higher level of visibility than ever before in this Nation's history, and the establishment of a national program to combat poverty. All basic research has been transferred out of the Bureau, great flexibility has been introduced into the Bureau's program and intensive efforts have been made to encourage the development of needed informational material to meet the Bureau's information and service requirements by other Bureaus and Departments.

Illustrative of the outreach approach, the Women's Bureau through the efforts of its national office and field staff has stimulated the establishment of commissions on the status of women in the 50 States, two municipalities, the District of Columbia, and the Virgin Islands. These commissions have provided a new instrumentality at the State level for identifying and promoting action which will permit women to increase their contribution to the National economic life.

Other techniques used by the Bureau to enable it to serve as a catalyst for far-reaching action include the stimulation of unified effort by voluntary organizations in areas of mutual concern, the use of pilot conferences sponsored or cosponsored by the Bureau, and cooperative programs with other Federal agencies and departments.

In *1967* accomplishments were indicative of the ways in which the Women's Bureau serves as a vital promotional and service agency and as a central point of information, policy, and leadership for the nation with respect to the advancement of women's employment opportunities and status. They evidence the growing emphasis on stimulating increased public awareness of the special employment-related problems of low-income girls and women. Highlights of accomplishments follow.

The Women's Bureau cosponsored 14 major conferences with such organizations and agencies as State Commissions on the Status of Women, National Association of Colored Women's Clubs, American Guidance and Personnel Association, Illinois Department of Labor, Southern Illinois University, Maryland State Department of Education, University of California Extension, Southern Methodist University, the National Council of Jewish Women, the Children's

Bureau, U.S. Department of Health, Education and Welfare, Directions Seminar, National Committee on Household Employment, and YWCA of Metropolitan Chicago and of Illinois. The conferences covered such topics as expanding employment opportunities for women, household employment, need for day care facilities, continuing education for women, counseling and guidance for women and girls, and women in poverty. Bureau staff participated in some 830 conferences and meetings, serving as speakers, panelists, workshop leaders and resource persons and provided, upon request, 14,371 technical and advisory services.

The Bureau issued 31 new and 35 revised publications, and more than 677,000 publications were distributed. Background materials were furnished for articles appearing in leading national magazines, journals, and many newspapers and other publications, and some 14 articles for books and periodicals were authored in the Bureau. In addition, 15 major speeches of the Bureau Director were reproduced for national distribution, other than those published in conference reports.

At the specific invitation of a group of nine voluntary educational and day care organizations, the Bureau took the leadership in organizing a conference on working women and day care needs. Convened jointly by Directions Seminar, the Children's Bureau and the Women's Bureau, representatives of 62 national organizations attended this conference held in the Department of Labor. A report is in preparation which will be widely distributed and provide the basis for similar meetings at the State and local level. The Bureau assisted in planning and conducting a day care conference sponsored by the Amalgamated Clothing Workers Baltimore Regional Joint Board, in connection with the first of several day care centers to be sponsored jointly by the union and the industry for the children of union members. Both of these conferences represent important breakthroughs in the child care field in their demonstration of interest and concern on the part of unions, employers, and educational organizations. One Bureau publication, "Federal Funds for Day Care Projects," brought together for the first time information concerning the sources of Federal funds for day care available from 13 different Federal agencies and met a long-felt need. These Bureau activities have contributed to the growing awareness of day care needs which is increasingly evident.

Demands on Bureau staff for assistance from State Commissions on the Status of Women were unexpectedly heavy in 1967 because of the large number (20) of new governors taking office at the beginning of that year. Early in 1967, Texas and New Mexico established commissions by administrative action, making a total of 50 State commissions plus commissions in two municipalities, the District of Columbia, and the Virgin Islands. Chairmen of 35 State commissions met with Bureau staff in Washington, D.C., in May 1967 to discuss developments and means of strengthening current programs.

The upgrading of household employment was promoted as another means of assisting disadvantaged women and girls who often turn to this type of employment because they lack other skills.

The Bureau continued to collect and collate data on the special problems of disadvantaged girls and women in their relation to the labor force. Fact sheets were prepared on "Working Wives—Their Contribution to Family Income" and "Women in Poverty—Jobs and the Need for Jobs." A study, "Underutilization of Women Workers," also was published. Revised were: "Why Women Work," "American Family in Poverty," "Women's Earnings in Poor Families," and "Who Are the Working Mothers?"

Technical assistance and advice were provided in a number of States where major improvements in minimum wage laws were effected. The Bureau issued numerous publications relating to women's stake in improved minimum wage legislation, especially its importance in the war on poverty, to assist the many women's groups which play a leadership role in the improvement of State wage standards. Since July 1966 new statutory minimum wage laws have been enacted in two States and increases in statutory minimum wage rates in 10 States.

Connecticut and Vermont enacted laws requiring premium pay for overtime, and exemptions or procedures for flexibility in administrative were provided in the hours-of-work laws in five States. "Highlights of 1966 State Legislation of Special Interest to Women—Labor Laws" and a similar report for 1967 were published and "Summary of State Labor Laws for Women," was revised.

The Bureau worked closely with State commissions on the status of women and others in Indiana and Nebraska where equal pay laws were enacted, bringing the total of States having legislation of this kind to 31.

The Bureau analyzed existing information on laws, programs and policies prohibiting sex discrimination, to provide technical assistance and advice to public and private agencies concerned with equal employment opportunities for women. "Laws on Sex Discrimination in Employment" was updated and related materials were prepared. The prohibition against sex discrimination in Title VII of the Civil Rights Act of 1964 stimulated continuing interest of Federal and State governments. Since July 1966 four States have added a prohibition against sex discrimination to their fair employment practice programs.

The Chairman of the Citizens' Advisory Council on the Status of Women appointed four task forces to review and update recommendations of the President's Commission on the Status of Women—Family Law and Policy, Health and Welfare, Labor Standards, and Social Insurance and Taxes. The Secretariat arranged for staffing of the task forces by experts from the Departments of Justice, Health, Education, and Welfare, Treasury, and Labor and is coordinating the work of the task forces. The Bureau is providing information and technical assistance.

The Secretariat assisted the Chairman in preparation of three bulletins to members of the Council, State Commissions, and heads of women's organizations. A staff paper on participation of women in national service and selective service was prepared by the Secretariat for the use of the Council members in responding to a request for advice from the National Advisory Commission on Selective Service. The Council sent statements to the Equal Employment Opportunity Commission in connection with its public hearings on advertising and flight attendants.

The Interdepartmental Committee recommended the form of an executive order to prohibit discrimination because of sex in Federal employment; recommended an Administration position on H.R. 643, a bill, "To provide equality of treatment for married women employees of the Federal Government and for other purposes;" and recommended inclusion of a prohibition against discrimination because of sex in the civil rights model law of the National Conference of Commissioners on Uniform Laws.

Bureau programs continued to emphasize the need for more realistic vocational counseling and guidance and for education and training opportunities for women and girls. A fact sheet "Expanding Opportunities for Girls: Their Special Counseling Needs" was issued. Two publications were geared to mature women seeking to enter or reenter the work force "College Women Seven Years After Graduation" and "Continuing Education Programs for Women."

A new series of leaflets designed to encourage girls to prepare for professions other than the traditional ones of teaching and nursing and to meet anticipated manpower shortages was initiated, and the first one entitled "Why Not Be An Engineer?" was published.

The Bureau joined with the Office of Economic Opportunity in calling and planning a conference on "Women in the War on Poverty." It also undertook demonstration pilot projects in the District of Columbia, recruiting volunteers for a telephone canvass of local employers to locate summer jobs for teenagers and to man an information center in a U.S. Employment Service office to interest youth in summer enrichment and recreation programs.

In the field of women's civil and political rights, the Bureau issued "Highlights of 1969 State Legislation of Interest to Women—Civil and Political Status," and a similar report for 1967, capsule summaries of family and property law in several States, and charts on marriage and divorce laws. Special interest in the eligibility of women for jury service resulted from a decision of the Federal District Court which held that Alabama jury service laws which excluded women denied them equal protection of the law in violation of the 14th Amendment to the Constitution. Following this decision a number of States improved their laws governing women's eligibility for jury duty. Intensified activities with respect to the improvement of marriage laws, due in part to a Supreme Court decision that legal impediments to marriage based on race violated the equal protection clause of the 14th Amendment, brought requests for technical assistance and advice from a number of concerned organizations.

An increasing interest in the work and publications of the Women's Bureau and in the status and role of women in the United States has been evidenced by visitors and requests for information from other countries, especially the developing countries. Orientation sessions on the role of women in the economy of the United States were provided for 124 members of teams and individuals from other countries. In addition 70 leaders from 34 countries had separate discussions

with Women's Bureau staff. A number of position papers for U.S. delegates to intergovernmental meetings, and reports for international agencies were prepared.

In *1968*, it is planned, with the same resources, to carry forward the same level of operations, with major emphasis on programs related to disadvantaged women and girls. The Bureau held a small consultation on the special problems of low-income women and girls to assist in developing new directions or emphases and in preparing especially adapted promotional materials and a two-day conference to promote the fuller utilization of woman physicians which was cosponsored by the American Medical Women's Association and the President's Study Group on Careers for Women. The Bureau is organizing one or two pilot projects to demonstrate the usefulness and workability of volunteer service in Department of Labor programs directed toward job development, training, placement, and advancement of low-income young people and adults. During the year the Bureau will hold six regional conferences of State Commissions on the Status of Women to focus on implementation of prior recommendations to government and other community service programs at all levels. The Bureau will be responsible for organizing in June the fourth national conference of the Commissions on the Status of Women in cooperation with the Citizens' Advisory Council on the Status of Women. Major publications will include the "1967 Handbook on Women Workers" and career leaflets on nine careers for the series initiated last year, as well as a special study on "Women Workers: Their Special Training Needs."

In *1969*, it is planned to further identify the special employment-related needs of low-income women and girls and stimulate new, and expand on-going programs to meet these needs. The Bureau will stimulate and encourage the fuller utilization of all womanpower resources through the development and/or promotion of programs which (1) expand training and retraining and education opportunities adapted to the needs of girls and women at all skill levels; (2) provide vocational counseling and guidance to mature women entering or re-entering the labor force; (3) encourage changes in outmoded attitudes with respect to the potential contribution of girls and the utilization of women workers on the part of parents, educators, employers, the mass media, and the general public; (4) stimulate business and industry to make fuller use of the training and talents of women; and (5) promote the achievement of legislation applicable to all but of particular significance to women. This includes improved minimum wage legislation, State equal pay legislation, State fair employment practice legislation and other legislation relating to working conditions and opportunities. The Bureau will serve as a clearinghouse and central source of information within the Federal Government on matters relating to the utilization of womanpower and related questions concerning the status of women.

The established on-going work of the Women's Bureau includes important programs to assist the 12 million women and girls who now live in poverty. The Bureau is already devoting a substantial part of its resources to stimulating the expansion of child care services, upgrading private household employment, promoting minimum wage legislation, encouraging the establishment of new entrance level job ladders, and preparing informational material concerning girls and women in poverty to focus greater attention on their special problems and needs. The Bureau proposes to intensify and expand these programs and to implement others.

Volunteers, the great majority of whom are women, have long represented a substantial unpaid manpower resource in the United States and many of the programs of voluntary organizations and of the State Commissions on the Status of Women are based on volunteer efforts. The Women's Bureau presently maintains continuing working relations with approximately 80 national organizations whose members number in the many millions, as well as cooperating with the 50 State Commissions on the Status of Women. In the past, the Women's Bureau has worked closely with many programs conducted by able and dedicated volunteers. The Bureau believes that such individuals can be of tremendous value in helping to develop, expand, coordinate, and staff new types of community supportive services related to poverty problems. They can also provide increased outreach to women and girls in poverty and encourage them to take greater advantage of the services.

Following the experimental projects initiated in Fiscal Year 1968 in selected areas, the Bureau proposed to arrange consultations with representatives of the major national organizations concerned with volunteer service and of State

Commissions on the Status of Women, with a view to developing coordinated goals and programs for the intensified utilization of volunteers in national, State and local programs related to the meeting of needs of the disadvantaged.

WORKLOAD STATISTICS

| | Actual, 1966 | Actual, 1967 | Estimate, 1968 | Estimate, 1969 |
|---|---|---|---|---|
| Major conferences cosponsored by Women's Bureau and State agencies, universities, or other groups | 10 | 14 | 14 | 14 |
| Participation in conferences, conventions, and other meetings, regional and departmental | 675 | 830 | 800 | 800 |
| Technical and advisory services rendered | 13,685 | 14,371 | 14,490 | 14,490 |
| Washington office | 5,950 | 6,089 | 6,130 | 6,130 |
| Regional offices | 7,735 | 8,282 | 8,360 | 8,360 |
| Number of requests for materials | 29,948 | 42,006 | 38,000 | 38,000 |

*Changes for 1969*

| | |
|---|---|
| Mandatory changes amount to | +$36,700 |
| Financing changes amount to | +10,000 |
| Program changes | None |

BASIS FOR THE ESTIMATE

The tabulation of workload statistics shows a growing volume of services which the Bureau, with no increase in staff, has been able to render by productivity increases and redirection of its program. The estimated workload for fiscal years 1968 and 1969 would be at the same general level of productivity as the estimates for fiscal year 1967, since the increases from 1965 to 1966 and from 1966 to 1967 with no additional resources would make further productivity increases difficult to achieve. Requests received in the Bureau for conference participation and for materials in 1967 which the Bureau was able to meet exceeded original estimates and they may do so in 1968 and in 1969.

The redirection of program has involved the use of staff time released from primary research to the analysis of data and development of promotional materials to meet the current demands for more highly service-directed information, interpretation of significant developments and trends, and a larger volume of technical and advisory services. In implementing this redirection further in 1968, the Bureau is transferring two positions out of the Division of Legislation and Standards to other Divisions—a GS–12 position has been added to the Field Division and a GS–9 position to the Division of Economic Status and Opportunities. We are now in the process of redirecting the activities of 2 of the positions in the Labor Law Branch which have previously been engaged in labor law research. Labor law research will be performed by the Bureau of Labor Standards and will be accomplished by that Bureau in the future with no additional resources. The remaining positions in the Branch of Labor Law have already been redirected to high priority activities within the Bureau providing technical assistance and promoting programs to advance the position of employed women, particularly those most disadvantaged.

The Bureau plans to continue its operations at the same high level of efficiency and economy and can make no further identifiable savings at this time.

*Activity 6. Providing compensation for persons covered by Federal Workmen's Compensation Laws*

| | |
|---|---|
| 1968 (positions, 579) | $5,471,000 |
| 1969 (positions, 579) | 5,811,500 |

NARRATIVE DESCRIPTION OF PROGRAM

This activity, administered by the Bureau of Employees' Compensation, provides compensation for persons covered by the Federal Employees' Compensation Act and the Longshoremen's and Harbor Workers Compensation Act and its extensions.

The Federal Employees' Compensation Act provides coverage to over 3 million employees of the Federal Government. The purpose of the Act is to ease the burden imposed on individual workers and their families as a result of job connected injury or death. The large majority of the workers are in unskilled or semi-skilled occupations, and the financial burden imposed by such injuries or by death are often overwhelming. It is the Bureau's primary responsibility to provide speedy, efficient and equitable service to these individuals or their families.

The Longshoremen's and Harbor Workers' Act provides workmen's compensation benefits and vocational rehabilitation services for certain employees of private employers who are engaged in maritime activities and other activities covered under extension of the Act. In addition to administering the benefit provisions of this Act, the Bureau makes studies of the causes of accidents, determines the authority of insurance carriers to write workmen's compensation issuance under the several laws and determines the authority of employers to act as self-insurers under such laws.

In *1967* under the Federal Employees' Compensation Act the Bureau administered the program at an approximate cost of $21 per case or $3,602,000. Benefit payments increased from $75,175,000 in 1966 to $89,146,000, an increase of 18 percent while administrative costs increased from $3,390,000 in 1966 to $3,602,000, an increase of less than 6 percent. Administrative costs amounted to 4 percent of benefit payments. This figure is considerably lower than the 10 to 15 percent administrative costs prevalent in the private insurance industry.

121,321 reports of new injuries were received and processed, an increase of some 13,000 new injuries reported in 1966. In large part this increase was due to increased Federal employment, particularly in high-injury rate agencies.

During Fiscal Year 1967 the "Federal Employees' Compensation Act Amendments of 1966" were enacted (signed July 4, 1966). This legislation brought numerous major changes, including a number of increases in compensation awards—such as those brought about by changes in the minimum and maximum allowance on monthly compensation, elimination of the limitation on dependency compensation in disability cases, raising the ceiling in allowances to medical attendants, and cost of living increases based on changes in the Consumer Price Index. Other changes include continuation of benefits to unmarried children attending school on a full-time basis after age 18 up to 23, or until they complete 4 years of education beyond high school; reemployment rights to beneficiaries who meet certain requirements; 24-month lump sum compensation payments to widows or dependent widowers who remarry; and informal hearings in instances where a beneficiary disagrees with a decision of the Bureau. The Bureau was able to make all of the necessary compensation adjustments resulting from these changes during 1967.

In *1968* it is estimated that new injury reports will total 125,000. Benefits payments are estimated at $92,521,000. Again, these increases are in large part due to increased Federal employment.

The Bureau is engaged in making compensation adjustments necessitated by the 3.7 percent increase in the Consumer Price Index (effective January 1, 1968), and by changes resulting from the new Federal Employees' Pay Act and the increase in health insurance rates.

The new hearings and review activity has been implemented and operations have begun in 1968. This activity permits claimants to furnish evidence to the Division of Hearing and Review once a preliminary determination has been made to deny the claim. The Division reviews such cases in the light of any additional evidence furnished by the claimant, before a final determination is issued. As of the end of December 1967 a total of 30 cases had been referred to the Division and 21 informal hearings had been completed. One result of the Division's work will be the furnishing of a complete file of material to the Employees' Compensation Appeals Board in cases that finally come before it.

In both 1967 and 1968 numerous policy and procedural instrutions were prepared to carry out the provision of the latest Amendments. This activity was carried out without additional staff.

Specifications for a study on program administration and organizational relationships have been prepared and are being reviewed by Departmental staff before invitations to bid are released. The primary purpose of this study is to reduce the time-lag in the payment of compensation benefits to injured employees.

In *1969* it is estimated that the Bureau will receive and process 130,000 new injury reports which together with 30,000 reopened cases and 22,500 cases maintained on regular payment rolls will bring the total caseload to 182,500 for the year. This compares with the 1967 total of 168,926 and the estimated 1968 caseload of 175,000.

Efforts will be made to reduce the existing backlog. The hearings and review activity will continue with emphasis placed on rapid decisions and expeditious handling of cases reviewed.

It is anticipated that the results of the administrative study will be available for analysis during 1969. Changes contemplated as a result of the analysis will be reflected in the 1970 budget submission.

The Bureau will probably be required to make a number of increases in existing compensation awards as a result of further increases in Federal salaries (i.e., each increase in Federal salaries establishes new minimum and maximum compensation levels.)

In *1967* under the longshoremen's and harbor workers' program new injuries reported totaled 100,897 a 2.6 percent increase over 1966. This increase in workload was absorbed by the Bureau. The increase in workload was greater than the overall 2.6 percent increase in injuries since the reports requiring greater staff time, time lost and fatal cases, increased 25 percent. The increase in injury reports is due largely to the increased maritime activity involved in the Vietnam war effort.

In *1968*, 102,000 new injuries are estimated; this increase again due in large part to the effect of the Vietnam war effort in the maritime industry and in *1969*, 104,000 new injuries are estimated.

In *1968* the administration and management services program of the Bureau established an Office of Program Analysis and Evaluation to provide for the review and evaluation of all field office operations. For some time the need for a comprehensive review and evaluation of operations in both major programs has been recognized, not only within the Bureau but by the General Accounting Office.

In *1969* it is anticipated that field office evaluations will result in recommendations relating to changes in the bureau's policies, procedures, and regulations. Nine evaluations are planned for the remainder of 1968 and 18 for 1969.

*Changes for 1969*

| | |
|---|---|
| Mandatory changes amount to | +$268,100 |
| Financing changes amount to | +49,100 |
| Program changes amount to | +23,300 |
| Positions | 0 |

The program changes for 1969 involve no positions. They are in two areas. An increase of $47,900 is requested to provide for the full year financing of 50 new positions for the Federal Employees' Compensation Act program financed for only a part year during 1968. This amount is partially offset by a decrease of $30,600 for non-recurring costs of these positions, thus a net increase of $17,300 is requested to finance these positions in 1969.

The other program changes are a result of the continuing deficit in the Longshoremen's and Harbor Workers' Trust Fund set up under Section 44 of the same Act. In 1968 and prior years costs for the administration of the Longshoremen's rehabilitation program were financed by transfer from the Trust Fund.

At the present time it is anticipated that the funds available are only sufficient to finance this program through fiscal year 1968. At the end of the current fiscal year the total resources in the Fund will be reduced to a level of $20,500 in securities.

The status of the Fund as of the end of the fiscal year 1968 will not permit the financing of this program in total for fiscal year 1969. With the availability of only $20,500 in securities and anticipated receipts of $14,000 for a total of $34,500 and estimated expenditures of $108,500 it has been necessary to request a direct appropriation to continue this program.

$68,000 is shown as an increase for the administrative costs of the program. This is offset by a $68,000 decrease in trust funds for 1969.

An additional $6,000 is requested for partial financing of the benefit costs under the program. Thus a net increase of $6,000 is requested with an overall increase of $74,000 in appropriated funds requested to continue the program.

BASIS FOR THE ESTIMATE

The estimate for fiscal year 1969 provides for a continuation of the fiscal year 1968 base plus mandatory financing and program changes which are shown under changes for 1969. It is anticipated that there will be an increase in workload under both the Federal Employees' Compensation Act and Longshoremen's and Harbor Workers' Act. The estimated workload of both programs has been on the basis of experience from 1966 to the present date. An analysis of workload factors and related man-hours is contained in the 1968 budget submission.

DISTRIBUTION OF FIELD STAFF

| Supervising offices | 1968 | | | 1969 | | |
|---|---|---|---|---|---|---|
| | Professional | Clerical | Total | Professional | Clerical | Total |
| Atlanta, Ga | 7 | 4 | 11 | 7 | 4 | 11 |
| Baltimore, Md | 11 | 8 | 19 | 11 | 8 | 19 |
| Beaumont, Tex | 3 | 1 | 4 | 3 | 1 | 4 |
| Birmingham, Ala | 1 | 1 | 2 | 1 | 1 | 2 |
| Boston, Mass | 16 | 22 | 38 | 17 | 22 | 39 |
| Chicago, Ill | 24 | 40 | 64 | 26 | 40 | 66 |
| Cleveland, Ohio | 17 | 28 | 45 | 18 | 28 | 46 |
| Dallas, Tex | 8 | 4 | 12 | 9 | 4 | 13 |
| Denver, Colo | 3 | 1 | 4 | 4 | 1 | 5 |
| Detroit, Mich | 2 | 1 | 3 | 2 | 1 | 3 |
| Fort Lauderdale, Fla | 2 | 1 | 3 | 3 | 1 | 4 |
| Galveston, Tex | 3 | 6 | 9 | 3 | 6 | 9 |
| Honolulu, Hawaii | 4 | 5 | 9 | 4 | 5 | 9 |
| Houston, Tex | 3 | 1 | 4 | 4 | 1 | 5 |
| Jacksonville, Fla | 14 | 23 | 37 | 14 | 23 | 37 |
| Kansas City, Mo | 4 | 3 | 7 | 4 | 3 | 7 |
| Long Beach, Calif | 4 | 2 | 6 | 4 | 2 | 6 |
| Mobile, Ala | 3 | 2 | 5 | 3 | 2 | 5 |
| New Orleans, La | 21 | 36 | 57 | 21 | 36 | 57 |
| New York, N.Y | 39 | 71 | 110 | 39 | 71 | 110 |
| Norfolk, Va | 4 | 4 | 8 | 5 | 4 | 9 |
| Philadelphia, Pa | 5 | 4 | 9 | 6 | 4 | 10 |
| Portland, Oreg | 3 | 2 | 5 | 3 | 2 | 5 |
| St. Louis, Mo | 2 | 1 | 3 | 3 | 1 | 4 |
| San Francisco, Calif | 39 | 66 | 105 | 40 | 66 | 106 |
| Savannah, Ga | 2 | 1 | 3 | 2 | 1 | 3 |
| Seattle, Wash | 16 | 26 | 42 | 17 | 26 | 43 |
| Washington, D.C | 16 | 31 | 47 | 16 | 31 | 47 |
| Total, field staff | 276 | 395 | 671 | 289 | 395 | 684 |

EXPLANATION OF ESTIMATE BY OBJECT

*Personnel compensation, $9,415,692*

The estimate provides for 1030 permanent positions or 985 manyears of employment. The estimated increase of $826,701 for 1969 includes $35,055 for the extra day of pay for current year staff, $113,617 for the net cost of within-grade promotion and $335,172 to provide for pay increase costs. It also includes $158,600 for the Executive Direction Planning and Evaluation, increase $146,488 for the Contract Safety program increase and $37,769 to cover the full year cost of 50 new positions for part of 1969.

*Personnel benefits, $774,621*

The estimate is based upon the cost of personnel compensation. The increase of $64,047 for 1969 includes $2,450 for the extra day of pay $10,496 for the net cost of within-grade promotions, $9,500 for the Executive Direction, Planning and Evaluation increase, $11,100 for the Contract Safety program increase and $30,501 for pay increase costs.

*Travel and transportation of persons, $572,070*

The estimate represents a net increase of $72,700 composed of increases of $74,700 for Executive Direction, Planning and Evaluation, and Contract Safety

of and a decrease of $2,000 attributed to a reduction in non-recurring costs of new positions authorized in 1968.

| | 1968 | 1969 | Change |
|---|---|---|---|
| Number of travelers | 351 | 369 | 18 |
| Number of days traveled | 15,222 | 17,863 | +2,641 |
| Estimated costs | 499,370 | 572,070 | +72,700 |

*Transportation of things, $38,250*

The estimate provides for a net reduction of $600 composed of an increase of $8,000 for Contract Safety, and a decrease of $8,600 for non-recurring cost for new positions in 1968.

| | |
|---|---|
| 1968 | $38,850 |
| 1969 | 38,250 |
| Change | 600 |

*Rent, communications, and utilities, $364,014*

This estimate provides for postage, all telephone service and rental of space. The increase of $26,622 is composed of the following:

| | 1968 | 1969 | Change |
|---|---|---|---|
| Working capital fund | $76,450 | $83,400 | +$6,950 |
| Federal telecommunication services | 47,572 | 35,772 | −11,800 |
| Telephone and teletype service | 61,602 | 67,192 | +5,590 |
| Space rental | 31,118 | 46,100 | +14,982 |
| Penalty mail | 73,600 | 84,500 | +10,900 |
| Rental of mechanical tabulating equipment | 20,000 | 20,000 | |
| Rental of other equipment | 27,050 | 27,050 | |
| Total | 337,392 | 364,014 | +26,622 |

*Printing and reproduction, $380,575*

The estimate provides for the printing of regulations, technical and other publications, forms, Appeals Board Decisions as well as all other duplicating services.

| | 1968 | 1969 | Change |
|---|---|---|---|
| Working capital fund | $120,536 | $146,800 | +$26,264 |
| Government Printing Office | 223,075 | 224,575 | +1,500 |
| Appeals board decisions | 9,200 | 9,200 | |
| Total | 352,811 | 380,575 | +27,764 |

*Other services, $432,884*

The estimate provides for central services provided by the Department, for miscellaneous repairs and services, for stenographic reporting services, collection of accident data by the Bureau of Labor Statistics, workmen's compensation studies and for research under contract.

| | 1968 | 1969 | Change |
|---|---|---|---|
| Working capital fund | $193,036 | $241,654 | +$48,618 |
| Stenographic reporting services | 35,500 | 35,500 | |
| Accident data (BLS) | 29,600 | 29,600 | |
| Workmen's compensation studies | 30,000 | 30,000 | |
| Research contracts | | 34,900 | +34,900 |
| Repair and services | 61,230 | 61,230 | |
| Total | 349,366 | 432,884 | +83,518 |

*Supplies and materials, $133,196*

The estimate provides for necessary desk-top supplies. Increases are related to program expansion and additional Working Capital Fund financing.

| | 1968 | 1969 | Change |
|---|---|---|---|
| Working Capital Fund | $64,828 | $78,596 | +$13,768 |
| Miscellaneous | 53,490 | 54,600 | +1,110 |
| Total | 118,318 | 133,196 | +14,878 |

*Equipment, $59,698*

The estimate provides for purchase of equipment for new positions in 1969, replacement of obsolete office machines, safety equipment and literature, books and subscriptions.

The cost of equipping new positions, $5,700 is offset by decreases totaling $30,600 for reduction in non-recurring cost of equipment for new positions in 1968. The net decrease is $24,900.

| | 1968 | 1969 | Change |
|---|---|---|---|
| Equipping new positions | $30,600 | $5,700 | −$24,900 |
| Film strips | 2,000 | 2,000 | ---------- |
| Safety equipment | 4,700 | 4,700 | ---------- |
| Miscellaneous equipment | 47,298 | 47,298 | ---------- |
| Total | 84,598 | 59,698 | −24,900 |

*Insurance claims and indemnities, $6,000*

This estimate is for partial payment of benefits authorized under Section 44 of the Longshoremen's and Harbor Workers Compensation Act.

| | |
|---|---|
| 1968 | ------- |
| 1969 | $6,000 |
| Change | +6,000 |

SUMMARY OF NEW POSITIONS

| | Number | Grade | Amount |
|---|---|---|---|
| Activity 1—Departmental: | | | |
| Special assistant | 1 | GS–17 | $26,960 |
| Program officer | 1 | GS–15 | 18,404 |
| Program analyst | 2 | GS–14 | 31,682 |
| Budget officer | 1 | GS–14 | 15,841 |
| Program analyst | 1 | GS–11 | 9,657 |
| Secretary | 1 | GS–9 | 9,937 |
| Do | 1 | GS–7 | 6,734 |
| Do | 2 | GS–5 | 11,130 |
| Total | 10 | ---------- | 130,345 |
| Activity 2—Field offices: Safety engineer | 13 | GS–12 | 153,959 |
| Grand total | 23 | ---------- | 284,304 |

Senator HILL. Now a young friend of ours, Mrs. Ether Peterson. We are glad to welcome you back.

Mrs. PETERSON. I am glad to be back again.

Senator Hill, in a way I guess this is a first and a last. It is the first time that we are appearing before you as an administration.

This is the third administration the Secretary has established. It is the last time that we are appearing before you as chairman. That gives us a good deal of sadness.

I would like to express my appreciation and the appreciation of all my coworkers here for the marvelous consideration we have always had from you.

We take pride, and you must too, in the satisfaction that you must feel in the improvement of the lives of the working people for whom we speak.

Senator HILL. You have done a fine job.

Mrs. PETERSON. With your help.

Senator HILL. It has been a pleasure to cooperate with you.

PREPARED STATEMENT

Mrs. PETERSON. If it is all right with you, I would like to put my statement in the record and just give a few of the highlights of what we are trying to do and what our problems are.

Senator HILL. All right. The statement will appear in full in the record.

(The statement follows:)

I am very pleased to appear before you in my role as Administrator, Wage and Labor Standards Administration, to present our budget estimates. I should first of all explain the change in our presentation. This year we are submitting a consolidated Wage and Labor Standards Budget, encompassing the Bureau of Labor Standards, the Women's Bureau, the Bureau of Employees' Compensation, the President's Committee on Employment of the Handicapped, the Employees' Compensation Appeals Board, and the Office of the Administrator. You will note that each of these well established organizations has maintained its identity within the budget. This consolidation is submitted to further implement the establishment in July, 1967 of a Wage and Labor Standards Administration, which has specific responsibility for executive direction and coordination of Wage and Labor Standards programs. The bureau directors are here to assist me in answering questions the Committee may pose on aspects of their particular programs. Mr. Russell will present his statement for Activity 4, Promoting Employment of the Handicapped, and will testify on that Activity.

The bureaus that comprise the Administration have closely related responsibilities and interests in many areas including equal pay, child labor, safety and occupational health, workmen's compensation, and women's employment. Many of these areas are growing both in complexity and importance. Industrial growth and rapid technological change have caused the occupational safety and health area to become an increasingly vital one. The growing number of women in the labor force—and the fact that many women workers are heads of families which fall below the poverty level—has given the work of the Women's Bureau increased importance. Close coordination of the various bureaus' efforts in these and other areas is needed to assure that the programs administered by the Wage and Labor Standards Administration are responsive to the changing needs and problems of the worker and that they complement each other without duplication or overlap.

Our request in 1969 is for $12,177,000 and 1030 positions. This represents an increase of 23 positions and $1,096,730 above the revised 1968 appropriations:

—$606,430—well over half of this amount—is for necessary mandatory and financing increases such as the cost of within-grade increases, etc.

—$477,600 and 23 positions are requested for program expansion in two areas; the Bureau of Labor Standards and the Office of the Administrator

—$47,900 is requested for the full cost of 50 new positions approved in 1968 for the Bureau of Employees' Compensation

—there is a $41,200 decrease in non-recurring costs which partially offsets the increase of $47,900

In 1968 admininstrative costs under the rehabilitation provisions of the Longshoremen's and Harbor Workers Compensation Act was financed through a transfer from the Longshore Trust Fund. The status of the Fund at the end of fiscal year 1968 will not permit its continued use for this purpose. We are therefore requesting $68,000 in general funds to supplement the $34,500 available in

the Trust Fund. We are also requesting $6,000 to pay rehabilitation benefits under the Act which cannot be financed from the Trust Fund.

One of the Wage and Labor Standards Administration program increases for 1969 is for Activity 3. Improving Safety and Other Working Conditions of Wage Earners. This increase is for 13 positions and $214,000 to enable us to significantly increase the number of safety and health inspections of work places under the Public Contracts Act.

I should like to briefly summarize the extent of this problem:

—In 1966 there were approximately 75,000 work locations under the Public Contracts Act. This represents a substantal increase in worksites from 1965.

—Workers covered under the Public Contracts Act alone have increased from 15 million in 1966 to more than 27 million in the current fiscal year.

—The Vietnam war has forced the reopening of outmoded, sometimes hazardous plants to produce war goods. This factor-combined with increased production pressures—has caused some serious accidents. These have occurred in such vital areas as ammunition production.

—National industrial injuries are increasing generally. The preliminary rate of 13.2 based on the first half of 1966 points to the possibility that injury rates in 1966 are higher than for any year since 1953.

To carry out Public Contract Safety inspections, the Bureau has a staff of 10 engineers, who will be able to make only approximately 1,500 inspections in 1968. The increased staff, it is anticipated, will be able to bring the 1969 inspection total to about 2,800 still considerably short of the number of inspections that should be made, considering the number of employees and employers covered under Public Contract Act authorities. To make the best use of this staff, our 1969 plans provides for giving priority to high-hazard operations. I believe we all learned a lesson from the uranium mining radiation problem that surfaced last year—namely, that the procurement acts safety and health program, small as it is, can make a significant impact and improve working conditions when it is aimed at particularly hazardous situations.

Safety improvements in longshoring, shipbuilding and ship repairing are continuing, with the ship repair rate for the first nine months of calendar year 1967 dropping 11.4 percent below the 1966 rate and the longshoring rate dropping 2.3 percent. However, since these are still the most dangerous of all industries, we cannot relax our efforts. We hope that 1969 will show a continuation of the steady decline which has resulted from our efforts.

Federal safety continues to improve. When Mission SAFETY–70 was announced by the President, the goal was a 30 percent reduction in Federal injuries by 1970. At midpoint injuries to Federal employees have been reduced by nearly 13 percent, with more than 10,000 injuries averted and some $8 million saved. Each of the past three years has successively achieved the lowest injury frequency rate on record.

Emphasis in 1969 will center on further reductions in government motor vehicle accidents, improvement in accident reporting and analysis, more adequate detection and subsequent correction of work hazards, and expanded safety training, particularly for supervisors and new hires.

A year ago we discussed the States and their efforts to improve labor law and administrative practices. Since then, a number of improvements have been made in minimum wage, antidiscrimination, safety and workmen's compensation legislation. Some of the improvements are:

—Minimum wage law in Nebraska

—Antidiscrimination law with mandatory compliance provisions in West Virginia

—Age discrimination law in Illinois

—Replacement of limited safety provisions with comprehensive safety laws in Michigan and Texas

—Significantly improved control of radiation hazards in Colorado, Idaho, Illinois, Maryland, Montana, Puerto Rico, South Carolina, South Dakota, Utah, and Vermont

—Significant revisions in coverage or minimum rates in minimum wage laws in 23 jurisdictions

—Minimum wage protection for men in Nebraska and Oregon

—Workmen's compensation provisions in Alabama, North Dakota, Wyoming, making radiation exposure a compensable disease

—Liberalization of time limit for filing for radiation diseases in Idaho, Maryland, Nevada, and West Virginia

The foregoing illustrate the progress made by the States, but much more needs to be done. The Bureau will continue with its technical assistance program to the States in 1969.

I should now like to turn to the important work of the Women's Bureau. For close to half a century the basic concern of the Bureau has been to promote the welfare of wage earning women. Today it provides a focal point of leadership and is the clearinghouse for information within the Federal Government on questions relating to the economic, legal and civil status of women. Working through its national office and five regional offices, the Bureau stimulates—at the national, State and local levels—activity directed toward bringing about needed changes in institutions, attitudes and laws affecting women's status and their opportunities in employment, education, and civil and political life. With more than 29 million women in our labor force and the likelihood that nine out of every 10 girls will engage in paid employment at some time in their lives, the Bureau's work is relevant to practically all the women in the Nation.

In recent years the Bureau has substantially redirected its program to focus on new priorities; a major emphasis of its present program is the special employment related problems of low-income women and girls. Through the efforts of its national office and field staff the Bureau has stimulated the establishment of commissions on the status of women in 50 States, 2 municipalities, the District of Columbia and the Virgin Islands. These groups provide a force for constructive action at the State and local level. I would like to submit for the record a summary of highlights, by State, of developments of special interest to women and excerpts from a number of representative letters to the Women's Bureau on its work.

The Bureau provides the secretariat and serves as the continuing staff resource for the Interdepartmental Committee and the Citizens' Advisory Council on the Status of Women and for the coordinating groups established by the President to promote the implementation and updating of the recommendations of the President's Commission on the Status of Women.

The Bureau's current program directed toward encouraging the development of expanded child care services for working mothers illustrates a variety of the techniques used so effectively by the Bureau. There are in the United States today 3.7 million working mothers with 4.5 million children under 6 years of age and places for only only about 450,000 children in licensed day care centers. To promote needed action the Bureau has stimulated effort by voluntary organizations, cosponsored pilot conferences, cooperated with other Federal agencies and departments and prepared and disseminated educational and promotional information.

The significant highlights of Bureau accomplishments are presented in some detail in our narrative statement. They evidence the growing emphasis on stimulating increased public awareness of the special employment-related problems of low-income women and girls.

In Fiscal Year 1969 the Bureau plans to intensify its on-going programs to assist the 12 million women and girls who now live in poverty and to implement others. It will continue to stimulate the expansion of child care services, the upgrading of private household employment, the extension and improvement of State minimum wage legislation, the establishment of new entrance level job ladders and the resolution of the issues raised by the passage of Title VII of the Civil Rights Act of 1964, as its effects on State laws relate to women workers. It will also continue to stress the need for more effective vocational counseling and guidance for girls and women in poverty and to promote a coordinated program encouraging the participation and effective use of non-governmental groups and individuals in programs for the disadvantaged.

The programs of the Bureau of Employees' Compensation are vital to the economic welfare of Federal employees and other workers covered by Federal workmen's compensation laws.

The Federal Employees' Compensation Act provides coverage to over 3 million employees of the Federal Government. The purpose of the Act is to ease the burden imposed on individual workers and their families as a result of job connected injury or death. The large majority of those injured are in unskilled and semi-skilled occupations, and the financial burdens imposed by such injuries or by death are often overwhelming. Therefore, it is the Bureau's primary purpose to provide speedy, efficient and equitable service to these individuals or to their families.

In fiscal year 1967 there were 121,324 reports of new injuries received and processed by the Bureau. It is anticipated that new injuries reported in 1968 and 1969 will total 125,000 and 130,000 respectively. These increases are due primarily to increased Federal employment in those agencies that have high injury rates. The Bureau further anticipates an overall workload of 182,500 Federal Employees' Compensation Act cases in FY 1969. This estimate includes the 130,000 new cases mentioned above, the reopening of 30,000 cases and the maintenance of some 22,500 payment cases. It compares with a fiscal year 1967 total workload of 168,926 and an estimated 1968 workload of 175,000. The Bureau administers this entire program at a cost of approximately $21 a case. In FY 1967 the bureau administered the Federal Employees' Compensation Act program at a cost of $3,602,000—four percent of the benefits paid. This compares quite favorably with the 10 to 15 percent administrative cost prevailing in the private insurance industry.

The Bureau also administers the Longshoremen's and Harbor Workers' Act which provides workmen's compensation benefits for employees in the private maritime industry and in certain other private employment.

Liability for the payment of compensation benefits under the program rests with the employer and the only expense to the Federal Government is for the administration of the program. The employer must meet this liability by insuring with a carrier authorized by the Bureau to write such insurance or by qualifying as a self insurer.

Section 44 of the Longshoremen's and Harbor Workers' Act created a trust fund to be used for rehabilitation of permanently disabled beneficiaries covered under the Act. The fund is made up of sums paid by employers in certain fatal cases, fines, penalties and interest or earnings. In past years the Bureau has transferred money from the Trust Fund for the costs of administering the rehabilitation provisions of the Act. The status of the Fund at the end of Fiscal 1968 will not permit continuation of this transfer. We are therefore requesting that these costs—and a portion of the rehabilitation benefit costs—be financed from the general fund in 1969.

The Employees' Compensation Appeals Board which was formerly shown in the Office of the Secretary Budget, is now part of the Wage and Labor Standards Administration and is shown in Activity 2, Appeals from determinations of Federal Employees' claims. The workload of the Board is relatively stable. 268 cases were closed in 1967. It is estimated that 313 cases will be closed in Fiscal Year 1968 and 300 cases in Fiscal Year 1969.

I should like to turn to the Office of the Administration. This Office is composed of my immediate staff and an Office of Planning. Since the Administration was established a very small staff has attempted to assist me in the overall direction and coordination of the Administration. The nature and extent of the workload encountered thus far in 1968 and the need to carry out as fully and effectively as possible the responsibilities assigned to the Administration by the Secretary are reflected in our requested program increase for 1969. We are asking for 10 positions and $263,600 to provide:

(a) A program officer and three program analysts to provide a continuing review of bureau programs, to coordinate research and to provide staff assistance in developing policy.

(b) A budget officer to consolidate and coordinate Administration budget activities.

(c) A special assistant to work closely with me on major complex problems—such as consumer problems of workers—and to monitor an administration-wide information program.

(d) Secretarial support for these and existing positions.

## CONSOLIDATED WAGE AND LABOR STANDARDS BUDGET

Mrs. PETERSON. As you are aware, this is the first time that the Department is submitting a consolidated Wage and Labor Standards budget.

Senator HILL. You have not done that in the past?

Mrs. PETERSON. No. This administration was set up by the Secretary in July 1967. It consists of the Bureau of Labor Standards. Mr. Swankin on my right is the Acting Director.

The Woman's Bureau Director is Mrs. Keyserling, who has appeared before you many times.

The Bureau of Employees' Compensation, is headed by Mr. Tinsley, who has presented that budget many times. Then we have the Employees' Compensation Appeals Board, headed by Mr. Schwartz.

I am very pleased to introduce Larry Gold, who has been assisting me on the budget presentation.

This budget consolidation carries out the establishment by the Secretary in 1967 of the Wage and Labor Standards Administration.

### ADMINISTRATION AND BUREAU RESPONSIBILITIES

You will notice that, even though we are presenting an overall budget, each Bureau maintains its identity.

Senator HILL. Each maintains its identity?

Mrs. PETERSON. Yes, it does. The Administration does have specific responsibility for the executive direction and coordination of these wage and labor standards programs. The Bureaus that comprise the Administration have very closely related responsibilities and interests in many areas.

They include equal pay, occupational safety and health, youth safety under the FLSA, workmen's compensation, and women's employment.

There are many areas of the standards field that interweave.

With the Administration, I feel that we are better able to improve and coordinate our work. Many of these areas are growing, both in complexity and in importance and the close coordination of the various bureaus in these and other areas is needed to assure that the programs are responsive to the changing needs and problems of the workers and that the programs complement each other without duplication or overlap.

I would like to say a few words about our overall request if I could, and then turn to the major program increases for the Office of the Administrator and for the Bureau of Labor Standards.

### 1968 APPROPRIATION AND 1969 BUDGET REQUEST

Our total request for the Administration for 1969 is $12,177,000. That represents 1,030 positions and is an increase of $1,096,730 and 23 positions above the revised 1968 appropriation.

I would like to point out that the largest part of this increase ($606,430), well over half, is for the necessary mandatory and financing increases such as the cost of within-grade increases.

The approximately $490,000 that is left takes care of the increases in positions that we are asking for.

One of the two major program increases is for the Office of the Administrator to help implement the Secretary's order which set up this Administration.

### ADMINISTRATION DIRECTION AND COORDINATION

Since the Administration was established, a very small staff has attempted to assist me in the overall direction and coordination of its activities.

The nature and extent of the workload encountered thus far in 1968 and the need to carry out as fully and effectively as possible the responsibilities assigned to the Administration by the Secretary necessitates the request for an additional 10 positions and $263,600 to provide the necessary staff for this.

These positions include a program officer and three program analysts to review the program, work in new areas, examine and develop recommended solutions to the problems, coordinate and initiate the necessary research, and provide staff assistance in developing policy.

A budget officer is needed to consolidate and coordinate the Administration's budget activities.

A special assistant is required to work closely with me on complex problems and to monitor an Administration-wide information program.

The remaining positions represent secretarial support for these existing positions. I would note here in terms of positions that our budget contains only 1.8 percent for overall administration and executive direction of the entire administration, which I think is a modest amount. That is one of the major increases that we are asking for.

### OCCUPATIONAL SAFETY AND HEALTH

The only other increase is for 13 additional safety inspectors and $214,000 under the Public Contracts Act to assist us in attacking the problem of occupational safety and health that the Secretary referred to in a broader context.

I would like to briefly summarize that problem as we see it in relation to our Public Contracts activities.

In 1966, there were approximately 75,000 work locations under the Public Contracts Act. This is a substantial increase in worksites.

Senator HILL. That is quite a bit, is it not?

Mrs. PETERSON. Yes, it is. The workers covered under the Public Contracts Act have increased from 15 million in 1966 to 27 million in this fiscal year.

The Vietnam war has forced the reopening of outmoded and sometimes hazardous plants to produce war goods. This factor combined with increased production and pressures has caused serious accidents in such vital areas as ammunition production.

### INDUSTRIAL INJURIES

The national rates for industrial injuries are increasing generally. The preliminary rate of 13.2 based on the first half of 1966 compares with the 1965 rate of 12.8. It points to the possibility that injury rates may continue to increase and means that we must increase our effort. If we can cut down the loss of life and the disablement that is taking place we can assist people in earning their living and in carrying on their work.

### PERSONNEL

To carry out the public contract safety inspection, the Bureau has a staff of 10 engineers who will be able to make only approximately 1,500 inspections in 1968. It is anticipated that the increased staff will be able to bring the 1969 inspection total to 2,800.

This is still considerably short of the number of inspections that should be made. We are now doing roughly around 2 percent. This would increase it to 4 percent, which is still short of what we should do.

Senator HILL. Only 4 percent?

Mrs. PETERSON. Four percent of all the covered establishments. Nevertheless, it is a good increase. It is something that is substantial.

### CONCENTRATION ON HIGH HAZARD AREAS AND OCCUPATIONS

We learned that if we concentrate on the high hazard industries, we can have a marked effect on accidents. The experience that we had in the uranium mine radiation problem last year showed us that.

Senator HILL. It is amazing what you can do.

Mrs. PETERSON. Yes, with the cooperation of the various agencies concerned and of the employers who are anxious to reduce the toll. These are the two main points.

These are the two areas where we are asking for increases. We have not talked of the ongoing work for which no increases are asked.

Senator HILL. You have no increase in the budget?

Mrs. PETERSON. I have only spoken of the places where we have increases. That does not mean that the ongoing work is not terribly important—in the work of the Women's Bureau and other areas that are represented here.

I would be very pleased to try to answer any questions you have. I have not asked the Bureau directors to make presentations but I am very sure they will be happy to answer any questions you might have.

Senator HILL. You always bring us a mighty good statement. You are doing a good job, too.

Mrs. PETERSON. We appreciate the assistance you have given us.

## Bureau of Employees' Compensation

### Claims and Expenses

**STATEMENT OF MRS. ESTHER PETERSON, ASSISTANT SECRETARY FOR LABOR STANDARDS**

**ACCOMPANIED BY:**

**TIMOTHY McGINLEY, ACTING DEPUTY ASSISTANT SECRETARY FOR LABOR STANDARDS**

**NEAL HERRICK, DIRECTOR, OFFICE OF PLANNING**

**LARRY GOLD, BUDGET OFFICER**

**THOMAS TINSLEY, DIRECTOR, BUREAU OF EMPLOYEES' COMPENSATION**

**LEROY MINOR, ASSISTANT DIRECTOR, ADMINISTRATIVE MANAGEMENT, BUREAU OF EMPLOYEES' COMPENSATION**

**MRS. CHARLOTTE BOWERS, BUDGET OFFICER, BUREAU OF EMPLOYEES' COMPENSATION**

**RICHARD E. MILLER, DIRECTOR, OFFICE OF PROGRAM AND BUDGET REVIEW**

#### Appropriation Estimate

"Wage and Labor Standards Administration Bureau of Employees' Compensation, Employees' Compensation Claims and Expenses

"For the payment of compensation and other benefits and expenses (except administrative expenses) authorized by law and accruing during the current or any prior fiscal year, including payments to other Federal agencies for medical and hospital services pursuant to agreement approved by the Bureau of Employees' Compensation; continuation of payment of benefits as provided for under the head 'Civilian War Benefits' in the Federal Security Agency Appropriation Act, 1947; the advancement of costs for enforcement of recoveries in third-party cases; the furnishing of medical and hospital services and supplies, treatment, and funeral and burial expenses, including transportation, and other expenses incidental to such services, treatment, and burial, for such enrollees of the Civilian Conservation Corps as were certified by the Director of such Corps as receiving hospital services and treatment at Government expense on June 30, 1943, and who are not otherwise entitled thereto as civilian employees of the United States, and the limitations and authority formerly provided by the Act of September 7, 1916, 48 Stat. 351, as amended, shall apply in providing such services, treatment, and expenses in such cases and for payments pursuant to sections 4(c) and 5(f) of the War Claims Act of 1948 (50 U.S.C. App. 2012); [$56,061,000] *$52,691,000*, together with such amount as may be necessary to be charged to the subsequent year appropriation for the payment of compensation and other benefits for any period subsequent to March 31 of the year."

AMOUNTS AVAILABLE FOR OBLIGATION

| | 1968 | 1969 |
|---|---|---|
| Appropriation or estimate | $56,061,000 | $52,691,000 |
| Reimbursements from other agencies (Public Law 86-767) | 36,460,000 | 43,928,000 |
| Appropriation or estimate, revised | 92,521,000 | 96,619,000 |

OBLIGATIONS BY ACTIVITY

| Description | Appropriation revised, 1968 | Estimate, 1969 | 1969 change |
|---|---|---|---|
| 1. Federal civilian employees benefits | $40,251,000 | $37,381,000 | −$2,870,000 |
| 2. Armed Forces reservists benefits | 12,900,000 | 12,500,000 | −400,000 |
| 3. War Claims Act benefits | 500,000 | 500,000 | |
| 4. Other benefits | 2,410,000 | 2,310,000 | −100,000 |
| Total direct obligations | 56,061,000 | 52,691,000 | −3,370,000 |
| 1. Federal civilian employee benefits financed by reimbursements from other agencies | 36,460,000 | 43,928,000 | +7,468,000 |
| Total obligations | 92,521,000 | 96,619,000 | +4,098,000 |

OBLIGATIONS BY OBJECT

| | Appropriation revised, 1968 | Estimate, 1969 | 1969 change |
|---|---|---|---|
| 42 Insurance claims and indemnities | $92,521,000 | $96,619,000 | +$4,098,000 |
| Deduct reimbursements from other agencies | 36,460,000 | 43,928,000 | +7,468,000 |
| Total direct obligations | 56,061,000 | 52,691,000 | −3,370,000 |

SUMMARY OF CHANGES

| | Direct appropriation | Authorization by transfer | Estimated available |
|---|---|---|---|
| 1968 appropriation or transfer | $56,061,000 | $36,460,000 | $92,521,000 |
| 1969 estimate | 52,691,000 | 43,928,000 | 96,619,000 |
| Total Change | −3,370,000 | +7,468,000 | +4,098,000 |
| Mandatory items: | | | |
| Federal civilian employee benefits: | | | |
| Increase in benefits for this activity are attributed to: | | | |
| (a) increase in disability and death compensation | +$1,700,000 | | +$1,700,000 |
| (b) increased medical based on experience | +900,000 | | +900,000 |
| (c) increase for full year cost for pay increase and consumer price index adjustments | +1,998,000 | | +1,998,000 |
| Federal civilian employee benefits: | | | |
| Increase to be recovered from Federal agencies for injuries or deaths to their employees occurring after December 1, 1960, as provided by sec. 209 of Public Law 86-767 approved September 13, 1960, amending sec. 35 of the Federal Employees' Compensation Act (5 U.S.C. 785) | −7,468,000 | +$7,468,000 | |
| Armed Forces reservists benefits: This activity reflects a continuing decrease in benefits for injury or death of members of the Armed Forces, which legislation was repealed by Public Law 881 approved Aug. 1, 1956 | −400,000 | | −400,000 |
| Other benefits: Programs under this activity involve coverage of relatively small groups. An overall decrease is anticipated in fiscal year 1969 | −100,000 | | −100,000 |
| Total change | −3,370,000 | +7,468,000 | +4,098,000 |

*Activity 1. Federal civilian employees' benefits*

| | |
|---|---|
| 1968 | $76,711,000 |
| 1969 | 81,309,000 |

NARRATIVE DESCRIPTION OF PROGRAM

This Act authorizes payment of benefits to civilian employees of the United States disabled as a result of injuries sustained while in the performance of duty, and to dependents of employees who die as the result of such injuries. Certain of these benefits are payable during the lifetime of the beneficiary, and the principal annual cost is for permanent disability and death compensation for

which liability was incurred in prior years. Expenditures from this fund for temporary disability and for medical care are directly influenced by changes in the number of new cases received within the current and preceding year. Other factors influencing the costs are increases in number of civilian employees, increases in wages on which compensation is based, the severity and frequency of injuries, the increased cost of medical expense, adjustments in benefits for cost-of-living increase based on the Consumer Price Index, educational benefits for dependent children, lump-sum payments to widows and dependent widowers upon remarriage, and other adjustments provided by the passage of the 1966 amendments to the Federal Employees' Compensation Act.

Public Law 86–767 amended Section 35 of the Act to provide that other Government agencies reimburse the Compensation Fund for costs incurred due to injuries or deaths occurring after December 1, 1960. The Bureau must provide each agency, prior to August 15 each year, with a statement of such costs. Each agency is then required to include in its annual budget, a request for appropriation in an amount equal to such costs. Sums appropriated pursuant to such requests shall, within 30 days after they become available, be deposited to the credit of the Compensation Fund.

The total increase for this activity is $4,598,000 and is distributed as follows:

| | |
|---|---|
| Disability and death benefits | $1,700,000 |
| Medical costs | 900,000 |
| Federal pay costs and consumer price index adjustments | 1,998,000 |
| | 4,598,000 |

This increase is offset by an increase in reimbursements under the "Charge-back" program of $7,468,000 for a net decrease of $2,870,000 in the direct appropriation.

An estimated increase of $1,700,000 in disability and death compensation payments is conservatively based upon the trend of expenditures for the past several years. The principal reasons for this trend are due to increases in Federal employees salaries. Federal employment and workload. Federal employment figures in fiscal year 1967 ranged from 2.8 million to 3.0 million, with an average of 2.9 for the entire fiscal year. New injuries reported in fiscal year 1967 were 121,321 or an increase of 11.9 percent over the previous year. Estimated new injuries for fiscal year 1968 are 125,000 and 130,000 for fiscal year 1969 which is a 7.2 percent increase over actual injuries reported in fiscal year 1967. In spite of these increases in new injuries reported, which coincide with increased Federal employment, the frequency rate in injuries is declining. This means that even though new injuries increase the number of injuries occurring per million manhours worked are decreasing.

Medical expenditures from the compensation fund for fiscal year 1967 reflect a continuing increase in both private and government facilities. In 1967 the cost has risen to $13,596,920, or an 18.4 percent increase over fiscal year 1966. While the estimate in fiscal year 1968 is of a lesser amount it is anticipated that actual expenditures will be higher. The amount requested for fiscal year 1969 is $14,220,000 and represents a conservative increase of $900,000.

During fiscal year 1967 the Bureau was required to make many adjustments in benefit payments to carry out the revisions provided under P.L. 89–488 "Federal Employees' Compensation Act Amendments for 1966". These initial adjustments were in excess of $12,000,000 and are continuing costs in subsequent fiscal years.

One of the major provisions in the 1966 amendments provides for an automatic cost-of-living adjustment in compensation payments based on the Consumer Price Index. The first adjustment made under this provision was an increase of 12.5 percent effective October 1, 1966. This adjustment was based on an annual average price index for calendar year 1958 and the price index for July 1966 (1958, 100.7—July 1966, 113.3). The law provides that subsequent adjustments will be made when the price index has risen 3 per centum over the most recent base period (July 1966) and remains at that level for three months. The Consumer Price Index level reached 116.9 (3.2 percent) in August, 1967, 117.1 (3.4 percent) in September and 117.5 (3.7 percent) in October, with all three months exceeding 3 per centum over the base period.

Further adjustments are being made in the minimum and maximum benefits under the Federal Employees' Pay Act (P.L. 90–206) and will be completed by February 1968. It is estimated that expenditures from the compensation fund

will increase, due to these adjustments, by $685,000 in 1968 and $1,998,000 for fiscal year 1969.

Reimbursements to the Compensation Fund by other agencies will total $43,928,000, an increase of $7,468,000 over 1968. Nine establishments, namely the Post Office Department, Departments of the Army, Navy, Air Force, Agriculture, Interior, and Transporation, the Veterans Administration, and the Tennessee Valley Authority comprise 88.6 percent of the reimbursements under the "Charge-back" program.

*Changes for 1969*

| | |
|---|---|
| Mandatory changes amount to | +$4,598,000 |
| Direct appropriation | −2,870,000 |
| Reimbursements | +7,468,000 |

*Activity 2. Armed Forces reservists benefits*

| | |
|---|---|
| 1968 | $12,900,000 |
| 1969 | 12,500,000 |

NARRATIVE DESCRIPTION OF PROGRAM

For a number of years, the benefits of the Federal Employees' Compensation Act were extended to members of the Reserve components of the Armed Forces for injuries occurring in the line of duty. Public Law 881, approved August 1, 1956, repealed legislation providing compensation for reservists in respect to casualties occurring after December 31, 1956.

The "Federal Employees' Compensation Act Amendments of 1966" provided educational benefits to dependent children and lump-sum awards to dependent widows upon remarriage.

In 1967 there were approximately 3,500 cases on the compensation roll. The payments under this activity continue to decrease each year as the beneficiaries remarry and dependent children become of age. In 1968 it is estimated there will be approximately 3,300 cases and in 1969 approximately 3,100 cases or a decrease of 200 cases per year.

*Changes for 1969*

| | |
|---|---|
| Mandatory changes amount to | −$400,000 |

*Activity 3. War Claims Act benefits*

| | |
|---|---|
| 1968 | $500,000 |
| 1969 | 500,000 |

NARRATIVE DESCRIPTION OF PROGRAM

Sections 4(c) and 5(f) of the War Claims Act of 1948 cover employees of Government contractors and civilian American citizens who were captured by the Japanese Government. Costs during the current fiscal year under sections 4(c) and 5(f) are estimated to be $500,000 the same as in fiscal year 1968.

No new injuries are anticipated under this program. However, as the present beneficiaries become older, more medical expenses are incurred.

*Activity 4. Other benefits*

1968 ---------- $2,410,000
1969 ---------- 2,310,000

The table below reflects the changes under this activity:

| Program | Actual, 1966 | | Actual, 1967 | | Estimate, 1968 | | Estimate, 1969 | | Change | |
|---|---|---|---|---|---|---|---|---|---|---|
| | Cases | Amount | Cases | Amount | Cases | Amount | Cases | Amount | Cases | Amount |
| Civil Air Patrol | 43 | $75,078 | 43 | $92,247 | 43 | $95,000 | 43 | $95,000 | | |
| Reserve Officers' Training Corps | 2 | 11,309 | 2 | 17,264 | 2 | 20,000 | 2 | 20,000 | | |
| Relief work employees | 866 | 682,585 | 818 | 1,739,533 | 818 | 1,868,000 | 800 | 1,825,000 | −18 | −$43,000 |
| Employees of Government contractors | 12 | 77,596 | 6 | 95,064 | 6 | 100,000 | 6 | 100,000 | | |
| Civilian war benefits | 35 | 30,826 | 34 | 29,189 | 34 | 30,000 | 33 | 25,000 | −1 | −5,000 |
| Maritime war risk benefits | 38 | 96,063 | 38 | 90,639 | 38 | 92,000 | 37 | 90,000 | −1 | −2,000 |
| Antipoverty benefits | 17 | 6,939 | 11 | 37,762 | 50 | 150,000 | 50 | 100,000 | | −50,000 |
| Administrative expenses for legal services | | | | 51,641 | | 55,000 | | 55,000 | | |
| Total | [1] 1,013 | 980,396 | [1] 952 | 2,153,339 | 991 | 2,410,000 | 971 | 2,310,000 | −20 | −10,0000 |

[1] Number of cases on payrolls as of June 30, 1966, and June 30, 1967.

Programs under this activity involve coverage of relatively small groups. Estimates for fiscal year 1969 are based on a projection of the 1966 and 1967 experience.

*Changes for 1969*

Mandatory changes amount to ---------- −$100,000

REIMBURSEMENT TO EMPLOYEES' COMPENSATION FUND IN ACCORDANCE WITH PUBLIC LAW 86-767

| | Fiscal year 1967 costs for reimbursement in fiscal year 1969 | Increase or decrease over payments for fiscal year 1968 |
|---|---|---|
| Federal civilian employees benefits, department or agency: | | |
| Department of Agriculture | $2,202,147 | $538,226 |
| Department of Commerce | 272,372 | −51,187 |
| Department of Defense | 5,087 | 98 |
| Defense Atomic Support Agency | 32,042 | 5,989 |
| Defense Communications Agency | 270 | −110 |
| Defense Intelligence Agency | 8,472 | −4,930 |
| National Security Agency | 20,430 | −7,198 |
| Defense Supply Agency | 400,811 | 170,631 |
| Department of the Air Force | 4,756,832 | 498,791 |
| Department of the Army | 4,867,285 | 1,062,823 |
| Corps of Engineers, civil functions | 655,599 | 31,182 |
| National Cemeteries and Ryukyu Islands Civil Administration | 43,685 | 23,915 |
| National Guard | 233,333 | 51,937 |
| Department of the Navy | 7,623,483 | 1,1051,236 |
| U.S. Marines | 241,640 | 28,052 |
| Department of Health, Education, and Welfare | 451,671 | 75,113 |
| Department of Housing and Urban Development | 75,071 | −881 |
| Department of Interior | 1,534,920 | 217,879 |
| Department of Justice | 344,005 | 62,474 |
| Department of Labor | 52,575 | −19,302 |
| Department of State | 128,537 | 78,577 |
| Agency for International Development | 223,454 | 63,242 |
| International Boundary and Water Commission | 4,659 | −4,622 |
| Peace Corps | 515,077 | 127,592 |
| Department of Transportation | 966,815 | 966,815 |
| Department of Treasury | 235,243 | −100,244 |
| Internal Revenue Service | 495,150 | 132,725 |

REIMBURSEMENT TO EMPLOYEE'S COMPENSATION FUND IN ACCORDANCE WITH PUBLIC LAW 86-767—Continued

| | Fiscal year 1967 costs for reimbursement in fiscal year 1969 | Increase or decrease over payments for fiscal year 1968 |
|---|---|---|
| Federal civilian employees benefits—Continued | | |
| Post Office Department | $11,883,865 | $1,767,567 |
| American Battle Monuments Commission | 57 | 9 |
| Atomic Energy Commission | 81,003 | 46,851 |
| Architect of the Capitol | 27,784 | 86 |
| Bureau of the Budget | 1,288 | −3,757 |
| Civil Aeronautics Board | 4,537 | 1,033 |
| Civil Service Commission | 14,873 | 4,292 |
| Export-Import Bank of Washington | 21,728 | 17,139 |
| Executive Office of the President | | −193 |
| Federal Aviation Agency | | −504,874 |
| Federal Communications Commission | 1,596 | 716 |
| Federal Deposit Insurance Corporation | 13,180 | 7,367 |
| Federal Home Loan Bank Board | 20,016 | 1,968 |
| Federal Power Commission | 50 | 38 |
| Federal Maritime Commission | | −1,695 |
| Federal Mediation and Conciliation Service | 145 | 67 |
| Federal Reserve System | 191 | −150 |
| Federal Trade Commission | 2,233 | −4,389 |
| General Accounting Office | 21,768 | 5,893 |
| General Services Administration | 519,030 | 144,524 |
| Government Printing Office | 75,009 | −7,852 |
| Interstate Commerce Commission | 18,611 | −3,451 |
| Library of Congress | 1,679 | −1,787 |
| National Aeronautics and Space Administration | 386,611 | 111,128 |
| National Capital Housing Authority | 1,002 | 943 |
| National Capital Transportation Agency | 159 | −190 |
| National Labor Relations Board | 15,287 | 12,471 |
| National Mediation Board | | −220 |
| National Science Foundation | 82 | 82 |
| Office of Economic Opportunity | 54,817 | 47,802 |
| Office of Emergency Planning | 51 | 51 |
| Railroad Retirement Board | 7,492 | 6,913 |
| Renegotiation Board | 32 | 9 |
| St. Lawrence Seaway Development Corporation | | −8,976 |
| Selective Service System | 42,066 | 20,356 |
| Securities and Exchange Commission | 11,507 | 7,195 |
| Small Business Administration | 36,821 | 18,471 |
| Smithsonian Institution | 17,126 | 806 |
| National Gallery of Art | 394 | −180 |
| National Zoological Park | 3,407 | 422 |
| Soldiers Home | 10,454 | 8,000 |
| Subversive Activities Control Board | | −32 |
| Tennessee Valley Authority | 1,608,320 | 262,143 |
| The White House Office | | −25 |
| U.S. courts | 2,105 | −982 |
| Supreme Court | | −12 |
| U.S. House of Representatives | 3,883 | −1,480 |
| U.S. Information Agency | 46,621 | 9,232 |
| U.S. Senate | 6,202 | −162 |
| U.S. Tariff Commission | 121 | 121 |
| Veterans' Administration | 2,555,859 | 523,439 |
| Veterans Canteen Service | 18,167 | 3,651 |
| Virgin Islands Corporation | | −8,024 |
| Total | 43,927,894 | 7,464,134 |
| Rounded | 43,928,000 | [1] 7,468,000 |

[1] Increase in "chargeback" as reflected on the summary of changes.

## EMPLOYEES' COMPENSATION CLAIMS AND EXPENSES—STATEMENT OF ACTUAL AND ESTIMATED BENEFIT PAYMENTS

| | Actual, 1966 | | | Actual, 1967 | | | Estimate, 1968 | | | Estimate, 1969 | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | Payments | Unit cost | Total cost | Payments | Unit cost | Total cost | Payments | Unit cost | Total cost | Payments | Unit cost | Total cost |
| Total disability | 162,136 | $228 | $36,930,993 | 181,997 | $247 | $44,932,133 | 167,189 | $273 | $45,642,500 | 173,100 | $283 | $48,921,000 |
| Total medical | 154,895 | 74 | 11,481,688 | 174,864 | 78 | 13,596,920 | 170,700 | 78 | 13,320,000 | 173,330 | 82 | 14,220,000 |
| Total death | 65,149 | 184 | 11,985,904 | 66,411 | 230 | 15,250,610 | 66,648 | 260 | 17,328,500 | 66,648 | 266 | 17,748,000 |
| Miscellaneous costs | 7,190 | 59 | 423,832 | 7,218 | 57 | 409,364 | 7,000 | 60 | 420,000 | 7,000 | 60 | 420,000 |
| 1. Benefits, Federal civilian employees | 389,370 | 156 | 60,822,417 | 430,490 | 172 | 74,189,027 | 411,537 | 186 | 76,711,000 | 420,078 | 194 | 81,309,000 |
| 2. Reservists of the Armed Forces | 50,213 | 256 | 12,859,844 | 47,205 | 261 | 12,342,007 | 46,600 | 277 | 12,900,000 | 44,200 | 283 | 12,500,000 |
| 3. Civil Air Patrol | 505 | 149 | 75,073 | 544 | 170 | 92,247 | 559 | 170 | 95,000 | 559 | 170 | 95,000 |
| 4. Reserve Officer Training Corps | 93 | 122 | 11,309 | 138 | 125 | 17,264 | 160 | 125 | 20,000 | 160 | 125 | 20,000 |
| 5. Federal relief work projects | 11,098 | 62 | 682,585 | 10,613 | 164 | 1,739,533 | 10,511 | 178 | 1,868,000 | 10,224 | 179 | 1,825,000 |
| 6. Employees of Government contractors | 535 | 145 | 77,596 | 606 | 157 | 95,064 | 700 | 143 | 100,000 | 700 | 143 | 100,000 |
| 7. Civilian war benefits | 441 | 70 | 30,826 | 440 | 66 | 29,189 | 450 | 67 | 30,000 | 373 | 67 | 25,000 |
| 8. Maritime war risk benefits | 506 | 190 | 96,063 | 490 | 185 | 90,639 | 500 | 184 | 92,000 | 489 | 184 | 90,000 |
| 9. Economic Opportunity Act | 35 | 198 | 6,939 | 176 | 215 | 37,762 | 750 | 200 | 150,000 | 500 | 200 | 100,000 |
| Total benefits, FECA | 452,796 | 165 | 74,662,657 | 490,702 | 181 | 88,632,732 | 471,767 | 195 | 91,966,000 | 477,283 | 201 | 96,064,000 |
| Employees of Government contractors | 1,755 | 119 | 208,331 | 1,669 | 119 | 198,417 | 1,778 | 119 | 212,000 | 1,778 | 119 | 212,000 |
| Civilian American internees | 2,693 | 113 | 303,967 | 2,384 | 110 | 262,738 | 2,826 | 102 | 288,000 | 2,826 | 102 | 288,000 |
| 10. Benefits under War Claims Act | 4,448 | 115 | 512,293 | 4,053 | 114 | 461,155 | 4,604 | 109 | 500,000 | 4,604 | 109 | 500,000 |
| Subtotal | 457,244 | 164 | 75,174,955 | 494,755 | 180 | 89,093,887 | 476,371 | 194 | 92,466,000 | 481,887 | 200 | 96,564,000 |
| 11. Administrative expenses for legal services | | | | | | 51,641 | | | 55,000 | | | 55,000 |
| Grand total | 457,244 | 164 | 75,174,955 | 494,755 | 180 | 89,145,528 | 476,371 | 194 | 92,521,000 | 481,887 | 200 | 96,619,000 |

Mrs. PETERSON. Would you like me to cover the Bureau of Employees' Compensation Claims and Expenses?

That is the next item.

Senator HILL. Proceed, please.

### EMPLOYEES' COMPENSATION FUND

Mrs. PETERSON. Mr. Chairman and members of the committee, as you know, the operations of the Bureau of Employees' Compensation are limited to the administration of the several workmen's compensation laws coming within Federal jurisdiction.

The Employees' Compensation Fund was established under section 35 of the Federal Employees' Compensation Act to cover the cost of disability and death benefits for Federal employees injured on the job.

It is also available for the payment of disability and death benefits to persons covered by sections 4(c) and 5(f) of the War Claims Act of 1948 and to various other groups embraced by extension of the Federal Employees' Compensation Act.

This fund is financed by a combination of direct appropriation and reimbursements from Federal agencies for sums expended in connection with injuries sustained by their employees.

### BUDGET REQUEST

The estimate for fiscal year 1969 provides for a direct appropriation of $52,691,000 and reimbursements by Federal agencies amounting to $43,928,000, for a total of $96,619,000.

This is a net increase of $4,098,000 or 4.4 percent over the original estimate of obligations of $92,521,000 for fiscal year 1968. We have revised this 1968 estimate to $95,521,000, an increase of $3 million to reflect the cost of increased benefit payments.

These additional costs in 1968 will be financed by an advance of funds from the 1969 appropriation under the authority contained in the present appropriation language.

The 1969 increases for employees compensation are $1,700,000 to handle additional cases expected due to expanding Federal employment and $1,998,000 for adjustments necessitated by the 3.7 percent rise in the Consumer Price Index and by the Federal pay raise.

Based on actual expenditure trends in the past several years, $900,000 is also required for increased medical costs.

### REIMBURSEMENTS FROM FEDERAL AGENCIES

The estimated increase in reimbursements from Federal agencies, commonly referred to as the "chargeback plan," amounts to $7,468,000. This permits a decrease of $3,370,000 in the direct appropriation.

ARMED FORCES RESERVISTS BENEFITS ACTIVITY

A decrease of $400,000 in the Armed Forces reservists benefits activity is anticipated. This activity should continue to decrease each year since the legislation for coverage of these reservists was repealed in August 1956. The decrease of $100,000 in the other benefits activity is based on actual experience during the past several years.

This is the condition of that fund and I am sure that Mr. Tinsley will be glad to answer any questions.

Senator HILL. Is there anything you would like to add on that?

Mr. TINSLEY. No, Mr. Chairman.

Senator HILL. That gives us a pretty good picture.

Mrs. PETERSON. That summarizes what we have done.

Senator HILL. Again, I commend you on the job you are doing.

Mrs. PETERSON. Thank you very, very much. We are going to miss you.

Senator HILL. I will miss you, too.

Mr. Lundquist?

## Wage and Hour Division

**STATEMENT OF CLARENCE T. LUNDQUIST, ADMINISTRATOR ACCOMPANIED BY:**

**IRVING LEVINE, ASSISTANT ADMINISTRATOR**
**WILLIAM R. REISE, CHIEF, DIVISION OF PROGRAM PLANNING AND EVALUATION**
**RICHARD E. MILLER, DIRECTOR, OFFICE OF PROGRAM AND BUDGET REVIEW**

### Appropriation Estimate

"Wage and Hour Division, Salaries and Expenses

"For expenses necessary for the Wage and Hour Division, including performing the duties imposed by the Fair Labor Standards Act of 1938, as amended, the Service Contract Act of 1965 (79 Stat. 1034), and the Act to provide conditions for the purchase of supplies and the making of contracts by the United States, approved June 30, 1936, as amended (41 U.S.C. 35–45), including reimbursements to State, Federal, and local agencies and their employees for inspection services rendered, [$24,166,000] *$26,211,000.*"

AMOUNTS AVAILABLE FOR OBLIGATIONS

| | 1968 | 1969 |
|---|---|---|
| Appropriation or estimate | $24,166,000 | $26,211,000 |
| Amount reserved under H. J. Res. 888 (Public Law 90–218) | −658,000 | |
| Amount of reserve applied to increased pay costs | 658,000 | |
| Proposed transfer from "Office of Manpower Administrator, salaries and expenses" for pay increases (Public Law 90–206 effective Oct. 8, 1967) | 73,000 | |
| Nonrecurring rental costs transferred to GSA | −31,800 | |
| Appropriation or estimate, revised | 24,207,200 | 26,211,000 |

OBLIGATIONS BY ACTIVITIES

| Description | Appropriation revised, 1968 | | Estimate, 1969 | | 1969 change | |
|---|---|---|---|---|---|---|
| | Position | Amount | Position | Amount | Position | Amount |
| 1. Enforcement | 1,720 | $19,852,800 | 1,790 | $21,643,200 | +70 | +$1,790,400 |
| 2. Wage determinations and regulations | 87 | 1,766,400 | 89 | 1,838,900 | +2 | +72,500 |
| 3. Research and legislative analysis | 72 | 1,819,200 | 73 | 1,895,500 | +1 | +76,300 |
| 4. Administration and management services | 75 | 768,800 | 77 | 833,400 | +2 | +64,600 |
| Total obligations | 1,954 | 24,207,200 | 2,029 | 26,211,000 | +75 | +2,003,800 |

## OBLIGATIONS BY OBJECT

| | Appropriation revised, 1968 | Estimate, 1969 | 1969 change |
|---|---|---|---|
| Total number of permanent positions | 1,954 | 2,029 | +75 |
| Positions other than permanent | 17 | 21 | +4 |
| Average number of all employees | 1,837 | 1,969 | +132 |
| 11 Personnel compensation | $18,069,100 | $19,629,500 | +$1,560,400 |
| 12 Personnel benefits | 1,463,100 | 1,601,000 | +137,900 |
| 21 Travel and transportation of persons | 1,279,500 | 1,233,500 | −46,000 |
| 22 Transportation of things | 76,000 | 82,700 | +6,700 |
| 23 Rent, communications, and utilities | 646,100 | 698,600 | +52,500 |
| 24 Printing and reproduction | 302,600 | 287,100 | −15,500 |
| 25 Other services | 2,102,200 | 2,364,200 | +262,000 |
| Services of other agencies | 45,500 | 49,200 | +3,700 |
| 26 Supplies and materials | 84,100 | 88,700 | +4,600 |
| 31 Equipment | 139,000 | 176,500 | +37,500 |
| Total obligations | 24,207,200 | 26,211,000 | +2,003,800 |
| Working capital fund items included above | (533,900) | (747,800) | (+213,900) |

## SUMMARY OF CHANGES

| | Positions | Amount |
|---|---|---|
| 1968 enacted appropriation | 1,954 | $24,166,000 |
| Amount reserved under H.J. Res. 888 (Public Law 90–218) | | 658,000 |
| Amount of reserve applied to increased pay costs | | 658,000 |
| Proposed transfer from "Office of Manpower Administrator Salaries and Expenses" for pay increases (Public Law 90–206 effective Oct. 8, 1967) | | 73,000 |
| Nonrecurring rental costs transferred to GSA | | 31,800 |
| 1968 appropriation, revised | 1,954 | 24,207,200 |
| 1969 estimate | 2,029 | 26,211,000 |
| Total change | +75 | +2,003,800 |
| Mandatory items: | | |
| Increases: | | |
| Net additional pay increase costs not completely funded in 1968 | | +795,400 |
| Net additional cost of within-grade promotions effective for part year in 1968 | | +74,100 |
| Net cost of within-grade promotions becoming effective in 1969 | | +109,300 |
| To provide for 1 extra day of pay in 1969 for current year staff | | +83,800 |
| To provide for career ladder promotions of investigators | | +47,000 |
| Subtotal, increases | | +1,109,600 |
| Decreases: To provide for a net decrease in contributions to the Federal employee's compensation fund | | −11,400 |
| Subtotal, decreases | | −11,400 |
| Total, mandatory items | | +1,098,200 |
| Financing items: To provide for full cost of centralized services purchased from the working capital fund | | +169,000 |
| Program items: | | |
| Increases: | | |
| To provide for full-year cost of new positions which were financed for a part year in 1968 | | +120,200 |
| To provide for administration of the increases in coverage and standards in 1969 under the Fair Labor Standards Act ($553,600 personal services; $220,800 nonlabor) | +75 | +774,400 |
| Subtotal, increases | +75 | +894,600 |
| Decreases: Management improvement and cost reduction savings from travel ($128,000) and printing ($30,000) | | −158,000 |
| Subtotal, decreases | | −158,000 |
| Total, program items | +75 | +736,600 |
| Total change | +75 | +2,003,800 |

## MANDATORY AND FINANCING CHANGES BY ACTIVITY

| Type of change | Activity 1 | | Activity 2 | | Activity 3 | | Activity 4 | | Total | |
|---|---|---|---|---|---|---|---|---|---|---|
| | Position | Amount | Position | Amount | Position | Amount | Position | Amount | Position | Amount |
| Mandatory items: | | | | | | | | | | |
| Net additional pay increase costs | | $647,200 | | $58,200 | | $63,100 | | $26,900 | | $795,400 |
| Net additional cost of within-grade promotions effective for part-year in 1968 | | 71,300 | | | | | | 2,800 | | 74,100 |
| Net within-grade promotion costs initially effective in 1969 | | 103,500 | | | | | | 5,800 | | 109,300 |
| To provide for 1 extra day of pay in 1969 for current year staff | | 74,200 | | 3,700 | | 2,900 | | 3,000 | | 83,800 |
| To provide for career ladder promotions for investigators | | 47,000 | | | | | | | | 47,000 |
| Contributions to Federal employees' compensation fund (—) | | —11,400 | | | | | | | | —11,400 |
| Total, mandatory items | | 931,800 | | 61,900 | | 66,000 | | 38,500 | | 1,098,200 |
| Financing items: To provide for full-year cost of centralized services purchased from the working capital fund | | 169,000 | | | | | | | | 169,000 |
| Total | | 1,100,800 | | 61,900 | | 66,000 | | 38,500 | | 1,267,200 |

*Mandatory and financing changes for 1969*

MANDATORY ITEMS

| | |
|---|---|
| Increases: To provide for full year cost of pay increases effective Oct. 8, 1967, and to provide full funding of part-year costs | $795,400 |
| Within-grade promotion costs: 1969 net additional cost of within-grade promotions effective for part year in 1968 | +93,300 |
| Personnel compensation | 155,670 |
| Deduct lapse | −3,770 |
| Deduct savings due to turnover | −65,200 |
| Personnel benefits | 6,600 |
| Net cost | 93,300 |
| Absorption of a portion of above increases | −19,200 |
| Adjusted net additional cost of within-grade promotions effective for part year in 1968 | 74,100 |
| Net cost of within-grade promotions becoming effective during 1969 | +138,100 |
| Personnel compensation | 231,340 |
| Deduct lapse | −6,140 |
| Deduct savings due to turnover | −96,900 |
| Personnel benefits | 9,800 |
| Net cost | 138,100 |
| Absorption of a portion of above increases | −28,800 |
| Adjusted net cost of within-grade promotions becoming effective during 1969 | 109,300 |
| To provide for extra day of pay in 1969 for current year staff | 83,800 |
| To provide for career ladder promotions of investigators | 47,000 |
| Decreases: To reduce the level of contributions to the Federal employees' compensation fund | −11,400 |
| Total, mandatory items | +1,098,200 |

FINANCING ITEMS

| | |
|---|---|
| Amount originally in base budget | 533,900 |
| Amount currently required in base budget | 702,900 |
| Changed financing required | +169,000 |

NOTE.—Changes in fees charged for centralized services (such as visual exhibits or reproduction) and changes in anticipated services rendered by the working capital fund require adjustments to the funds provided in the base budget.

## PROGRAM CHANGES BY ACTIVITY

| | | Activity 1 | | Activity 2 | | Activity 3 | | Activity 4 | | Total | |
|---|---|---|---|---|---|---|---|---|---|---|---|
| | | Positions | Amount | Positions | Amount | Positions | Amount | Positions | Amount | Positions | Amount |
| 11 | Personnel compensation | +70 | +$568,800 | +2 | +$14,900 | +1 | +$10,300 | +2 | +$20,800 | +75 | +$614,800 |
| 12 | Personnel benefits | | +55,400 | | +1,200 | | +800 | | +1,600 | | +59,000 |
| 21 | Travel and transportation of persons | | −34,200 | | −9,200 | | −2,600 | | | | −46,000 |
| 22 | Transportation of things | | +6,700 | | | | | | | | +6,700 |
| 23 | Rent, communications, and utilities | | +47,700 | | +1,900 | | +1,000 | | +1,900 | | +52,500 |
| 24 | Printing and reproduction | | −20,800 | | +200 | | | | +200 | | −20,400 |
| 25 | Other services | | +26,400 | | +600 | | +300 | | +600 | | +27,900 |
| 26 | Supplies and materials | | +4,600 | | | | | | | | +4,600 |
| 31 | Equipment | | +35,000 | | +1,000 | | +500 | | +1,000 | | +37,500 |
| | Total | +70 | +689,600 | +2 | +10,600 | +1 | +10,300 | +2 | +26,100 | +75 | +736,600 |

*Activity 1. Enforcement*

1968 (positions, 1,720)---------- $19, 852, 800
1969 (positions, 1,790)---------- 21, 643, 200

NARRATIVE DESCRIPTION OF PROGRAM

This program provides for obtaining compliance with three related statutes containing labor standards which the Wage and Hour Division administers: the Fair Labor Standards Act, the Walsh-Healey Public Contracts Act, and the McNamara-O'Hara Service Contract Act. Information and enforcement activities are conducted to obtain compliance with the minimum wage, equal pay, child labor and overtime standards of these Acts. In addition, the Wage and Hour Division administers the prevailing wage rate provisions of the National Foundation for the Arts and the Humanities Act, and has been delegated the enforcement responsibilities of the Secretary of Labor with respect to the Davis-Bacon Act, the Contract Work Hours Standards Act, and related acts.

With the extensive changes which have taken place or will take place as a result of the 1966 amendments to the Fair Labor Standards Act, the standards and coverage of the Act are closer than at any time in its history to meeting the original objectives, i.e., the elimination of "labor conditions detrimental to the maintenance of the minimum standard of living necessary for health, efficiency, and general well-being of workers." However, much remains to be done from an enforcement standpoint to insure that the 42.8 million workers who have been guaranteed fair labor standards will obtain the full benefit of these standards.

Obtaining compliance with the minimum standards of the Fair Labor Standards Act is the primary goal of the Division's staff. Despite improvements in the enforcement and information programs, increases in both coverage and standards have outstripped increases in staff. As a result the level of compliance has probably not risen since 1965 when 18 percent of the establishments covered by the Act were not in current compliance with the monetary provisions of the law. Minimum wage and overtime violations continue to be found in about half of all establishments selected for investigation. While great strides have been made in eliminating the oppressive use of child labor in covered industries, some 18,000 minors are still found employed in violation of the child-labor provisions each year. Progress is also being made in guaranteeing equal pay for equal work regardless of sex, but much remains to be done. More than 5,000 workers are found in violation annually of the equal pay provisions of the Act.

Economic growth and the 1966 Fair Labor Standards Act amendments have increased the number of covered workers by about 9.7 million and the number of covered establishments by about 700,000. The 1966 amendments also established a minimum wage of $1.60 for non-agricultural workers to be reached in February 1968 for previously covered workers and February 1971 for newly covered workers. Successive annual changes in the Act's provisions as a result of the 1966 amendments are shown in the table below. The Division's enforcement staff must keep pace with these changes in coverage and standards to prevent a serious worsening of the level of compliance.

| Effective date | Previously covered [1] (minimum wage) | Newly covered (other than agricultural and Federal employees) | | Newly covered agricultural employee (minimum wage) |
|---|---|---|---|---|
| | | Minimum wage | Overtime standard (hours) | |
| Feb. 1, 1967 | $1.40 | $1.00 | 44 | $1.00 |
| Feb. 1, 1968 | 1.60 | 1.15 | 42 | 1.15 |
| Feb. 1, 1969 | | 1.30 | 40 | 1.30 |
| Feb. 1, 1970 | | 1.45 | | |
| Feb. 1, 1971 | | 1.60 | | |

[1] Applies to newly covered Federal employees.

*In 1967*, the minimum wage standard was increased from $1.25 to $1.40 an hour effective February 1, 1967 for approximately 33 million employees previously covered by the Act and employees of the Federal Government. On the same date, coverage was extended to some 600,000 establishments and an estimated 8.5 million additional employees (including 400,000 farm workers) requiring the payment of minimum wages of at least $1.00 an hour and time-and-one-half for over-

time after 44 hours (unless otherwise exempted). The 600,000 newly covered establishments included additional retail and service establishments; schools, hospitals, and institutions for the care of the sick or aged; hotels and motels; laundries; restaurants; small construction firms; certain farms; and establishments handling or processing agricultural commodities under specified conditions. Of the newly covered workers, almost 1 million were earning less than $1.00 an hour prior to the effective date of the amendments. It is estimated that wage increases of $304 million annually were required to raise these employees to the $1.00 level. To meet the new $1.40 an hour minimum wage for previously covered employees, an estimated 3.7 million employees were due increases amounting to $800 million annually.

With 1,024 investigator positions in 1967, the same number as authorized prior to the Fair Labor Standards Act amendments, the Wage and Hour Division investigated 58,159 establishments. Of these, 20,896 were investigated on the basis of complaints received from the public and 37,263 as a result of other indications of possible violations. Statistics on investigations completed during 1967, including underpayments disclosed with respect to minimum wage, overtime, equal pay, and service contract standards and violations of the child labor provisions, are shown in the table on page WH–17. The total number of establishments investigated in 1967 represented only approximately 1 out of every 30 establishments covered at the end of year. With the resources provided in 1966 and preceding years approximately 1 out of every 20 establishments covered by the Act was investigated during any given year.

Information and education programs were intensified to inform employees and employers of their rights and responsibilities under the 1966 amendments and to permit maximum effective utilization of the Division's limited enforcement capabilities. These programs will be continued in 1968 at approximately the same level.

*In 1968*, the $1.60 minimum wage which became effective February 1, 1968 for previously covered employees for the first time approximately equals the $3,300 poverty income level as defined by the Social Security Administration for a family of four, based on full-time year around employment. This change requires increases in wage payments totaling $2 billion for nearly 6 million employees. With the increase to $1.15 for newly covered employees, an estimated 1.3 million additional employees are entitled to receive higher wages totaling $325 million. In total, therefore, changes in the Act occurring in 1968 will mean raises amounting to $2.3 billion for more than 7 million workers. Based on experience during the first half of the year, it is expected that the number of complaint investigations completed in 1968 will reach 30,000 compared to 20,896 in 1967. The number of investigations made as a result of other indications of possible violations will be approximately the same as in 1967, resulting in an estimated total of 68,000 investigations during 1968.

Due to the need to inform employers, employees, and other interested groups as to how they are affected by the successive changes in the Fair Labor Standards Act, including the February 1, 1968 increases in the minimum wage for all covered employees, informational programs similar to those initiated in 1967 are being carried out. Specific programs of this sort include the following:

An information brochure containing highlights of the amended act, an official notice to employees, and a request form for obtaining additional information was mailed to 2 million employers.

Informational packages are being prepared with regard to changes in the Hazardous Occupations orders for minors between 16 and 18 years of age, and will be mailed to affected employers.

Employees are being apprised of their rights through extensive and repeated use of mass media channels of communications including the daily, weekly, labor, foreign language, and other specialized press; trade journals and other periodicals; and radio and television stations.

Additional pamphlets and other materials are being developed and distributed to the public to acquaint them with the new provisions. Where possible, these pamphlets are put into laymen's language to ensure ready comprehension. In all, it is estimated that some 8,000,000 pieces of informational material will be printed in 1968.

Speeches are made to employer and employee organizations, and other interested groups, at the national, state, and local level.

To facilitate contacts, special efforts are made to locate the Division's field offices in cities and areas which are readily accessible to the public.

Cooperative arrangements have been established with the AFL–CIO for the expeditious handling and forwarding of complaints for both union and nonunion workers.

The scope of the Wage and Hour Division's enforcement responsibilities and efforts continues to increase as additional points of law are clarified, new standards are promulgated, and service contract wage determinations are issued. Of particular note are revisions in the Hazardous Occupations Orders for minors, and new interpretive positions with regard to the application of the provisions requiring equal pay for equal work regardless of sex.

During the first half of 1968, the Wage and Hour Division also was delegated enforcement responsibilities with respect to the Davis-Bacon Act, the Contract Work Hours Standards Act, and related Federal construction and assistance acts. Under the authority delegated to the Secretary by Reorganization Plan No. 14 of 1950, the Division will coordinate the enforcement activities of the contracting agencies with respect to the wage and hour provisions of these acts. Actual investigations are performed primarily by the contracting agencies. The Division will initiate enforcement actions based on complaints received, review and evaluate compliance actions and enforcement reports of the contracting agencies, and in cases of serious violations make recommendations regarding actions necessary to obtain compliance including action to place violating contractors on the ineligible list. An estimated 1,000 investigations by the contracting agencies will be initiated annually as a result of complaints received by the Department, with an additional 800 investigation files expected to be referred by the contracting agencies for compliance action.

*Changes for 1969*

| | |
|---|---|
| Mandatory changes amount to | +$931,800 |
| Financing changes amount to | +$169,000 |
| Program changes amount to | +$689,600 |
| Positions | +70 |

*Proposal.*—To perform the additional 2,000 complaint investigations anticipated in 1969 as a result of changes in the coverage, minimum wage, and overtime standards of the Fair Labor Standards Act, and to maintain approximately the same ratio of investigators to covered establishments which was authorized for 1968.

*The Need.*—Based upon 1967 employment data, it is estimated that 1.2 million additional employees and 100 thousand additional establishments will become subject to the standards of the Fair Labor Standards Act as a result of the lowering of the annual dollar volume test for enterprise coverage to $250,000 which becomes effective February 1, 1969. This will bring the total number of covered establishments as a result of the 1966 amendments to about 1.9 million and the number of covered employees to about 42.8 million, an increase of some 29% in covered employment and almost 60% in establishments since 1966. The minimum wage rate for about 33 million employees covered prior to the 1966 amendments will increase to $1.60 an hour on February 1, 1968. Changes in the minimum wage and overtime standards provided for the 9.7 million employees newly covered as a result of the amendments will take place in progressive yearly steps. Effective February 1, 1969, the minimum wage for most workers newly covered in 1967 will be increased to $1.30 an hour and the basic overtime standard for most newly covered workers (other than agricultural workers and employees of hotel and restaurant establishments) will become 40 hours. An estimated 2 million newly covered workers will be entitled to wage increases. As a result of these changes in coverage and standards, the number of complaints received is expected to reach 32,000 in 1969.

The number of establishments subject to the provisions of the Fair Labor Standards Act is currently 50% greater than prior to the 1966 amendments to the Act, but the Division's authorized investigator strength has increased only 12% since the amendments became effective. These two factors coupled with the higher minimum standards provided by the 1966 amendments have led to a sharp reduction in the ratio of investigators to covered establishments, to covered employees, and to the number of employees entitled to wage increases as a result of the amendments:

(1) The estimated number of employees entitled to a wage increase as a result of the February 1968 changes in the minimum wage to $1.60 and $1.15 an hour was 7,260,000 as compared to 2 million in 1956 and 2,569,000 in 1962.

(2) The estimate of employees entitled to wage increases following statutory changes is currently 6,330 per investigator position as compared to 2,621 in 1956 and 1962.

(3) The ratio of covered establishments to investigator positions is 1,548 per position in 1968, an increase of 48% over 1956 and 36% over 1962.

With the February 1969 extension of coverage to an additional 1.2 million employees and 100,000 establishments, and with the other changes in the Act's standards, an increase in investigator postions is needed in 1969 to prevent a further deterioration in these ratios and a lowering of levels of compliance with the minimum standards established by the Act.

*The Program.*—The fifty new investigator positions and 20 supporting positions being requested will enable the Wage and Hour Division to perform the additional 2,000 complaint investigations anticipated in 1969 as a result of changes in the coverage, minimum wage, and overtime standards of the Fair Labor Standards Act, and to otherwise maintain approximately the same level of enforcement capability with regard to covered establishments as in 1968. A total of 32,000 complaint investigations are projected for 1969. The 1,197 investigator positions requested for 1969 will enable the Wage and Hour Division to complete these investigations, and to make 43,000 investigations of other establishments where compliance problems are believed to exist. The information program, special investigation programs related to the equal pay and child labor standards, and investigations of government contractors under the Walsh-Healey Public Contracts Act and the McNamara-O'Hara Service Contract Act will continue at approximately the same level as in 1968.

The following table provides summary statistics on investigation results and related activities for 1966 and 1967, and projected results for 1968 and 1969. The total amount of underpayments estimated for 1968 and 1969 are affected by the length of time that the new higher standards have been in effect, increased emphasis on low wage areas, and the smaller size of the establishments newly covered by the Fair Labor Standards Act. Minimum wage underpayments in 1969 are expected to increase in relation to overtime underpayments, but will not reach the unusually high rate disclosed in 1966. In 1966 there were 43 cases with underpayments of $100,000 or more, totalling $10.3 million and including large amounts of minimum wage underpayments. The circumstances which resulted in these large cases have been corrected and are not expected to recur.

| | |
|---|---|
| Base: | |
| Positions | 1,720 |
| Estimated cost | $19,852,800 |
| Additional cost: | |
| Positions | 70 |
| Man-years | 63 |
| Estimated cost | $689,600 |

BASIS FOR THE ESTIMATE

Program changes are based on the need to complete an additional 2,000 complaint investigations in 1969 as a result of publicity concerning changes in the coverage and standards of the Act, and to perform additional non-complaint investigations as a result of extended coverage. The increase in covered establishments which will take place in 1969 is 5.6%. The increase in investigator positions being requested for 1969 is 4.4%.

The estimate for this activity is based upon continuing improvements in 1969 in the number of investigations per investigator position, particularly with respect to investigations scheduled on the basis of other than a formal complaint. It also reflects increased output and a fund increase of $120,200 for the full-year costs of new positions authorized in 1968, $715,600 is provided for the 70 additional positions requested in 1969 for this activity. Program decreases of $116,200 for travel and $30,000 for printing and reproduction costs will be accomplished through continuing management improvement and cost reduction efforts.

INVESTIGATION RESULTS, FISCAL YEAR 1967, AND ESTIMATED RESULTS FOR FISCAL YEARS 1968 AND 1969

| | Actual | | Estimated | |
|---|---|---|---|---|
| | 1966 | 1967 | 1968 | 1969 |
| Available investigator staff (man-years) [1] | 971 | 970 | 1,034 | 1,115 |
| Total number of establishments investigated | 57,625 | 58,159 | 68,000 | 75,000 |
| Covered employees in investigated establishments | 2,020,087 | 1,844,143 | 2,000,000 | 2,175,000 |
| Number of employees underpaid | 428,778 | 368,582 | 450,000 | 500,000 |
| Underpayments disclosed in current workweek | $1,107,155 | $981,005 | $1,200,000 | $1,300,000 |
| Amount of underpayments | $89,929,756 | $76,092,726 | $82,000,000 | $90,000,000 |
| Minimum wages | $28,371,174 | $18,839,742 | $23,500,000 | $26,500,000 |
| Overtime | $59,460,982 | $53,737,920 | $54,000,000 | $58,500,000 |
| Equal pay | $2,097,600 | $3,252,319 | $3,500,000 | $3,900,000 |
| Service contracts | | $262,745 | $1,000,000 | $1,100,000 |
| Amount agreed to pay | $27,430,911 | $26,693,123 | $30,000,000 | $33,000,000 |
| Number of employees whom employers agree to pay | 205,728 | 194,496 | 210,000 | 230,000 |
| Number of minors illegally employed | 18,550 | 18,536 | 20,000 | 21,000 |
| Agriculture | 5,487 | 4,201 | 5,000 | 5,000 |
| Nonagriculture | 13,063 | 14,335 | 15,000 | 16,000 |
| Complaints received | 23,431 | 24,857 | 30,000 | 32,000 |
| Litigation filed | 1,672 | 1,817 | 1,850 | 1,950 |

[1] Includes training time for new investigator positions.

COMPARISON OF INVESTIGATOR POSITIONS TO COVERAGE AND EMPLOYEES ENTITLED TO PAY RAISE

| | 1956 [1] | 1962 [2] | 1968 [3] | 1969 [4] |
|---|---|---|---|---|
| Investigator positions | 763 | 980 | 1,147 | 1,197 |
| Total number of covered establishments | 800,000 | 1,113,390 | 1,776,000 | 1,876,000 |
| Total number of covered employees | 24,000,000 | 28,500,000 | 41,562,000 | 42,778,000 |
| Number of employees entitled to wage increase following statutory change | 2,000,000 | 2,569,000 | 7,260,000 | [5] 8,000,000 |
| Ratio of investigator positions to covered establishments | 1:1,048 | 1:1,136 | 1:1,548 | 1:1,567 |
| Ratio of investigator positions to covered employees | 1:31,455 | 1:29,082 | 1:36,235 | 1:35,738 |
| Ratio of investigator positions to employees entitled to wage increase following statutory change | 1:2,621 | 1:2,621 | 166,330 | 1:6,683 |

[1] Statutory minimum wage increased from $0.75 to $1 an hour effective Mar. 1, 1956.
[2] Statutory minimum wage increased from $1 to $1.15 an hour and 3,600,000 newly covered employees subject to $1 an hour minimum wage standard effective Sept. 3, 1961.
[3] Statutory minimum wage for previously covered employees will increase from $1.40 to $1.60 an hour and minimum wage for employees newly covered under 1966 amendments will increase from $1 to $1.15 an hour effective Feb. 1, 1968.
[4] Reflects increase of 50 investigator positions proposed for 1969 in connection with statutory changes effective Feb. 1, 1969, under 1966 FLSA Amendments. Statutory minimum wage for newly covered workers will increase from $1.15 to $1.30 an hour effective Feb. 1, 1969, and an estimated 1,200,000 employees in 100,000 establishments will be covered by the act for the first time on that date.
[5] Includes 7,260,000 employees due wage increases as a result of statutory changes effective Feb. 1, 1968.

### *Activity 2. Wage determinations and regulations*

| | |
|---|---|
| 1968 (position 87) | $1,766,400 |
| 1969 (position 89) | 1,838,900 |

NARRATIVE DESCRIPTION OF PROGRAM

This program provides for development of regulations, administrative and wage determinations, and administrative interpretations required for the administration of the Fair Labor Standards Act, the Walsh-Healey Public Contracts Act, the McNamara-O'Hara Service Contract Act, and the Arts and Humanities Act. Under provisions of the McNamara-O'Hara Service Contract Act, determinations are made of prevailing wage rates paid and fringe benefits given different groups of service employees. These determinations apply to Federal service contracts exceeding $2,500 and set the minimum wage rates and fringe benefits that contractors covered by the determination must provide to their employees. Special minimum wage certificates for learners, handicapped workers, student-learners, student-workers, apprentices, sheltered workshops, and full-time students in retail or service establishments or in agriculture are issued under Section 14 of the Fair Labor Standards Act to the

extent necessary to prevent the curtailment of employment opportunities. Also under this act, industry committees establish special minimum wage rates for Puerto Rico, the Virgin Islands, and American Samoa.

*Government contract wage determinations*

*In 1967*, the first full year of operations following the effective date of the McNamara–O'Hara Service Contract Act, 757 wage determinations were issued under the Act. These determinations were issued in response to notices by Federal contracting agencies of their intention to make a service contract exceeding $2,500. Within 30 days of receipt of such notifications, the Administrator of the Wage and Hour Division is required to notify the contracting agency of the applicable wage determination for the locality and classes of service employees to be employed under the intended contract, or if no determination will be applicable, that the minimum wage standards of the Fair Labor Standards Act will apply. Most of the determinations issued are based on wage surveys conducted by the Bureau of Labor Statistics, which currently makes annual published surveys of wages and certain fringe benefits for some 86 metropolitan areas in the United States. However, during 1967 an additional 60 special area surveys and two industry studies were conducted at the Wage and Hour Division's specific request.

No new industry wage determinations were issued during 1967 under the Walsh-Healey Public Contracts Act as a result of difficulties arising from adverse court decisions. An omnibus determination was issued effective February 1, 1967, increasing the minimum wage applicable to Federal supply contracts under the Act to at least $1.40 an hour in all industries, the same level required by the Fair Labor Standards Act, unless a higher individual determination applies.

*In 1968*, it is planned to issue approximately 1,000 wage determinations under the McNamara–O'Hara Service Contract Act. Eighty-five special area wage surveys and four industry studies have been requested. Effective February 1, 1968, an omnibus determination under the Walsh-Healey Public Contracts Act increases the minimum wage in all industries subject to a lower determination, including industries subject to the 1967 omnibus determination, to at least $1.60 an hour. No individual industry determinations are planned in 1968.

*In 1969*, it is planned to issue approximately 1,200 wage determinations under the McNamara-O'Hara Service Contract Act. As a result of previous wage determination activity, it is estimated that wage determinations under this Act will be applicable to an estimated 10,000 of the 25,000 agency notices expected during 1969. The increased number of agency notices of intention to make a service contract expected in 1969 is a reflection of the greater awareness on the part of agency contracting officers of the requirements of the Act. Also, the publication of interpretive positions and revised administrative procedures is expected to help foster government-wide compliance with the Act and to clarify agency responsibilities under the Act. Approximately the same number of special area wage surveys will be requested in 1969 as in 1968, at an estimated cost of $700,000. These surveys are to be repeated at regular intervals to ensure that determinations are based on current wage data. No new industry wage determinations under the Walsh-Healey Public Contracts Act are planned for 1969 in view of the continuing limitations imposed by the courts.

GOVERNMENT CONTRACT WAGE DETERMINATION ACTIVITY, 1966–69

| | 1966 | 1967 | 1968 | 1969 |
|---|---|---|---|---|
| Notices of intentions to make a service contract received | 7,119 | 15,233 | 20,000 | 25,000 |
| Wage determination issued | 166 | 757 | 1,000 | 1,200 |
| Notices to which wage determinations apply | 677 | 4,064 | 6,500 | 10,000 |

*Special minimum wages*

*In 1967*, as a result of the 1966 amendments to the Fair Labor Standards Act, the volume of applications for special minimum wage certificates pursuant to Section 14 of the Act increased more than 40% over the previous year. The 1966 amendments not only increased the statutory minimum wage for previously covered workers and substantially increased coverage, but also materially modified the provisions of Section 14 with respect to full-time students and handi-

capped workers. Changes were made in the ten supplemental learner regulations, in the full-time student regulations, and in the two regulations dealing with handicapped workers in industry and in sheltered workshops. Full-time student, student-learner, and handicapped worker certificates accounted for the increase in certificates issued. In response to Congressional requests, procedural requirements were examined to ensure that compliance by the public is facilitated to the extent possible within the framework of the Act's statutory requirements.

*In 1968*, a somewhat smaller increase in applications, primarily for full-time student, student-learner, and handicapped worker certificates, is anticipated. It is estimated that 24,500 certificates will be issued. During 1968, revisions will be considered for six additional regulations.

*In 1969*, an increase of approximately 10% is expected in the number of special minimum wage certificates issued as a result of the changes in coverage and standards which will take place, and the increased emphasis being placed on the creation of job opportunities for youth and handicapped workers. The operation of the revised regulations and procedural requirements will be closely studied in 1969 and further revisions will be made as found necessary.

SPECIAL MINIMUM WAGE CERTIFICATION ACTIVITY, 1966–69

| | 1966 | 1967 | 1968 | 1969 |
|---|---|---|---|---|
| Applications received | 14,885 | 21,191 | 27,000 | 30,000 |
| Certificates issued | 14,032 | 20,420 | 24,500 | 27,000 |
| Employment authorized | 107,508 | 114,222 | 165,000 | 180,000 |

*Wage order program*

*In 1967*, as a result of the twelve percent statutory increase in wage order rates in Puerto Rico and the Virgin Islands, applications for the appointment of a hardship review committee were filed for 12 of the 31 wage order industries in Puerto Rico. Workload associated with applications for hardship review committees is equivalent to the preparation of economic reports during the biennial review of an industry, involving the collection of wage and other economic data, the analysis and evaluation of the effects of proposed action on the various segments of the industry concerned, and the preparation of economic reports of findings. In view of the automatic increase in wage order rates, which maintained comparability with the statutory increases in minimum rates on the mainland, the regular biennial review was suspended. However, ten industry committees were appointed to establish minimum rates for newly covered employment in the Virgin Islands. One industry committee was appointed for American Samoa which considered minimum rates for all newly-covered as well as previously covered employment. As a result of the automatic increases, the hardship review committee reports, and recommendations of the special industry committees, forty-two wage orders were issued in 1967.

*In 1968*, it is anticipated that 8 to 12 applications for hardship review will be filed in connection with the automatic increase in wage orders effective during this period. No provision is made for a hardship review with respect to automatic increases of the wage order rates issued in 1967 for newly covered employment. Either automatic increases, or wage orders resulting from hardship reviews, will be issued in 1968 for all industries in Puerto Rico and the Virgin Islands.

*In 1969*, the regular biennial review program required by the Fair Labor Standards Act will be resumed. This program is designed to bring wage rates in Puerto Rican industry up to the mainland standard as quickly as possible without curtailing employment opportunities or the development of industry. Wage orders issued in 1967 in Puerto Rico contained wage rates for forty broad industry categories. Of these industries, 5 were up to mainland standards, 30 had at least some rates at mainland levels, and all rates in the remaining 5 industries were below the mainland standards. Rates for one-half of the forty industries in Puerto Rico will be reviewed in 1969 and the remainder in 1970. The review of the minimum wage rates in the Virgin Islands and American Samoa will also be made in 1969. This will result in the issuance of 22 wage orders in 1969.

*Regulations and interpretations*

*In 1967*, four of the major regulations under the Fair Labor Standards Act were revised extensively to reflect the new and changed provisions incorporated into the Act by the 1966 Amendments. Regulations and interpretative bulletins are codified in the Code of Federal Regulations. One regulation dealing with the exemption from the minimum wage and overtime provisions for executive, administrative, or professional employees was updated and expanded to include academic administrative personnel and teachers. Material changes were made in the recordkeeping regulations to provide for workers employed in agriculture, hospital employees, and tipped employees. Because of substantial changes in the exemptions for agricultural processing, revisions were made in the regulations dealing with industries of a seasonal nature and all previously issued determinations of eligibility were reissued to conform to the amendments. General regulations pertaining to the Arts and Humanities Act also were issued during the year. In the area of interpretations, the equal pay bulletin was revised to add new concepts developed in administering the equal pay provisions. Guidelines were published on the employer-employee relationship between landowners and sharecroppers and an explanatory statement was issued on the application of the Fair Labor Standards Act to funeral homes and ambulance service operations. Specialized publications were developed on coverage in industries brought under the Act by the 1966 Amendments.

The interpretive function requires constant coordination between the Wage and Hour Division and the Office of the Solicitor of Labor. During 1967, in conjunction with the Solicitor's Office, interpretive positions were formulated with respect to all major provisions of the amended Fair Labor Standards Act. For example, definitive positions were developed on the employer-employee relationship in training programs for nurses, laboratory technicians, and radiologists in hospitals; the exemption for employees in the range production of livestock; the relationship between farmers and employees furnished by labor contractors or crew leaders; and whether food service employees of hospitals and nursing homes are entitled to the complete overtime pay exemption or subject to the more restrictive standards generally appplicable to employees of such establishments. These positions were developed from the study and analysis of potential problems as well as in response to individual inquiries and resulted in the promulgation of hundreds of opinion letters. When a sufficient body of material has been developed on a subject, the interpretations are formalized and published in the Federal Register as an interpretative bulletin.

*In 1968*, the regulations and interpretations activity will continue at approximately the same level as 1967. It is estimated that approximately 20 regulations, interpretative bulletins, and other explanatory materials will be developed or significantly revised during 1968. Revised regulations concerning "fair value" of board, lodging, and other facilities have been published. Regulations and interpretative positions dealing with the McNamara-O'Hara Service Contract Act are being prepared for publication this year which will provide a complete and comprehensive compilation of interpretative positions and legal opinions developed during the two years since the effective date of the Act. Seasonal industry determinations this year include determinations applicable to the dairy products industry, to the cottonseed processing industry, the cotton storing and compressing industry, and the Puerto Rican sugar industry. Also in process is a comprehensive review of the need for additional determinations within particular industries concerning the application of the retail exemptions provided by the Fair Labor Standards Act.

*In 1969*, it is planned to continue the regulations and interpretations activity at approximately the same level. The need for continued activity at this level is attributable to the extent and complexity of the 1966 amendments to the Fair Labor Standards Act, and the continual refinement of previous interpretative positions to reflect statutory changes, court decisions, legal opinions, and changes in industry practices. The 1966 amendments have generated a workload in the interpretations area which surpasses all previous experience with the exception of the period immediately following the enactment of the original Act in 1938. Included in the scope of planned activity for 1969 are the following:

Determinations of retail concept under the Fair Labor Standards Act as applied to various types of goods and services.

Revised interpretative bulletin on overtime pay.

A new interpretative bulletin on general and enterprise coverage.

A new separate interpretative bulletin on agriculture.

Interpretative bulletin on the minimum wage requirements of the Fair Labor Standards Act.

Revised interpretative bulletin on hours worked.

Revised regulations on salary tests for the executive, administrative, and professional employee exemptions.

Additional specialized publications explaining the application of the Fair Labor Standards Act to specific industries.

*Changes for 1969*

| | |
|---|---|
| Mandatory changes amount to | +$61,900 |
| Program changes amount to | +10,600 |
| Positions | +2 |

*Proposal.*—To meet the anticipated increased demand for special minimum wage certificates in 1969.

*The Need.*—Due to increased emphasis on creating job opportunities for the handicapped and youth, in combination with the higher standards and extended coverage which go into effect February 1, 1969, applications for special minimum wage certificates are expected to increase from 21,191 in 1967, and approximately 27,000 in 1968, to 30,000 in 1969. All applications must be acted upon promptly in accordance with the requirements of the Administrative Producures Act, whether or not a certificate is actually issued. The Wage and Hour Division has no control over this workload, which is externally generated and requires a satisfactory level of service to the public.

*The Program.*—The increase is based entirely on the additional numbers of applications for full-time student, student learner, handicapped worker, and sheltered workshop certificates, which are expected to account for ninety percent of the applications received. Two additional positions, plus continuing improvements in the management of this workload, will be needed to act upon the additional 3,000 applications anticipated in 1969.

| | |
|---|---|
| Base: | |
| Positions | 87 |
| Estimated cost | $1,766,400 |
| Additional cost: | |
| Positions | 2 |
| Man-years | 1.8 |
| Estimated cost | $10,600 |

BASIS FOR THE ESTIMATE

Estimates are based upon experience at current program levels, plus previous experience with changes in the standards provided by the Acts. A reduction of $9,200 in travel funds reflects cost reduction measures and reduced administrative travel requirements.

*Activity 3. Research and legislative analysis*

| | |
|---|---|
| 1968 (positions, 72) | $1,819,200 |
| 1969 (positions, 73) | 1,895,500 |

NARRATIVE DESCRIPTION OF PROGRAM

This program provides for planning and conducting research and analysis on the effects of the provisions of the Fair Labor Standards Act, the Walsh-Healey Public Contracts Act, and the McNamara-O'Hara Service Contract Act; with developing material for use in connection with legislative matters and the administration of these acts; and with providing statistical and economic analyses for use in enforcement and wage determinations activities. Section 4(d) of the Fair Labor Standards requires the Secretary of Labor to submit annually to the Congress a report including an evaluation of the standards established by the act and recommendations for possible new legislation. Preparation of these and other reports is an on-going, year-round program that involves planning the dimensions of proposed studies, making economic surveys, analyzing the statistical data collected, and making recommendations based on these analyses. Studies often require surveys to be made over a period of several years to accurately reflect the effects of changes in the provisions of the acts on the economy and on society.

*In 1967*, a major part of the research was completed for two studies required by the 1966 amendments to the Fair Labor Standards Act which dealt with (1) wage payments to handicapped clients of sheltered workshops and the feasibility of raising existing wage standards in these workshops, and (2) premium payments for overtime work, including the effects of fringe benefits on overtime practices, to determine whether the present overtime standard is an effective deterrent to excessive hours of work. Reports of these studies together with the recommendations of the Secretary were submitted to the Congress during the first half of 1968. In addition, the following major studies were completed which supplemented the annual report and evaluation required of the Secretary by Section 4(d) of the Act:

A nation-wide study of employee earnings and hours of work in retail trade in June 1966 completed a five-part program designed to evaluate the effects of the 1961 amendments to the Fair Labor Standards Act on the retail industry. The study also provides a basis for analyzing the impact of the 1966 amendments on both previously covered and newly covered retail establishments;

Nation-wide studies of the laundry and cleaning services industry and of non-Federal hospitals provide a basis for measuring the impact of the 1966 amendments to the Fair Labor Standards Act on these newly covered industries. The data gathered on employment, earnings, and hours of work were compiled using such characteristic breakdowns as geographic location and occupation;

A study of the wages and hours in the motion picture theater industry provides information on the possible need for, and the feasibility of, extending minimum wage and overtime protection to employees of the industry. The data were evaluated by such characteristics as occupation, type of theater, receipts-size, and geographic area.

Seven research projects were undertaken to aid in reviewing or making new regulations and interpretations under the acts administered by the Wage and Hour Division, and additional research was conducted to obtain economic data required in support of litigation. One case of particular significance was that of *Maryland* v. *Wirtz*, testing the constitutionality of the 1966 amendments relating to State and local employees of schools and hospitals. Information on types and rates of coverage in effect in the States, and on the need for possible further extensions of coverage to additional employees of State and local governments, was obtained as part of a continuing program of research and analysis. Wage impact tables were prepared for the 12 hardship reviews which were requested in connection with the Puerto Rican wage order program. Within the Division's regular statistical program, compilations and analyses of investigation findings and workload output were made at regular intervals. Coverage estimates by such characteristics as industry, geographical area, and sex were updated to reflect changes in the economy, national growth patterns, and new coverage resulting from legislation.

Although these research activities were carried out primarily for purposes of studies directed by the Congress, legislative recommendations, determinations required by the Act, and in support of litigation, the results of such research also have important application to the operating programs of the Wage and Hour Division. Statistics on operations and estimates of coverage changes in 1967 provided a basis for the regional allocation and geographic distribution of investigators in the field for the enforcement activity. The study of wage rates in sheltered workshops resulted in a planned program of intensive sheltered workshop investigations in 1968. Economic studies of newly-covered and low-wage industries provided a basis for determining enforcement needs in these industries.

*In 1968*, it is planned to continue the research and analysis activity at approximately the same levels as 1967. Thus far in 1968 economic data has been obtained and analyzed in connection with five litigation cases. Further research will be required in the case of *Maryland* v. *Wirtz*. Wage impact tables will be required for the 8 to 12 hardship review applications anticipated under the Puerto Rico wage order activity. A feasibility study and initial planning have been completed to undertake the design of an automated system for updating coverage estimates in greater detail, and by additional characteristics, than has been possible by manual methods. Also the feasibility of developing a method of measuring compliance on a continuing basis will be explored.

A three-part comprehensive study of hired farm workers is being undertaken. The first part will be completed in 1968 and will provide an evaluation of the economic effects on agriculture of the $1.00 an hour minimum wage and implications of the $1.15 rate for employees of certain large farms. Field surveys are conducted in conjunction with the annual enumerations of the Department of Agriculture. The second survey, which will be conducted a year later, will examine the effects of the increase in the minimum wage to $1.15 effective in 1968, and the implications of the $1.30 minimum wage effective in 1969. These surveys will provide information on employment, earnings, weekly hours, and perquisites, by region, type of farm, employment status, and method of wage payment.

Three separate studies are being conducted to provide information on the effects of the 1966 amendments to the Fair Labor Standards Act on other newly covered employees. These studies are concerned with the hotel and motel industry, eating and drinking places, and food service workers in retail trade. Data on employment, earnings, and hours of work will be tabulated for characteristics such as geographic location, occupation, tipping status of employees, supplemental pay provisions, split-shift arrangements, and establishment sales size.

A general, nation-wide study is underway to permit an analysis of the extent to which price changes accompanied the increase in the minimum wage. Price indices will be developed for selected consumer items at the retail level and manufacturing industries at the wholesale level for both the South and the rest of the country. The South is being separated out because increases in the minimum wage will probably have greatest impact in that area.

In cooperation with the Department of Defense and the Department of State, a study is being made of the wage rates payable to Federal employees in the Canal Zone, and the requirements for effective and economical operation of the Panama Canal. Public Law 89–601, which amended the Fair Labor Standards Act, requires the Secretary of Labor to report to the Congress not later than July 1, 1968, the results of this study together with such recommendations as he deems appropriate.

A study is being initiated which will be completed in 1969 to evaluate the effects on sheltered workshop wages and employment of the changes in rates paid to handicapped clients required on February 1, 1968. This will be a comprehensive study which will update the previous report on sheltered workshops as well as determine the progress made by individual clients in these workshops. Another study which will be completed in 1969 involves the salary tests for executive, administrative, and professional employees.

*In 1969*, much of the work begun in 1968 will reach its fruition. The price study will be continued to capture the full effects of the increase to $1.60 in the minimum wage, and the second of the three-part hired farmworkers study on the effects of the minimum wage on agriculture will be completed. The third part of this study evaluating the impact of the final increase in the agriculture minimum wage to $1.30 in 1969 will be completed in 1970. Follow-up studies based on the hardship reviews of industry wage orders for Puerto Rico will be completed to provide an evaluation of the effects of the Fair Labor Standards Act amendments.

Three studies are currently in the planning stage for submission in connection with the report required by Section 4(d) of the Fair Labor Standards Act. One, on agricultural processing industries, will focus on the changes in the overtime exemptions now provided for the handling and processing of farm products. This study will provide data on the number of weeks of peak activitity, and the hours worked in those weeks, to permit an evaluation of the continued need for these exemptions. The other two studies will be nation-wide two-payroll period surveys of two relatively low-wage newly covered industries, laundries and nursing homes. The purpose of these studies is to ascertain the effects on employment, wages, and hours of work of the changes in the minimum wage and overtime standards effective in February 1967 and 1968. As a by-product, these studies will also provide information on the implications of the standards which will become effective on February 1, 1969.

The two studies initiated in 1968, involving an evaluation of the effects of rate changes effective February 1, 1968, for handicapped clients, and the salary tests for executive, administrative and professional employees, will be completed during 1969. The statistical program is expected to continue at approximately the level of previous years. With the resumption of the biennial industry committee reviews in Puerto Rico and the Virgin Islands, wage impact tables for approximately 22 wage order industries will be prepared in 1969. Based on previous

years, it is expected that economic research will be required in support of 12 to 16 litigation cases.

*Changes for 1969*

| | |
|---|---|
| Mandatory changes amount to | +$66,000 |
| Program changes amount to | +$10,300 |
| Positions | +1 |

*Proposal.*—To perform case study analyses in local areas of the degree to which the economic position of workers is affected by changes in the standards of the Fair Labor Standards Act, according to worker characteristic.

*The Need.*—Current economic studies of the effects of changes in the Act's standards and coverage are based on industry surveys. Better information is needed concerning the effects of these changes on economic conditions in local areas so that a greater degree of flexibility in the direction of programs can be attained.

*The Program.*—The additional position will be utilized to undertake a number of local studies within particular communities, to provide information concerning the effects of changes in the statutory standards on employment and the economic position of workers residing in the area. These studies will be made on-site and in depth, analyzing the economic effects of changes in terms of a variety of worker and employment characteristics.

| | |
|---|---|
| Base: | |
| Positions | 72 |
| Estimated cost | $1,819,200 |
| Additional cost: | |
| Positions | 1 |
| Man-years | 9 |
| Estimated cost | $10,300 |

BASIS FOR THE ESTIMATE

Estimates are based on experience at current program levels. A reduction of $2,600 in travel funds reflects cost reduction measures and reduced administrative travel requirements.

*Activity 4. Administration and management services*

| | |
|---|---|
| 1968 (positions, 75) | $768,800 |
| 1969 (positions, 77) | 833,400 |

NARRATIVE DESCRIPTION OF PROGRAM

This program provides management staff leadership and coordination in the planning of bureau-wide program activities and administrative policies. Plans and programs are designed to meet the social and economic goals and objectives of the acts administered by the Wage and Hour Division. Specifically, actions are conducted or directed in the fields of program planning, personnel administration, budget and fiscal administration, organization and management, and systems management, with necessary administrative services provided in support of the execution of programs.

Specific goals and objectives are established for each of the Division's programs. Alternative methods of attaining these targets are analyzed to ensure that the most effective use is made of the resources available, and to provide the basis for estimating future resource requirements for programs. Specific studies are made of manpower resource needs by geographic area to develop staff deployment plans. Manpower and other resources are allocated to program managers to provide local management flexibility and a better basis for reviewing accomplishments or problems encountered. As part of a continuing program of management improvement and cost reduction, surveys are conducted periodically to review and evaluate the organization, functions, workload, systems and procedures, and the utilization of resources by program managers.

Of continuing importance in the achievement of the Division's goals and objectives is the recruitment, training, development, utilization, and retention of well qualified people. This involves efforts ranging from the promotion of deserving individuals to the handling of employee or union grievances. With the greater complexities of the acts administered, the processes of review and analysis of job requirements, training, and employee utilization are being expanded to ensure that adequate and capable staff are available for each program.

In addition to continuing program support to the national office and the field, the following actions and accomplishments are noted:

*In 1967*, significant responsibilities for administrative and financial management were delegated to regional managers. This has led to substantially greater regional participation in the planning, programming, and review of activities which significantly affect the scope and direction of the Division's programs. In addition, the decentralization of these responsibilities has established a reliable basis for financial control and cost awareness at the organizational level where expenditures are incurred. Two new district offices were established in Cleveland and Detroit under the jurisdiction of the Chicago Region, based on the initial successful operations of the district office established in Los Angeles the year before. These offices offer a higher level of representation and improved services to the public in major metropolitan areas, as well as improved supervision of field operations in the geographic areas served, without increasing the costs or size of the field organization.

The acquisition of dictating equipment for investigators and the use of additional clerical support personnel were tested in 1967. Also during 1967 a general systems review was made to identify areas of potential ADP applications. As an aspect of the management improvement program, 369 employee suggestions were evaluated and 106 were implemented.

*In 1968*, it is planned to continue to increase the field's responsibilities for regional management. Instructions were issued for regional participation in a program for the quarterly review and analysis of goals and accomplishments. The implementation of an ancillary accounting system for the handling of back wage underpayments recovered as a result of legal action, involving the distribution of approximately $3.5 million to some 30,000 employees through the use of Federal deposit facilities, will be completed before the end of the year.

During 1968, additional district offices were established in Dallas, Houston, Oklahoma City, Philadelphia, Pittsburgh, and San Francisco. In cooperation with the Department of Defense and components of the Department of Labor, arrangements were made to receive notices of defense agency procurement actions by magnetic tape and instructions are being developed for a computer edit to be used in conjunction with investigation programming under the McNamara-O'Hara Service Contract Act and the Walsh-Healey Public Contracts Act. Efforts are continuing to simplify and minimize reporting requirements of investigators and to free investigator time otherwise spent in routine operations.

*Changes for 1969*

| | |
|---|---|
| Mandatory changes amount to | +$38,500 |
| Program changes amount to | +$26,100 |
| Positions | +2 |

*Proposal.*—To continue efforts in the areas previously reported, and to provide additional program support in those areas which will contribute most significantly to the effective utilization of manpower and program resources.

*The Need.*—In anticipation of the increased program responsibilities resulting from the 1966 amendments to the Fair Labor Standards Act, the additional responsibilities for administration and enforcement of the Davis-Bacon and related acts, and requested increases in the overall employment of the Wage and Hour Division for the accomplishment of these responsibilities, the requested positions are needed to meet the additional demands for administration and management in the areas of budgeting and personnel.

*The Program.*—The two additional positions will be utilized to develop and carry out improved management systems in the areas of budgeting and financial control, and to provide for increased responsibilities in the areas of personnel management and development.

| | |
|---|---|
| Base: | |
| Positions | 75 |
| Estimated cost | $768,800 |
| Additional cost: | |
| Positions | 2 |
| Man-years | 1.8 |
| Estimated cost | $26,100 |

BASIS FOR THE ESTIMATE

Program estimates are based on experience at the current level of administration and management support, plus the costs of two additional positions and mandatory changes.

DISTRIBUTION OF FIELD STAFF

| Supervising offices | 1968 | | | 1969 | | |
|---|---|---|---|---|---|---|
| | Professional | Clerical | Total | Professional | Clerical | Total |
| Atlanta, Ga | 183 | 36 | 219 | 192 | 40 | 232 |
| Birmingham, Ala | 113 | 31 | 144 | 118 | 33 | 151 |
| Boston, Mass | 61 | 22 | 83 | 61 | 22 | 83 |
| Chicago, Ill | 199 | 57 | 256 | 207 | 60 | 267 |
| Dallas, Tex | 159 | 36 | 195 | 166 | 39 | 205 |
| Kansas City, Mo | 110 | 29 | 139 | 115 | 31 | 146 |
| Nashville, Tenn | 137 | 35 | 172 | 143 | 38 | 181 |
| New York City, N.Y | 108 | 27 | 135 | 108 | 27 | 135 |
| Philadelphia, Pa | 94 | 32 | 126 | 97 | 33 | 130 |
| San Francisco, Calif | 134 | 32 | 166 | 140 | 34 | 174 |
| Santurce, P.R | 26 | 13 | 39 | 27 | 13 | 40 |
| Total field staff | 1,324 | 350 | 1,674 | 1,374 | 370 | 1,744 |

EXPLANATION OF ESTIMATE BY OBJECT

*Personnel compensation, $19,629,500*

This estimate provides for 2,029 full-time positions or 1,949 net man-years, and 21 man-years of intermittent employment. Of this, 1,688 man-years and $16,794,400 are allocated to field personnel compensation and 282 man-years and $2,835,100 for Departmental. The increase of $1,560,400 from 1968 provides $170,500 for within-grade promotions, $43,700 for career ladder promotions for field investigators, $78,000 for one extra day of pay in 1969, $111,800 for the full-year cost of new positions financed for a portion of 1968, $503,000 for additional costs of provisions of the 1966 amendments to the Fair Labor Standards Act becoming effective in 1969, and $653,400 for full-year cost of pay increase under P.L. 90–206.

*Personnel benefits, $1,601,000*

This estimate is based upon levels of personnel compensation for 1969. The net increase of $137,900 from 1968 provides $12,900 for within-grade promotions, $3,300 for career ladder promotions for field investigators, $5,800 for one extra day of pay in 1969, $8,400 for the full-year cost of new positions financed for a portion of 1968, $50,600 for additional costs of provisions of the 1966 amendments to the Fair Labor Standards Act becoming effective in 1969, $68,300 for full-year cost of pay increase under P.L. 90–206, and a reduction of $11,400 in the contribution to the Federal Employees' Compensation Fund. This estimate covers the following benefits:

| | |
|---|---|
| Contribution to the Civil Service Commission retirement fund | $1,277,700 |
| Employees' group life insurance | 65,600 |
| Employees' health benefits | 160,000 |
| Contribution under the Federal Insurance Contribution Act | 5,900 |
| Contribution to Federal employees' compensation fund | 3,800 |
| Employees' moving allowances | 88,000 |
| Total | 1,601,000 |

*Travel and transportation of persons, $1,233,500*

This estimate provides for per diem, mileage, parking fees, and transportation costs for investigators, field office supervisors, administrative officials, and industry committee members. A 10% ($128,000) reduction from 1969 base travel

funds is reflected and $82,000 is provided for additional costs of provisions of the 1966 amendments becoming effective in 1969.

| | 1968 | 1969 | Net change |
|---|---|---|---|
| Per diem | $426,100 | $410,800 | −$15,300 |
| Mileage | 680,700 | 656,200 | −24,500 |
| Other transportation costs | 172,700 | 166,500 | −6,200 |
| Total | 1,279,500 | 1,233,500 | −46,000 |

*Transportation of things, $82,700*

This estimate provides for the movement of household goods and personal effects of approximately 100 employees and $18,700 for shipment of supplies, equipment, and printed matter to field installations. The increase of $6,700 from 1968 provides for additional costs of provisions of the 1966 amendments to the Fair Labor Standards Act becoming effective in 1969.

| | 1968 | 1969 | Net change |
|---|---|---|---|
| Movement of household goods | $58,000 | $64,000 | +$6,000 |
| Shipment of supplies and materials | 18,000 | 18,700 | +700 |
| Total | 76,000 | 82,700 | +6,700 |

*Rent, communications, and utilities, $698,600*

The increase of $52,500 from 1968 provides for additional costs of provisions of the 1966 amendments to the Fair Labor Standards Act becoming effective in 1969.

| | 1968 | 1969 | Net change |
|---|---|---|---|
| Paid official mail | $206,900 | $215,200 | +$8,300 |
| Telephone services | 223,600 | 234,900 | +11,300 |
| Teletype services | 3,600 | 3,600 | |
| Rent and utility services | 52,400 | 83,400 | +31,000 |
| Working capital fund | 54,600 | 56,500 | +1,900 |
| Federal telecommunications system | 105,000 | 105,000 | |
| Total | 646,100 | 698,600 | +52,500 |

*Printing and reproduction, $287,100*

A net savings of $15,500 results from a 10% ($30,000) reduction from 1969 base printing funds, partially offset by $9,600 provided for additional costs of the 1966 amendments becoming effective in 1969 and $4,900 increase due to full-year cost of the pay increases under P. L. 90–206.

| | 1968 | 1969 | Net change |
|---|---|---|---|
| Special purpose publications | $174,700 | $157,400 | −$17,300 |
| Administrative publications | 32,500 | 29,200 | −3,300 |
| Working capital fund | 95,400 | 100,500 | +5,100 |
| Total | 302,600 | 287,100 | −15,500 |

*Other services, $2,413,400*

The increase of $265,700 from 1968 provides $169,000 for a change in usage and billing for working capital fund services, $27,900 for additional costs of provisions of the 1966 amendments to the Fair Labor Standards Act becoming

effective in 1969, and an increase of $68,800 resulting from full-year costs of the pay increase under P.L. 90–206.

| | 1968 | 1969 | Net change |
|---|---|---|---|
| Bureau of Labor Statistics for tabulation of investigator statistics | $53,000 | $54,200 | +$1,200 |
| Bureau of Labor Statistics for collection of data necessary to the administration of the Service Contract Act | 701,600 | 723,900 | +22,300 |
| Bureau of Labor Statistics for wage surveys related to economic effects of the acts administered by the Wage and Hour Division | 864,100 | 894,400 | +30,300 |
| Surveys and studies to provide a bais for developing legislative recommendations and to study the economic effects of the acts administered by the Wage and Hour Division | 140,800 | 145,600 | +4,800 |
| Bureau of Census and other agencies for special tabulations related to covered establishments | 15,000 | 15,000 | ---------- |
| Security investigations | 4,200 | 4,200 | ---------- |
| Miscellaneous other services | 45,500 | 49,200 | +3,700 |
| Working capital fund | 323,500 | 526,900 | +203,400 |
| Total | 2,147,700 | 2,413,400 | +265,700 |

*Supplies and materials, $88,700*

The increase of $4,600 from 1968 provides for additional costs of provisions of the 1966 amendments to the Fair Labor Standards becoming effective in 1969.

| | 1968 | 1969 | Net change |
|---|---|---|---|
| Desk top supplies | $23,700 | $24,800 | +$1,100 |
| Working capital fund | 60,400 | 63,900 | +3,500 |
| Total | 84,100 | 88,700 | +4,600 |

*Equipment, $176,500*

The increase of $37,500 from 1968 provides for additional costs of provisions of the 1966 amendments to the Fair Labor Standards Act becoming effective in 1969.

| | 1968 | 1969 | Net change |
|---|---|---|---|
| Equipment | $126,400 | $163,900 | +$37,500 |
| Subscriptions to permanent reference materials | 12,600 | 12,600 | ---------- |
| Total | 139,000 | 176,500 | +37,500 |

SUMMARY OF NEW POSITIONS

| | Number | Grade | Amount |
|---|---|---|---|
| Activity 1—Field offices: | | | |
| Investigator | 10 | GS–12 | $114,610 |
| Do | 40 | GS–7 | 269,360 |
| Clerk-stenographer | 20 | GS–4 | 99,900 |
| Total | 70 | ---------- | 483,870 |
| Activity 2—Departmental: | | | |
| Exemption specialist | 1 | GS–12 | 11,461 |
| Clerk-stenographer | 1 | GS–4 | 4,995 |
| Total | 2 | ---------- | 16,456 |
| Activity 3—Departmental: Labor economist | 1 | GS–12 | 11,461 |
| Activity 4—Departmental: | | | |
| Personnel staffing specialist | 1 | GS–12 | 11,461 |
| Budget analyst | 1 | GS–12 | 11,461 |
| Total | 2 | ---------- | 22,922 |
| Grand total | 75 | ---------- | 534,709 |

PREPARED STATEMENT

Senator HILL. Now, Mr. Lundquist, Administrator of the Wage and Hour Division. We are happy to have you with us again.

Mr. LUNDQUIST. Mr. Chairman, this is Mr. Levine, Assistant Administrator.

Mr. Chairman, there is a detailed statement that is available for the record. With your permission, that detailed statement will be submitted. I will not read from it.

(The statement follows:)

The Wage and Hour Division's request for fiscal year 1969 is $26,211,000, which provides $2,003,800 more than the revised appropriation for 1968. The changes for 1969 include the following:

| | Positions | Funds |
|---|---|---|
| Administration of the added coverage and minimum wage and overtime changes to take place under the Fair Labor Standards Act in 1969 | +75 | +$774,400 |
| Full-year cost of new positions financed for a part year in 1968 | | +120,200 |
| Financing and mandatory changes such as career ladder promotions, within-grade promotions, and pay raise increases | | +1,267 200 |
| Management improvement and cost reduction savings in travel and printing costs | | −158,000 |
| Total change | +75 | +2,003,800 |

*Changes resulting from legislation*

The 1966 Fair Labor Standards Act amendments provided for successive annual changes extending coverage and increasing the minimum wage and overtime standards under the Act. The minimum wage was increased from $1.25 to $1.40 an hour effective February 1, 1967, and from $1.40 to $1.60 an hour effective February 1, 1968 for the 33 million employees whose employment was previously covered under the Act. For the 8.5 million employees (other than Federal employees and those employed in agriculture) whose employment was covered for the first time as a result of the 1966 amendments, a minimum wage of $1.00 an hour was established effective February 1, 1967 with annual increases of 15 cents an hour until $1.60 an hour is reached in 1971. Generally, newly covered employees became subject in 1967 to an overtime standard requiring not less than 1½ times the regular rate of pay after 44 hours. This initial workweek standard was reduced to 42 hours February 1, 1968, and will be reduced to 40 hours February 1, 1969. Agricultural employees whose employment is covered as a result of the 1966 amendments were entitled to a minimum wage of at least $1.00 an hour beginning February 1, 1967, with increases to $1.15 an hour February 1, 1968 and $1.30 an hour February 1, 1969. No overtime provisions are applicable to agricultural employment and employees of hotels and restaurant establishments.

In addition to the changes in the standards described above, the 1966 amendments to the Fair Labor Standards Act provided for a further extension of coverage which becomes effective February 1, 1969. On that date the "annual gross volume" test which defines coverage for certain enterprises is reduced from $500,000 to $250,000. This change will have the effect of bringing under the Act an estimated 100,000 establishments and 1.2 million employees not previously subject to either the Federal minimum wage or overtime standards. With this change, it is estimated that nearly 1.9 million establishments and 42.8 million employees will be subject to the Act's standards.

As a result of changes in the minimum wage standards for covered employees effective February 1, 1968, nearly 7.3 million workers in 1968 will be entitled to increased earnings totaling approximately $2.3 billion at an annual rate. To the extent that overtime is being worked, additional increases in earnings will be provided for newly covered employees as a result of the reductions in the overtime standard to 42 hours in 1968 and 40 hours in 1969. The $1.30 minimum wage rate which becomes effective in 1969 will mean raises for workers brought under the Act in 1967 as well as in 1969.

*Enforcement program*

With 1,024 investigator positions in 1967, the same number as authorized prior to the 1966 amendments, the Wage and Hour Division investigated 58,159 establishments. Of these, 20,896 were investigated on the basis of complaints received from the public and 37,263 as a result of other indications of possible violations. 368,582 employees were found to have been underpaid a total of $76,092,726.

Since February 1, 1967, the effective date of the 1966 Fair Labor Standards Act amendments, the Wage and Hour Division has experienced a 45 percent increase in the number of complaints received per month as compared with the monthly average for the preceding year. It is presently estimated that of the 68,000 investigations which will be made in 1968, 30,000 will be as a direct result of complaints from the public. The number of complaints requiring investigation is expected to increase to 32,000 in 1969 with the additional changes in the provisions of the Act.

To avoid a retrogression in the existing level of compliance, an increase of fifty investigator positions is requested for 1969. With the extension of coverage in 1969 to an additional 100,000 establishments and 1.2 million employees, this increase in staff would maintain approximately the same ratio of investigators to covered establishments as was authorized for 1968.

With respect to other acts administered, the Wage and Hour Division was recently delegated the functions assigned to the Secretary of Labor by Reorganization Plan No. 14 of 1950 for coordinating the enforcement activities of Federal contracting agencies with respect to the Davis-Bacon Act, the Contract Work Hours Standards Act, and related acts. No increase in funds is being requested for this purpose, since responsibilities are still limited to coordination with contracting agencies.

*Public information and education program*

As a result of the successive changes in the standards of the Fair Labor Standards Act following the 1966 amendments, information and education programs have been intensified to inform employees and employers of their rights and obligations, and to assist employers in avoiding unintentional accumulations of back-wage liability under the Act.

In 1967 and 1968 information brochures containing highlights of the amended Act, an official notice to employers, and other explanatory material concerning changes in the provisions of the Act were mailed to approximately 1.9 million employers. A copy of this material is here and offered for inclusion in the record. Extensive use has been made of mass media channels of communication to inform employees of their rights, including daily, weekly, labor, foreign language, and other specialized press; trade journals and other periodicals; and radio and television. It is estimated that some 8 million pieces of informational material will be printed in 1968 and distributed to the public, including both technical interpretations of the Act and to the maximum extent possible pamphlets written in layman's language to ensure ready comprehension.

To facilitate contacts with the public, special efforts are made to place the Division's offices in locations where access is easiest. Presently the Division maintains regional and district offices in seventeen major metropolitan centers, field offices in 100 cities, and deploys investigators in approximately 300 other cities and communities across this Nation. Speeches explaining the Act's provisions are made to employer, employee, and other organizations at the national, state, and local level, and informational contacts are maintained with governmental officials, business and employee associations, and local community organizations. These efforts have been extremely rewarding, and will be continued in 1969.

*Wage order program—Puerto Rico-Virgin Island-American Samoa*

The 1966 amendments to the Fair Labor Standards Act required an automatic 12% increase in wage rates for previously covered industries effective April 1, 1967 unless a hardship review was granted and resulted in different rates. During 1967, twelve requests for the establishment of hardship review committees were received from industries in Puerto Rico. These resulted in two committees being appointed in addition to the five committees required to establish wage rates for newly covered industries in Puerto Rico, the Virgin Islands, and American Samoa. Wage orders were issued, either as a result of committee activity or automatic increases, for all 42 broad industry groupings in 1967.

Increases of an additional 16% became effective on April 2, 1968 for previously covered industries in Puerto Rico and the Virgin Islands. Industries covered prior to the 1966 amendments were entitled to request a hardship review of these otherwise automatic increases. Nine applications for such "hearing action" were received, and hardship review in lieu of the automatic increase has been granted to the Puerto Rican sugar and handkerchief industries. In 1969, the regular biennial "hearing action" review program will be resumed. The law requires that the wage levels in Puerto Rico, the Virgin Islands, and American Samoa reach mainland applicable minimum rates as rapidly as possible, provided that the wage levels established "will not substantially curtail employment in the industry, and will not give any industry in Puerto Rico or in the Virgin Islands a competitive advantage over any industry in the United States outside of Puerto Rico and the Virgin Islands." Reviews are scheduled for half of the industries in Puerto Rico, plus all of the covered industries in the Virgin Islands and American Samoa in FY 1969. These will result in the issuance of about 20 wage orders in 1969.

*Special minimum wage program*

More than 20,000 special minimum wage certificates were issued in 1967 authorizing the employment of full-time students, handicapped workers, student learners, apprentices, and learners at rates below the statutory minimum. This was an increase of more than 6,000 over the number of certificates issued in 1966. Over 13,000 certificates were issued during the first half of 1968, or nearly as many as were issued annually before the 1966 amendments. The increases have been almost entirely in the number of certificates for student-learners, full-time students, and handicapped workers. It is estimated that a total of about 24,500 certificates will be issued in 1968 and that this number will rise to approximately 27,000 in 1969 with continued increases in minimum wage standards.

As directed by the 1966 amendments, a special study was completed on the wages paid to handicapped clients in sheltered workshops and on the feasibility of raising existing wage standards in such workshops. This report was submitted to the Congress in September 1967. While no specific legislative proposals were recommended, the Secretary stated that serious consideration should be given to several forms of wage supplements for handicapped clients of sheltered workshops as outlined in the report.

*Government contracts wage determination program*

Fiscal year 1967 was the first full year of operations under the McNamara-O'Hara Service Contract Act. During the year, 757 determinations of prevailing minimum wages and fringe benefits were issued by the Wage and Hour Division. These determinations were applicable to more than 4,000 of the agency notices of intention to make a service contract received by the Wage and Hour Division from contracting agencies. As the cumulative number of wage determinations in effect increases, the percentage of the total number of covered service contracts awarded that are affected by wage determinations will also increase. Where no determination is issued, the Fair Labor Standards Act minimum wage ($1.60 per hour as of February 1, 1968) is applicable. In 1967, about one out of four notices of intention to award a contract was covered by a wage determination. It is anticipated that in 1968 one out of every three contract notifications received will be covered by a determination and that in 1969 this will increase to 40%. In 1969, it is estimated that a total of 1,200 determinations will be issued. These wage determinations are based on wage surveys conducted by the Bureau of Labor Statistics. The Bureau of Labor Statistics currently makes annual surveys of wages for some 86 metropolitan areas in the United States. Eighty-five special area wage surveys and four special industry studies have been requested by the Divisions for 1968, and approximately the same number will be required in 1969.

An omnibus determination was issued in 1967 which raised the minimum wage level under the Walsh-Healey Public Contracts Act to $1.40 an hour unless a previous higher determination applied. A similar omnibus determination effective February 1, 1968 raised the minimum rate to $1.60 an hour to conform to the basic standard of the Fair Labor Standards Act. No Public Contracts Act industry wage determinations are planned in 1969.

*Economic studies*

Section 4(d) of the Fair Labor Standards Act directs the Secretary of Labor to submit annually to the Congress a report including an evaluation and appraisal of the effects of the Act and recommendations for further legislation. Supple-

menting this year's report are special studies on the effects of the 1966 amendments with respect to newly covered employees in the hotel and motel industry, eating and drinking places, and food service workers in retail trade. Also included was the first part of a three-part comprehensive study of hired farm workers which is designed to evaluate the economic effects of the $1.00 an hour minimum wage effective in 1967, and the implications and subsequent effects of the successive increases to $1.15 in 1968 and $1.30 in 1969.

Research was undertaken during 1967 and final reports were submitted to the Congress during the first part of 1968 for two studies directed by the 1966 amendments to the Act. The first of these dealt with wage payments to handicapped clients of sheltered workshops, and the feasibility of raising existing wage standards in these workshops. The second report submitted to the Congress was a study dealing with premium payments for overtime work, including the effects of fringe benefits on overtime practices. A third study directed by the 1966 amendments is being made in cooperation with the Departments of State and Defense. This report concerns the wage rates payable to Federal employees in the Canal Zone and the requirements for effective and economical operation of the Panama Canal, and is to be submitted to Congress by July 1968.

Additional economic studies begun in 1968 will be completed in 1969. A nationwide study of consumer and wholesale prices will be made to determine the extent to which price changes accompany increases in the minimum wage. The second part of the study of hired farm workers will be completed evaluating the economic effects of the $1.15 increase and implications of the $1.30 increase. A follow-up study of wage rates and employment in sheltered workshops will be made to update the previous report submitted to the Congress this year.

In addition to the farm worker study, three studies are being planned for submission in connection with the report required by Section 4(d) of the Act in January 1969. A study of agricultural processing industries will focus on the overtime exemptions now provided for the handling and processing of farm products and the need for changes. The two other studies will ascertain the effects of the 1967 and 1968 minimum wage and overtime standards on employment, wages, and hours of work in two relatively low-wage newly covered industries: laundries and nursing homes. As a by-product, these studies will also provide information on the implications of the new standards which will become effective on February 1, 1969.

SUMMARY

While the 1966 amendments provided very meaningful changes in coverage and wage standards, much remains to be done from an enforcement standpoint to insure that the 42.8 million workers who have been guaranteed fair labor standards will obtain the full benefit of these standards. The Wage and Hour Division's request for 1969 will provide the basis for such actions.

WITNESS' TENURE IN OFFICE

Senator HILL. How long have you been in this position?

Mr. LUNDQUIST. Ten years, Mr. Chairman. If I may say so nostalgically, you were the chairman of the committee in 1958 which approved my appointment.

I want you to know, as I said then, I was appreciative of your approval.

Senator HILL. You have measured up, you have done the job.

BUDGET REQUEST

Mr. LUNDQUIST. Thank you, sir.

The summary statement, Mr. Chairman, indicates that the Wage and Hour Division for the fiscal year 1969 is requesting $26,211,000, which does provide $2,003,800 more than the revised appropriation for 1968.

The changes for 1969 include both increases and decreases. The increases are related to some 75 new positions, of which we contemplate

approximately 50 would be investigators. Other changes are mandatory in terms of the pay increase and financing new positions authorized in 1968 and a decrease of $158,000 in travel and printing costs as a result of what we believe are true management improvement and cost reduction savings in 1968.

Senator HILL. You mean you use airlines now instead of covered wagons?

Mr. LUNDQUIST. We certainly use the coach. We tend not to travel as much and attempt to have folks that are close by fulfill the assignments as necessary.

Senator HILL. Without too much travel?

Mr. LUNDQUIST. Without too much travel. But without any sacrifice on the part of know-how and ability to present our point of view and our message.

### MINIMUM-WAGE INCREASES AND EXTENSION

On February 1, 1967, the minimum wage was increased from $1.25 to $1.40 an hour for some 33 million previously covered workers—and coverage at that time was extended to an additional 8½ million employees for whom generally a minimum wage of $1 was established.

On February 1, 1968, these minimum-wage rates were raised from $1.40 to $1.60 for previously covered employees and to $1.15 for those covered initially at a dollar.

In February 1969, the minimum wage for the newly covered workers will be increased to $1.30 and the present 42-hour overtime standard for these newly covered workers will be reduced to 40 hours. In addition, as a result of the 1966 amendments, the annual-gross-volume-of-business test, which defines coverage for certain enterprises, will be reduced from $500,000 to $250,000, bringing under the act an estimated 100,000 additional establishments and 1.2 million additional employees.

With this change it is estimated that nearly 1.9 million establishments and 42.8 million employees will be subject to the Fair Labor Standards Act.

The full effect of the 1966 amendments, however, will not be achieved until February 1971, when the minimum wage for all covered workers, except those in agriculture which stop at $1.30 next year, will be $1.60.

### VIOLATION COMPLAINT INCREASE

During the past year, we have experienced more than a 40-percent increase in the number of complaints alleging violations of the act. This is up from about 23,000 to above 30,000.

In 1969, the number of complaints requiring investigation is expected to increase from 30,000 to 32,000 with the additional changes in the provisions of the act.

### ENFORCEMENT

The wage and hour enforcement program will need to be stepped up in 1969 to service these complaints and with the additional coverage to avoid what we believe would be a retrogression of the existing level of compliance.

While the 1966 amendments provided very meaningful changes in coverage and wage standards, much remains to be done to insure that the 42 million workers who have been guaranteed fair labor standards will in fact actually realize the full benefits of these standards.

We think, Mr. Chairman, that this request for 1969 will provide the basis for such action.

Thank you.

Senator HILL. You think you will be able to meet the situation?

Mr. LUNDQUIST. We think it will provide a sound basis. We do not think it will do everything we would want to do, Mr. Chairman, but we realize, in the framework of a proper budget considered throughout the executive branch, that these funds will be meaningful in terms of effective enforcement.

Senator HILL. Is there anything you gentlemen would like to add?

Mr. LEVINE. No, thank you, Mr. Chairman.

Senator HILL. Thank you very much.

Mr. LUNDQUIST. Thank you, Mr. Chairman. It is always a pleasure to appear before you.

## Bureau of Labor Statistics

### STATEMENT OF ARTHUR M. ROSS, COMMISSIONER ACCOMPANIED BY RICHARD E. MILLER, DIRECTOR, OFFICE OF PROGRAM AND BUDGET REVIEW

#### Appropriation Estimate

"Bureau of Labor Statistics, Salaries and Expenses

"For expenses, not otherwise provided for, necessary for the work of the Bureau of Labor Statistics, including advances or reimbursement to State, Federal, and local agencies and their employees for services rendered, [$20,933,000] *$22,669,000.*"

AMOUNTS AVAILABLE FOR OBLIGATION

| | 1968 | 1969 |
|---|---|---|
| Appropriation or estimate | $20,933,000 | $22,669,000 |
| Amount reserved under H.J. Res. 888 (Public Law 90–218) | −487,000 | |
| Amount of reserve applied to increased pay costs | 487,000 | |
| Proposed transfer from "Office of Manpower Administrator, salaries and expenses" for pay increases (Public Law 90–206 effective Oct. 8, 1967) | 54,000 | |
| Nonrecurring rental costs transferred to General Services Administration | −2,000 | |
| Appropriation or estimate, revised | 20,985,000 | 22,669,000 |

OBLIGATIONS BY ACTIVITY

| Description | Appropriation revised, 1968 | | Estimate, 1969 | | 1969 change | |
|---|---|---|---|---|---|---|
| | Positions | Amount | Positions | Amount | Positions | Amount |
| 1. Manpower and employment | 345 | $8,295,000 | 345 | $8,528,400 | | +$233,400 |
| 2. Prices and cost of living | 309 | 3,478,900 | 360 | 4,122,300 | +51 | +643,400 |
| 3. Wages and industrial relations | 321 | 3,504,400 | 357 | 3,972,300 | +36 | +467,900 |
| 4. Productivity, technology, and growth | 96 | 1,205,100 | 96 | 1,422,100 | | +217,000 |
| 5. Foreign labor and trade | 41 | 453,100 | 41 | 471,500 | | +18,400 |
| 6. Program staff services | 153 | 1,659,900 | 153 | 1,708,600 | | +48,700 |
| 7. Administration and management services | 126 | 2,388,600 | 126 | 2,443,800 | | +55,200 |
| Total obligations | 1,391 | 20,985,000 | 1,478 | 22,669,000 | +87 | +1,684,000 |

OBLIGATIONS BY OBJECT

| | Appropriation revised, 1968 | Estimate, 1969 | 1969 change |
|---|---|---|---|
| Total number of permanent positions | 1,391 | 1,478 | +87 |
| Positions other than permanent | 74 | 74 | |
| Average number of all employees | 1,302 | 1,397 | +95 |
| 11 Personnel compensation | $12,152,100 | $13,398,700 | +$1,246,600 |
| 12 Personnel benefits | 900,730 | 996,030 | +95,300 |
| 21 Travel and transportation of persons | 754,200 | 706,700 | −47,500 |
| 22 Transportation of things | 20,000 | 20,000 | |
| 23 Rent, communications, and utilities | 1,161,470 | 1,226,270 | +64,800 |
| 24 Printing and reproduction | 704,300 | 655,800 | −48,500 |
| 25 Other services | 1,455,100 | 1,650,100 | +195,000 |
| Services of other agencies | 3,538,000 | 3,658,400 | +120,400 |
| 26 Supplies and materials | 178,700 | 190,300 | +11,600 |
| 31 Equipment | 120,400 | 166,700 | +46,300 |
| Total obligations | 20,985,000 | 22,669,000 | +1,684,000 |
| Working capital fund items included above | (953,000) | (1,016,000) | (63,000 |

SUMMARY OF CHANGES

| | Positions | Amount |
|---|---|---|
| 1968 enacted appropriation | 1,391 | $20,933,000 |
| Amount reserved under H.J. Res. 888 (Public Law 90-218) | | −487,000 |
| Amount of reserve applied to increased pay costs | | 487,000 |
| Proposed transfer from "Office of Manpower Administrator" for pay increases (Public Law 90-206 effective Oct. 8, 1967) | | 54,000 |
| Nonrecurring rental costs transferred to General Services Administration | | −2,000 |
| 1968 appropriation, revised | 1,391 | 20,985,000 |
| 1969 estimate | 1,478 | 22,669,000 |
| Total change | +87 | +1,684,000 |
| Mandatory items: | | |
| Increases: | | |
| Net additional pay increase costs not completely funded in 1968 | | +619,500 |
| Net additional cost of within-grade promotions effective for part year in 1968 | | +71,700 |
| Net cost of within-grade promotions becoming effective in 1969 | | +95,200 |
| To provide for 1 extra day of pay in 1969 for current year staff | | +55,300 |
| Payments to States for increased salary rates in connection with the cooperative employment statistics and labor turnover programs (nonlabor, $95,000) | | +95,000 |
| Subtotal, increases | | +936,700 |
| Decreases: | | |
| To provide for a net decrease in contributions to the Federal employees' compensation fund | | −10,000 |
| Subtotal, mandatory items | | +926,700 |
| Financing items: To provide for full cost of centralized services purchased from the working capital fund | | +1,300 |
| Program items: | | |
| Increases: | | |
| To overcome critical price information deficiencies ($330,700 personal services; $79,300 nonlabor costs) | +39 | +410,000 |
| To provide for the development of statistical measures of price competitiveness of U.S. products in world markets ($96,000 personal services; $27,000 nonlabor costs) | +12 | +123,000 |
| To initiate a program of surveys of nonmanufacturing industries to obtain information on general wage changes ($160,100 personal services; $46,900 nonlabor costs) | +21 | +207,000 |
| To initiate studies of employee-management relations in Federal, State, and local governments ($134,800 personal services; $31,200 nonlabor costs) | +15 | +166,000 |
| Subtotal, increases | +87 | +906,000 |
| Decreases: | | |
| Management improvement and cost reduction savings in travel and transportation of persons | | −78,000 |
| Management improvement and cost reduction savings in printing and reproduction | | −72,000 |
| Subtotal, decreases | | −150,000 |
| Subtotal, program items | +87 | +756,000 |
| Total change | +87 | +1,684,000 |

MANDATORY AND FINANCING CHANGES BY ACTIVITY

| Type of change | Activity 1 | | Activity 2 | | Activity 3 | | Activity 4 | | Activity 5 | | Activity 6 | | Activity 7 | | Total | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | Positions | Amount | Positions | Amount | Positions | Amount | Positions | Amount | Positions | Amount | Positions | Amount | Positions | Amount | Positions | Amount |
| MANDATORY ITEMS | | | | | | | | | | | | | | | | |
| Net additional pay increase costs | | +$125,100 | | +$91,200 | | +$90,200 | | +$206,400 | | +$13,600 | | +$48,500 | | +$44,500 | | +$619,500 |
| Net additional cost of within-grade promotions effective for part year in 1968 | | +9,100 | | +19,000 | | +18,100 | | +6,300 | | +2,700 | | +7,700 | | +8,800 | | +71,700 |
| Net within-grade promotion costs initially effective in 1969 | | +23,800 | | +17,400 | | +27,400 | | +5,700 | | +3,000 | | +9,000 | | +8,900 | | +95,200 |
| Payments to States for increased salary rates | | +95,000 | | | | | | | | | | | | | | +95,000 |
| Contributions to FEC fund, (+) or (−) | | | | | | | | | | | | | | −10,000 | | −10,000 |
| Extra day of pay for current year staff | | +13,400 | | +11,700 | | +12,500 | | +4,300 | | +1,900 | | +6,500 | | +5,000 | | +55,300 |
| Subtotal, mandatory items | | +266,400 | | +139,300 | | +148,200 | | +222,700 | | +21,200 | | +71,700 | | +57,200 | | +926,700 |
| FINANCING ITEMS | | | | | | | | | | | | | | | | |
| Cost of centralized services | | | | | | | | | | | | | | +1,300 | | +1,300 |
| Total | | +266,400 | | +139,300 | | +148,200 | | +222,700 | | +21,200 | | +71,700 | | +58,500 | | +928,000 |

*Mandatory and financing changes for 1969*

| | |
|---|---|
| Mandatory items: | |
| Increases: | |
| To provide for full year cost of pay increases effective Oct. 8, 1967 and to provide full funding of part-year costs | $619,500 |
| Within-grade promotion costs: | |
| 1969 net additional cost of within-grade promotions effective for part year in 1968 | +104,700 |
| Personnel compensation | 97,300 |
| Personnel benefits | 7,400 |
| Net cost | 104,700 |
| Absorption of a portion of above increases | −33,000 |
| Adjusted net additional cost of within-grade promotions effective for part-year in 1968 | 71,700 |
| Net cost of within-grade promotions becoming effective during 1969 | +133,200 |
| Personnel compensation | 123,230 |
| Deduct lapse | +370 |
| Personnel benefits | 9,600 |
| Net cost | 133,200 |
| Absorption of a portion of above increases | −38,000 |
| Adjusted net cost of within-grade promotions becoming effective during 1969 | 95,200 |
| To provide for 1 extra day in 1969 for current year staff | 55,300 |
| Payments to States for increased salary rates in connection with the cooperative employment statistics and labor turnover programs (nonlabor) | 95,000 |
| Decreases: To reduce the level of contributions to the Federal employees' compensation fund | −10,000 |
| Total, mandatory items | +926,700 |
| Financing items: | |
| Amount originally in base budget | 960,400 |
| Amount currently required in base budget | 961,700 |
| Changed financing required | +1,300 |

Changes in fees charged for centralized services (such as visual exhibits or reproduction) and changes in anticipated services rendered by the working capital fund require adjustments to the funds provided in the base budget.

## PROGRAM CHANGES BY ACTIVITY

| Object classification | Activity 1 | | Activity 2 | | Activity 3 | | Activity 4 | | Activity 5 | | Activity 6 | | Activity 7 | | Total | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | Position | Amount | Position | Amount | Position | Amount | Position | Amount | Position | Amount | Position | Amount | Position | Amount | Position | Amount |
| 11 Personnel compensation | | | 51 | $396,000 | 36 | $274,300 | | | | | | | | | 87 | $670,300 |
| 12 Personnel benefits | | | | 30,700 | | 20,600 | | | | | | | | | | 51,300 |
| 21 Travel and transportation of persons | | −$9,500 | | 4,100 | | −25,900 | | −$3,100 | | −$1,400 | | −$1,700 | | −$1,800 | | −47,500 |
| 23 Rent, communications, and utilities | | | | 39,400 | | 25,400 | | | | | | | | | | 64,800 |
| 24 Printing and reproduction | | −23,500 | | 4,200 | | −2,400 | | −2,600 | | −1,400 | | −21,300 | | −1,500 | | −48,500 |
| 25 Other services | | | | 4,200 | | 3,500 | | | | | | | | | | 7,700 |
| 26 Supplies and materials | | | | 6,700 | | 4,900 | | | | | | | | | | 11,600 |
| 31 Equipment | | | | 27,000 | | 19,300 | | | | | | | | | | 46,300 |
| Total | | −33,000 | 51 | 504,100 | 36 | 319,700 | | 5,700 | | 2,800 | | −23,000 | | 3,300 | 87 | 756,000 |

## Bureau of Labor Statistics

### (Salaries and expenses)

#### BASIS FOR ESTIMATES

This general statement is intended to indicate the nature of the major resources of cost estimates in Bureau programs, and to indicate, in general terms, the ways in which the Bureau has attempted to minimize costs. The fact must be emphasized that Bureau methods and procedures are under continual review with respect to (1) the data required to meet major governmental and private needs, and (2) the most efficient ways of meeting these needs.

The estimated cost of the Bureau's programs for fiscal 1969 is based upon long and cumulative experience in the operation of complex statistical programs involving survey planning, data collection, tabulation and summary of data, and the preparation of analytical reports.

Methods and procedures have been constantly refined in light of advances in statistical methodology and in the technology of data processing. Constant experimentation has taken place with respect to sample design, methods of data collection, schedule editing and data tabulation.

A major element in the cost of a statistical operation is the number of units (individuals, households, establishments) from which data must be collected. In developing sampling designs, the Bureau is guided by the most efficient use of sampling techniques to provide the desired level of accuracy. Size of sample in relation to sampling error will differ for a given survey, depending upon the number and character of the magnitudes to be estimated. In general, the larger the number of breakdowns to be derived from a given survey, the larger the sample required to provide reliable estimates. For example, data on a regional basis (e.g., for wages in the textile industry in the south) will require a larger sample than would be needed for national estimates alone.

A second major element in the cost of Bureau programs involves the method of data collection. The most efficient method of collection depends largely upon the nature of the information that is sought. Some types of information (e.g., comparatively simple magnitudes such as total employment, man-hours paid for, and total payroll of an establishment for a designated week) can be successfully collected by mailed questionnaire. On the other hand, data on the prices of selected items of apparel (involving comparability of specifications from store to store) or on occupational wages (where comparability of occupational duties from establishment to establishment is important) can only be adequately secured through personal visit to the sample units. Again, data for the Monthly Report on the Labor Force, which involves answers to a variety of questions by representatives of households, can only be collected by personal interview. Wherever possible, the Bureau has substituted less for more expensive collection methods. For example, after experimentation, it was concluded that the Bureau's occupational wage surveys in metropolitan areas could be conducted in alternative years largely by mailed questionnaire, with some supplementation by personal visit. A program of pilot studies is under way to determine the most effective methods of obtaining accurate occupational employment statistics from establishments—by mailed questionnaire, by a combination of mailed questionnaire and personal visits, or the addition of special questions to the occupational wage surveys. In some survey activities, the most efficient collection procedure involves a combination of methods. This aspect of the Bureau's work is under constant review with the aim of maximizing the efficiency of collection procedures with due regard to accuracy of response.

A third major source of cost relates to the frequency of surveys. Frequency depends in part upon the uses to be made of the survey data and partly upon the volatility of the survey items. For example, monthly data on both the labor force and prices appear to represent the minimum frequency required for both government and private decision making. Both labor force and price data tend to be volatile, thus providing an additional reason for the derivation of highly current estimates. On the other hand, occupational wages tend to change less frequently, so that annual surveys are adequate for most purposes and in most periods. Similarly, estimates of productivity, at least for most purposes, are adequate on an annual basis. It should be noted that, in view of the increasing role of Government in the operation of the economy, all of the pressures are toward greater currency of information. For example, the Bureau is now called upon, from time to time, to provide quarterly rather than annual estimates of productivity for selected industries for internal government use.

A fourth major source of cost in the operation of statistical programs is the tabulation and summarization of the data collected. In this area, the Bureau has made great advances in the use of electronic data processing equipment, and is constantly seeking for the most advanced and efficient use of this rapidly changing technology. The Bureau has a highly effective data processing center and new applications of machine equipment are under constant consideration. A data bank based on a comprehensive system of storage, retrieval, and analysis of numeral information has been developed by the Bureau of Labor Statistics for nearly three years. Its major attribute is that it gives the Bureau's social scientists direct use of the computer as a common tool in the analysis of economic affairs while by-passing the need for writing a computer language program on a job-by-job basis.

Finally, the fifth major element in the cost of Bureau programs is represented by survey planning and data analysis. The final output of the Bureau ranges from memoranda for internal government use to public releases and reports of various kinds. Here again, the Bureau has sought to devise the most efficient methods of accomplishing its survey planning and its explanatory and analytical work. The requirement for analytical staff is a function of (1) the survey planning that must accompany the initiation and maintenance of statistical programs and (2) the adequate analysis for policy and related purposes of the Bureau's output of statistical and economic data in terms of the full exploitation of the data collection in the vital areas in which the Bureau deals.

*Activity 1. Manpower and employment*

| | |
|---|---|
| 1968 positions, 345 | $8,295,000 |
| 1969 positions, 345 | 8,528,400 |

NARRATIVE DESCRIPTION OF PROGRAM

The Bureau's Manpower and Employment Statistics program measures the activity and health of the economy and of each of its industrial and geographical sectors, including urban slum and other problem areas, in terms of employment, hours, earnings, and labor turnover; it also shows the economic status of workers in terms of their employment, unemployment, and labor force participation in relation to their personal characteristics. Projections of labor supply and manpower requirements for the economy and for each industry and occupation provide a basis for anticipating manpower problems, planning training and educational programs, and vocational guidance. Long-term and short-term labor force projections by age, sex, and race, and studies of the relation of labor force activity rates to economic conditions are prepared as a basis for manpower policy.

*Employment and unemployment analysis—household survey*

Each month the Bureau analyzes significant developments in the labor force, and in employment and unemployment as revealed by statistics from the Current Population Survey of 52,500 households conducted for the Bureau of Labor Statistics by the Bureau of the Census. Supplementary surveys are also conducted in conjunction with the regular surveys, providing an average of 10 special reports a year on such subjects as the employment experience of out-of-school youth, and the relationship of unemployment and geographic mobility.

*In fiscal year 1967*, the three-year program of testing improved measures of employment and unemployment was completed. In January 1967, changes in the definition of employment and unemployment were instituted, and new probing questions to clarify the concepts were added to the basic questionnaire. At the same time, the number of households included in the survey was increased by 50 percent—to 52,500 each month. Combined with the sharpened definition, the sample expansion increased considerably the reliability of the monthly employment-unemployment figure.

The Bureau published projections of the labor force by color for 1970–1980, and State labor force projections for 1970 and 1980. In addition, studies were published on "Low Earners and Their Incomes" and on "Work Limitations and Chronic Health Problems."

Thirteen slum areas in ten cities in the United States and Puerto Rico were also surveyed during the year jointly by the Bureau of Employment Security and the Bureau of Labor Statistics. During the last half of the year, an experimental, methodological program was undertaken in three cities to test methods of measuring labor force experience of slum residents and to test techniques for improving coverage of slum area population in employment and unemployment surveys.

*In fiscal year 1968*, tabulation and analysis of the results of the experimental surveys conducted in the three cities will be completed. If possible, additional surveys of slum areas will be started in the last half of the fiscal year. These data are essential in planning and carrying through training and other manpower programs in central cities.

The Bureau is also publishing new labor force statistics on employment and unemployment characteristics for the 15 major metropolitan areas and the 9 largest cities within them. These statistics are expected to shed new light on the underutilization of human resources. In addition, the Bureau will publish the results of a study of men 20 to 64 years old who are not in the labor force and a study of multiple jobholders.

*In fiscal year 1969*, the program will continue without substantial change.

*Industry employment statistics—establishment survey*

The Bureau of Labor Statistics cooperates with State agencies in collecting data each month on employment, hours, and earnings from a sample of establishments in all nonagricultural activities. Approximately 195,000 reports are collected from establishments each month, of which 155,000 relate to employment, man-hours, and payrolls, and 40,000 relate to labor turnover. Monthly estimates of employment are published for 402 industries, hours and earnings data for 357 industries, and labor turnover statistics for 224 industries. In cooperation with State agencies, monthly data on employment, hours, and earnings are published for each State. Employment data are published for 203 local areas, and hours and earnings data are published for 172. Labor turnover data are published for 93 major local areas.

Two major publications are issued annually, one providing all national series from 1909 forward, and the other providing State and area data from the beginning date of each series.

*In fiscal year 1967*, activity in the industry employment statistics program continued to be directed toward the expansion of establishment reports on employment, hours, and earnings. Although no additional funds were provided for this program in fiscal year 1967, results from earlier allocations to cooperating State agencies became evident and considerable progress was made toward fulfillment of the objective to improve the reporting sample by the addition of 10,000 establishments, thereby strengthening the estimates for service industries and providing more area detail. A significant achievement was the development of monthly hours and earnings series covering all production or nonsupervisory payroll workers in the private nonagricultural economy.

*In fiscal year 1968*, the new hours and earnings series, covering all production and nonsupervisory workers, are being extended back to 1947 on an annual average basis.

*In fiscal year 1969*, the program will continue without substantial change.

*Occupational employment statistics*

The Bureau collects data on employment in scientific and technical occupations, and is developing a broader program covering other important occupations. Employment data for scientific and technical personnel by occupation and function are collected by mail from approximately 25,000 industrial establishments, 2,800 State Government agencies, and, less frequently, from 8,200 local government units.

*In fiscal year 1967*, the annual survey of employment of scientific and technical personnel in industry was conducted. Work on the development of data in other occupations included a pilot study of the computing and accounting machinery industry to test the feasibility of collecting across-the-board occupational employment statistics by a mail questionnaire. An exceptionally high response rate of 80 percent was recorded for this survey. A second pilot study, a survey of occupational employment in the communications industry, is being completed.

*In fiscal year 1968*, preparations for the first major collection of occupational employment statistics (other than scientific and engineering occupations) are underway, beginning with about 50 occupations in the metalworking industry. A report entitled *Occupational Employment Statistics 1960–1966* will be published, bringing together from a number of sources the currently available statistics on employment by occupation in the U.S. and in a limited number of industries.

*In fiscal year 1969*, the program will continue without substantial change.

*Manpower and occupational outlook*

Information is prepared on future occupational and industrial manpower requirements and resources covering the entire spectrum of manual, white-collar, and service jobs, and all major industries. The information is based on intensive research, including interviews with employers, unions, and professional societies, and data from other programs of the Bureau and other Government agencies. The *Occupational Outlook Handbook*, the major publication of the program, is issued every other year. It provides comprehensive information on about 700 occupations and 30 industries. Additional information is published in the *Occupational Outlook Quarterly*, and in special reports and bulletins. This information is used by counselors, educators, and others helping young people choose a field of work, and by training authorities and policy makers in developing programs of education and training.

In addition, special manpower studies are prepared that provide information in greater depth, on the changing industrial structure and occupational composition of American industries, such as railroads, civil aviation, and electronics. Other special studies provide more technical information and projections of manpower requirements and resources in specific occupations and industries, or for specific groups of workers—such as teachers, technicians, and nonwhite workers.

*In fiscal year 1967*, a new edition of the *Occupational Outlook Handbook* was completed for publication in early 1968. A major accomplishment of the Bureau was the drafting of a report "Tomorrow's Manpower Needs." This study provides industrial and occupational manpower information on a national basis and is intended to serve as a guide to State Employment Service offices for developing estimates of future occupational manpower requirements as a basis for planning vocational education and training programs under the Vocational Education Act of 1963. Other accomplishments included a health manpower study prepared at the request of the Intradepartmental Committee on Health Manpower; a study of State and local government employment for a Bureau report requested by the President; and a report on Federal Government employment for a Presidential Task Force.

*In fiscal year 1968*, major projects include completion of a study of seasonal employment and unemployment in the construction industry, as a part of a report on the industry which the President requested from the Secretaries of Labor and Commerce.

*In fiscal year 1969*, the program will continue without substantial change.

*Injury statistics*

Annual reports, based on data from approximately 110,000 establishments, provide information on work-injury frequency and severity measures for 670 manufacturing and nonmanufacturing industry classifications. Technical service, including staff training and review of procedures, is provided to insure uniformity in survey operations of the 16 States with which cooperative arrangements exist for the compilation of work-injury statistics.

*In fiscal year 1967*, quarterly surveys of injury statistics were discontinued to release resources which would permit more rapid and adequate processing of the annual surveys. Studies were published on work injury rates and causes of work accidents in concrete brick and block manufacturing establishments, in school lunchrooms, and in hotels.

*In fiscal year 1968*, improvements in processing the annual statistics on work injuries will be realized as a result of new computer procedures. The new procedures will also allow for expansion of the sample of establishments used in the annual work-injury frequency and severity measures. Studies on work injury causes in hospitals, fire departments, and foundries will be completed.

*In fiscal year 1969*, the program will continue without substantial change.

*Statistics on current job opportunities*

*In fiscal year 1967*, results of pilot surveys in 14 Standard Metropolitan Statistical Areas, made in 1966 in cooperation with the Bureau of Employment Security and State agencies, were analyzed. These experimental surveys demonstrated the feasibility of collecting data on job opportunities in conjunction with the labor turnover data collection program.

*In fiscal year 1968*, a continuing survey in two Standard Metropolitan Statistical Areas is being undertaken to develop operating and analytical experience.

*In fiscal year 1969*, the program will continue without substantial change.

*Changes for 1969*

| | |
|---|---|
| Mandatory changes amount to | +$266,400 |
| Program changes amount to | −33,000 |
| Positions | None |

PROPOSAL

| | |
|---|---|
| Management improvement and cost reduction in travel and transportation of persons | −9,500 |
| Management improvement and cost reduction in printing and reproduction | −23,500 |

*Activity 2. Prices and cost of living*

| | |
|---|---|
| 1968 (positions, 309) | $3,478,900 |
| 1969 (positions, 360) | 4,122,300 |

NARRATIVE DESCRIPTION OF PROGRAM

This program provides for collection and analysis of data on consumer prices and preparation of consumer price indexes for the United States and the major metropolitan areas; for pricing of industrial and agricultural products and for development and publication of wholesale price indexes on a commodity and industry basis; for development of standard family budgets; and for price and index number research.

*Consumer prices*

The Consumer Price Index (CPI) for urban wage earners and clerical workers has been available as a continuous series for more than 50 years. The CPI is used extensively to measure changes in purchasing power of the consumer dollar. It is the basis for most estimates of changes in real earnings of labor, and for comparison with productivity measures. One of the principal uses of the CPI is in wage adjustments and collective bargaining negotiations. It is estimated that about 2 and a quarter million workers are covered by contracts which provide for automatic wage increases based on changes in the index.

Compiled and published monthly, the index is currently based on prices and quotations for about 400 items in 56 urban areas obtained mostly by personal visits to approximately 18,000 retail establishments, and rents of 40,000 tenants. The national index report includes about 375 different group index series for the United States and for 23 large metropolitan areas. In addition, average retail prices for nearly 100 food items are published for the U.S. and for the same 23 metropolitan areas.

*In fiscal year 1967*, improvements were made in various procedures used in constructing the CPI. A major revision of the food store sample was carried out, including reallocation of the sample by type and size, and revision of store weights, based on the 1963 Census of Retail Trade. Also, rent samples, which had fallen seriously below desired strength, were augmented and reallocated to make them more representative of current housing in individual cities; building permit data from the Bureau of Census were used. A critical examination of techniques used in adjusting price comparisons for quality differences was completed.

Progress was made on planning and development of procedures for mechanical processing of data for the CPI. An electronic data processing system was developed. Processing procedures involving the quality comparability of price quotations for food items in large cities were improved, and compilation of the used car index was programmed on the computer. New collection schedules, for nonfood commodities and services, adapted to machine punching were tested in a few cities, and plans for test computation of certain phases of the final index calculations by machine were worked out.

A comprehensive bulletin, "The CPI: History and Techniques," was released It combines an historical summary of the scope and basic methods of compiling the CPI since its inception during World War I with a detailed explanation of present index techniques and a description of the comprehensive revision completed in 1964.

The Bureau participated in a special report to answer the question "Do the Poor Pay More?", which was issued in three parts in early 1967. Extra pricing of food was conducted in four separate months in all CPI cities to assess the importance of week-end specials on food prices.

*In fiscal year 1968*, work continues on adapting the CPI to the computer, with an overlap period in which both manual and computer processing will have been done. The additional funds provided in fiscal year 1968 allow development of more precise specifications defining quality-determining characteristics. This will result in a significant improvement in the precision of the index as a measure of actual price changes, by allowing for changes in the quality of goods and services. These funds also permit tests to be made of new procedures for better measurement of prices for hospital services and home purchases.

*In fiscal year 1969*, the program will continue without substantial change.

*Industrial prices*

The current program of industrial (non-retail) pricing is centered largely in the Wholesale Price Index (WPI), which includes monthly prices for some 2,300 commodities, based on about 7,000 quotations. Summary indexes are published for 15 principal groups of products with separate details for 86 subgroups and 287 product classes, as well as for most of the individual commodities. The commodities are grouped according to a commodity classification which takes account of market structures and products having related uses.

Using essentially these same data, price indexes are compiled and published monthly for 67 manufacturing, mining, and agricultural industries grouped according to the Standard Industrial Classification.

The Wholesale Price Index is used by government and private research agencies for many purposes, including market analysis, escalation of long-term purchase and sales contracts, formulation of monetary policies, and as an indicator of economic trends. The index also is used by buyers and sellers of commodities—purchasing agents and sales managers.

*In fiscal year 1967*, a number of steps were taken to improve the measurement of wholesale price changes. The Wholesale Price Index was completely reweighted and 201 commodities were added. A much needed reclassification was accomplished, and a new calculation procedure and machine program were put into effect. A new preliminary estimate was developed to provide an earlier measure of wholesale price trends.

Coverage of industry price indexes was expanded from 52 industries to 67 industries.

*In fiscal year 1968*, some additional commodities are being added, principally in the electronics area. Work continues on storage of primary market historical data in the Bureau's retrieval system for easier access in economic analysis and more economical reproduction.

*Price research*

Conceptual and technical research is conducted on the measurement of price change. The Bureau also carries on continuing analyses and interpretations of price developments in relation to major factors affecting price behavior.

*In fiscal year 1967*, a long-term program of basic research on the functioning of prices under modern market conditions was begun. Linkages between the Wholesale Price Index and the Consumer Price Index were studied. In the field of international prices, the Bureau undertook limited developmental research, including an evaluation of existing sources of price data.

Research into the interrelationship of prices and other aspects of the economy was undertaken. Information on the price impact of the manpower supply situation was prepared for use in the Department's periodic reports on manpower requirements and resources. A beginning was made on the exploration of factors affecting consumer service prices. Throughout the year, the Bureau furnished the Council of Economic Advisers and the Secretary of Labor with a special weekly report containing information not available elsewhere on current and future price developments, and, as pertinent, related economic factors.

*In fiscal year 1968*, the first in a series of market studies incorporating supply and demand analysis will be completed, and a second nearly completed. A model explaining price behavior for eleven categories of personal consumption expenditures is being tested for use in projecting price developments. Preliminary results of research on industry price behavior in several industries will be available, and different theories explaining the linkages between prices at various stages of production are being tested.

*Standard budgets*

The program involves the development and maintenance of standard budgets for a city worker's family and a retired couple at three levels: (a) minimum adequate; (b) moderate; and (c) a higher standard. Scales of equivalent income are developed for families of different size and composition.

Limited consultation and technical assistance are provided to public and private agencies at the Federal, State, and local levels in the use of standard budgets for planning and administering assistance programs of various kinds and in developing assistance standards.

*In fiscal year 1967*, the moderate budget for a four-person city worker's family was updated to the level of the autumn of 1966. A revised family equivalence scale for use in estimating budget costs for families of different size, composition, and age of the head of the family was calculated.

*In fiscal year 1968*, the city worker's moderate budget has been published; the budget for the retired couple will be published by the end of the year. Additional interpretative and analytical reports necessary for understanding the uses and limitations of the budgets are underway. Some exploratory work on comparative living cost indexes has been begun. Regional differentials in actual average prices for individual items are being measured and analyzed to the extent that available data permit. Individual consumers who inquire are supplied with specific details of the standard budgets to assist them in their own family budgeting.

*In fiscal year 1969*, the program will continue without substantial change.

*Consumer expenditure surveys*

These surveys are made periodically. None have been scheduled since 1960–61.

*In fiscal year 1967*, a monograph was completed on the design, methods, and evaluation of the 1960–61 Survey of Consumer Expenditures, the most recent such survey. A bulletin on clothing expenditures by sex-age groups was prepared.

*In fiscal year 1968*, exploratory and developmental work for a new large-scale Consumer Expenditure Survey is underway. (The survey is planned for 1972 to provide up-to-date weighting factors for the 1975 revision of the Consumer Price Index.)

*In fiscal year 1969*, the program will continue without substantial change.

*Changes for 1969*

| | |
|---|---|
| Mandatory changes amount to | +$139,300 |
| Program changes amount to | +$504,100 |
| Positions | +51 |

INCREASES

*Overcoming critical price information deficiencies*

PROPOSAL

To develop and publish price indexes for sectors of the economy not presently covered, including transportation, finance and insurance, and government purchases of goods, including defense-related items; and to improve existing indexes, such as those for construction and manufacturing.

THE NEED

Data on prices are lacking for many sectors of the economy and are seriously deficient for others. As a result, business, government, and labor are handicapped in their efforts to evaluate price developments and to make economic decisions for the future. For example, business firms need data on levels and trends in prices of insurance and transportation as well as of costs of wages and materials in order to establish their own pricing policies. Both business and labor need more information on prices in order to assess more accurately wage-price-productivity relationships when bargaining over wage agreements. All segments of the public, and Government as well, should know, and have a measure of, the prices paid by Federal, State, and local governments for goods—defense and nondefense—purchased in their behalf. Finally, because of lack of adequate price information, both Government and private economists find it difficult to evaluate adequately the significance of price increases in relation to cost develop-

ments in particular industries and to determine what actions might be undertaken to alleviate price pressures and to achieve price-level stability.

To meet these needs it is not only necessary to develop new indexes for sectors not previously covered, but it is also imperative to improve the limited indexes now available. For example, certain indexes for manufacturing, one of the most comprehensively covered sectors, are deficient because they fail to measure actual transactions prices, reflecting instead list prices that may be discounted by various amounts depending on demand. These indexes miss some critical turning points in price trends, as the sluggish list prices lag behind changes effected through raised or lowered discounts.

THE PROGRAM

The achievement of a comprehensive price information system commensurate with present and future requirements for such data will take several years. In fiscal year 1969, the Bureau plans to begin the collection of data for transportation and for Government purchases of goods, and to work on the improvement of construction price indexes. All newly covered series will be on an actual transaction price basis with data being obtained from buyers where necessary, rather than from sellers.

BASE

Positions: 14. Estimated Cost: $100,000.

ADDITIONAL COST

Positions: 39. Man-years: 35. Estimated Cost: $410,000.

BASIS FOR ESTIMATE

The average cost of collecting, processing, and analyzing a single price quotation until it is published as part of an index was used to obtain the $410,000 estimate for this program. The average cost may be somewhat higher than for the usual index since more information is required from buyers to assure that prices reflect actual transactions. The program should require about 25,000 price quotations to achieve the stated ends.

*Measures of international price competitiveness*

PROPOSAL

To develop statistical measures of the price competitiveness of U.S. products in world markets. These price data would permit improved comparisons of price trends between the United States and its trading partners and could also be used, with supplemental information of competing foreign products to compare price levels at a given point in time.

THE NEED

The continuing crisis in the balance-of-payments position of the United States calls for a continuing body of knowledge on the price competitiveness of U.S. commodities in world markets. The President's program announced January 1, 1968, as well as earlier events in the international trade and finance areas, points up the urgent need for data to evaluate the effect of these actions on the U.S. balance-of-payments position. In November 1967, the United Kingdom devalued the pound sterling and several other countries adjusted their exchange rates. Both government and business have been hampered in their evaluation of these monetary decisions, including their effect on prices of internationally traded commodities, by the lack of international price data. Similarly, such data are needed for adequate evaluation of results of tariff reductions negotiated at the Kennedy Round meetings in Geneva.

A number of agencies of the U.S. Government have indicated an interest in the development of a program to measure international price competition. The Treasury and Federal Reserve Board are actively interested in the proposed program which would provide data for assessment of financial policies and appraisal of the U.S. balance-of-payments position. The Commerce Department needs such information for operation of its export promotion program, as do other government officials concerned with specific problems in international trade. In addi-

tion, these measures would help American businessmen in their efforts to increase export sales. The program would provide businessmen with international price competitiveness information required to select the commodity groups for which export promotion efforts would be most likely to succeed.

Other countries are giving increasing attention to the development of international price measures to the extent that technical discussions have been held within the framework of the Organization for Economic Development.

THE PROGRAM

The Bureau proposes to compare U.S. export prices for commodities that are important in world trade with those in other selected countries. New price indexes will be developed based on the actual transaction prices of items. In its initial phase, the project will involve collection of export prices for selected metal and machinery products from U.S. firms engaged in the manufacture, sale or purchase of internationally traded commodities, from commercial invoices accompanying imports entered at major U.S. ports, and from bids by foreign and domestic suppliers for products procured by government and international agencies. In addition, the Bureau will participate in the international cooperative effort in the Organization for Economic Development to secure some of the foreign price data required.

BASE

Positions: 4. Estimated Cost: $45,000.

ADDITIONAL COST

Positions: 12. Man-years: 10.7. Estimated Cost: $123,000.

BASIS FOR ESTIMATE

Indexes of price competitiveness for durable manufacturers will require pricing about 1,000 U.S. exports, sampling of 3.8 million import invoices per year, and collecting collateral data on prices in third country markets. Since durables, particularly machinery and equipment are important to U.S. trade but difficult to compare over time, a substantial amount of specification data will also have to be collected for each product. Based on experience of other organizations, such as the National Bureau of Economic Research, that have developed more limited indexes and the costs the Bureau has incurred in collecting, analyzing and processing price quotations for existing programs, a minimum of 12 positions are considered necessary.

| | |
|---|---|
| Decreases: | |
| Management improvement and cost reduction in travel and transportation of persons | —$20,100 |
| Management improvement and cost reduction in printing and reproduction | —8,800 |

*Activity 3. Wages and industrial relations*

| | |
|---|---|
| 1968 (positions 321) | $3,504,400 |
| 1969 (positions 357) | 3,972,300 |

NARRATIVE DESCRIPTION OF PROGRAM

This program provides for the collection and analysis of basic data on wages, salaries, and supplementary benefits; changes in wages and related benefits, including the preparation of indexes and wage chronologies; employer expenditures for employees' compensation, including fringe benefits, and the composition of payroll hours.

Detailed analytical studies are made of the provisions of collective bargaining agreements and employee benefit plans, and a representative file of such agreements is maintained for public use. Reports are prepared on the structure, membership, and activities of American trade unions. Data on work stoppages are compiled.

*Wage studies*

Several types of studies of occupational wages and salaries are made for use in wage and salary administration and evaluation:

*Metropolitan area studies.*—Annual surveys of wages and salaries are made on a cross-industry basis in 185 metropolitan areas. Data are collected from 17,000 establishments—by personal visit to 14,000, by mail questionnaire to 3,000. These surveys provide straight-time earnings, work schedules and supplementary benefits information for about 70 work levels of office clerical, professional and technical, maintenance and power plant, and custodial and material movement occupations. These data are used in setting and adjusting pay rates for Federal blue-collar workers as well as for other governmental and private uses.

*Industry studies.*—These studies provide information on wage rates, work schedules and supplementary benefits for occupations peculiar to 50 individual manufacturing and 20 nonmanufacturing industries in selected regions or localities. Surveys are made by personal visit on a 5-year cycle.

*Professional, administrative, technical, and clerical salary studies.*—This annual survey, which is linked with the area wage surveys, provides information on salary levels and distributions in both metropolitan and nonmetropolitan areas for about 80 occupational work levels in 21 job categories. Data are collected from about 2,600 establishments by personal visit. The results of this survey, are used by the Federal Government in its administration of the Federal pay comparability principle prescribed by the Federal Pay Reform Act of 1962.

*Union wage scales.*—Annual surveys of 4,000 local unions yield data on wage scales and hours of work for selected crafts in four highly unionized industries (building construction, printing, local transit, local trucking) in 68 cities of 100,000 population or more. Quarterly data are collected from 700 local unions for seven building trades in 100 cities.

*Earnings distribution.*—Surveys are made to provide frequency distributions, on a non-occupational basis, of employee earnings and hours in major industry divisions.

*In fiscal year 1967*, the Bureau concentrated on the improvement of existing programs. For the Professional, Administrative, Technical, and Clerical Pay Survey, new job standards and descriptions were written for selected jobs and adjustments were made in survey specifications, in cooperation with representatives of the Civil Service Commission. Preliminary estimates of annual earnings of workers in eight industries were made from data obtained from the Social Security Administration.

*In fiscal year 1968*, the number of occupational pay surveys will be maintained. Recent increases in the sample size and amount of detail of some of these surveys will be absorbed through increased productivity.

*In fiscal year 1969*, the program will continue without substantial change.

*Compensation studies*

*Employer Compensation Expenditures and Payroll Hours.*—These studies provide measures of the level of expenditures for each element of compensation (leave, overtime, health and welfare, etc.), the trend in those levels, and comparisons between groups of employees, industries, areas, and differing characteristics of the employment situation. The data, collected primarily by personal interview, relate to about 60 manufacturing and nonmanufacturing industries.

*Employee Welfare and Benefit Plans.*—Reports are prepared periodically of the principal features of 150 major selected health and insurance plans and 150 pension plans. Analyses are made of developments in the field regarding pension plan coverage for older workers and adapting group health insurance to Medicare.

*In fiscal year 1967*, considerable progress was made in developing a system of reporting total compensation, including fringe benefits. Such data were collected for six manufacturing and five nonmanufacturing, industries, and the biennial cross-industry survey of calendar 1966 was begun. This survey covers, for the first time, all classes of employees in the nonfarm private economy.

Reports were completed on a decade of pension plan terminations, on health insurance benefits for laid-off workers, and on recent changes in major negotiated health and insurance plans. In addition, the Bureau's summary of 100 negotiated health and insurance plans was brought up to date.

*In fiscal year 1968*, the first full cycle of surveys under the new concept of employer expenditures for employee compensation was begun. As noted earlier, this plan calls for biennial cross-industry studies and studies of selected industries in the intervening years. Exploratory work will continue on techniques for developing annual earnings statistics.

Reports were completed on recent changes in the vesting provisions of private retirement plans, on terminations of deferred profit sharing plans, on the characteristics of new private pension plans and deferred profit sharing plans, and on the coverage of older workers by private retirement plans.

*In fiscal year 1969*, the program will continue without substantial change.

*Wage trend studies*

A monthly report on current wage developments lists and analyzes details of collective bargaining agreements affecting 1,000 or more workers. Quarterly and annual statistical summaries of wage changes in manufacturing are prepared, including nonunion and small union situations. In addition, national indexes of wage and salary changes are maintained for several important occupational groups. Chronologies covering about 40 key collective bargaining situations detail the history of change in the amount and characteristics of wages, benefits, and selected plant practices. This record is brought up to date at the beginning of each new contract term.

*In fiscal year 1967*, the Bureau initiated pilot surveys to test collection techniques in the construction, trade and finance, and service industries. For the first time, the Bureau made estimates of the "package" for all settlements affecting 5,000 or more workers. The semiannual survey of wage changes in manufacturing was changed to its previous quarterly basis in order to meet the needs of the Council of Economic Advisers for more timely information on wage pressures on the economy.

*In fiscal year 1968*, five wage chronoligies were published covering North American Aviation, the Boeing Company (Washington plants), Aluminum Company of America, American Viscose and Bituminous Coal Mines. Final reports appeared on wage developments in major collective bargaining situations and on wage developments in manufacturing in 1966.

*Industrial relations studies*

A file of approximately 5,000 collective bargaining agreements is maintained for public use; virtually all agreements covering 1,000 workers or more, excluding railroad and airlines, are included in the file. Annually, three to five reports are made, analyzing selected provisions and their prevalence in approximately 1,700 agreements covering about 7.5 million workers.

A directory of National and International Labor Unions in the United States is compiled biennially.

Monthly estimates and detailed annual analyses are provided for all work stoppages in the continental United States which affect 6 or more workers and last more than one shift. Included are the number of stoppages, workers involved, man-days involved, duration, and settlements. Industry studies and special analytical articles are also prepared.

*In fiscal year 1967*, recurring program activities continued at existing levels. In addition, preparations were begun for studies of employment-management relations in public employment, proposed for fiscal year 1969. Discussions on labor-management activities at the State and local level were held; collection of basic materials (Federal laws, executive orders, and administrative rulings dealing with union activities and collective bargaining for public employees) was begun.

*In fiscal year 1968*, the biennial union directory will be published. A pilot survey of the characteristics of State employee organizations is being undertaken. Four studies are being completed, each on a particular type of provision in collective bargaining contracts, namely, subcontracting, vacations and holidays, seniority, and wage determination. Each study will include data on the prevalence of the provision and give sample clauses.

*Changes for 1969*

| | |
|---|---|
| Mandatory changes amount to | +$148,200 |
| Program changes amount to | +$319,700 |
| Positions | 36 |

INCREASES

*Wage changes in nonmanufacturing industries*

PROPOSAL

To obtain and analyze information on general wage and benefit changes for nonsupervisory workers in nonunion and small unionized, nonmanufacturing establishments.

THE NEED

About three out of four workers in the United States are employed in nonmanufacturing industries. Yet our information on wage trends focuses almost exclusively on manufacturing and on organized workers. It is difficult to assess the significance of wage developments to the country's economic structure when information is lacking on changes in wages for most employees.

The limitations of providing data on wage changes in the United States for manufacturing only is evidenced by the fact that a significant part of the rise in the Consumer Price Index in recent years has come from the service industries where labor costs are a high proportion of total costs. For example, in hospitals, which employ about 1.3 million workers or a sixth of all workers in the service industries, wage changes in 1966 (according to a pilot survey) averaged 7.6 percent, compared with 3.3 percent in manufacturing. Hospitals face a critical problem of attracting competent workers and the American Nurses' Association, which is vitally concerned with both standards of pay for hospital employees and general standards of medical care, has pointed to the need for information on wage changes in this industry. Increasing hospital charges affect not only the costs of medicare but health insurance costs for many younger citizens. The President has directed the Bureau of Labor Statistics to keep track of such costs. Yet, under present circumstances, there are no resources available to the Bureau to gather and analyze data on wage changes, one of the major reasons for increases in hospital charges.

THE PROGRAM

The proposed semiannual sample survey would provide data comparable to those collected for manufacturing establishments. It would cover nonsupervisory workers, including white-collar workers, and provide the basic data for analysis of current wage changes in nonmanufacturing as a whole and for certain industry groups including hospitals.

Combined with the information already available on wage and benefits changes in manufacturing, these data would provide a comprehensive reporting system to government, business, and labor on general wage changes. The data would be used to evaluate the extent to which wage changes contribute to inflationary pressures on prices, the difference in movement of wages in union and nonunion situations, and problems of the availability of workers in lower paid occupations. The data would also permit a balanced analysis of patterns of wage changes for the economy as a whole and improved forecasts of future wage movements.

BASE

Positions: None. Estimated Cost: None.

ADDITIONAL COST

Positions: 21. Man-years: 18.9. Estimated Cost: $207,000.

BASIS FOR ESTIMATE

The initial survey will cover 9.000 establishments of which 8,700 will be contacted by mail questionnaire and 300 by personal visit by field representatives. The second survey will cover only that portion of the 9,000 establishments which grant increases during the six months after initiation of the survey. An average cost (based on previous experience) for mail collection, personal visit collection, and related costs was applied.

*Employment-management relations in Federal, State, and local governments*

PROPOSAL

To develop a continuing program of analytical studies of employee-mangement relations in Federal, State, and local governments, thus providing to employee organizations and to management in Government some of the Bureau services available to their counterparts in private industry.

THE NEED

As employment in the public sector has increased over the past decade to over 11 million persons, so has concern regarding ways and means of providing for an effective system of employee management relations. Stimulated by Executive Order 10988, issued in 1962, and by similar action by State and local governments, employee organizations have multiplied. However, some of the new organizations, inexperienced in the methods of bargaining, have demonstrated great impatience with existing procedures. As a result there have been a number of strikes and boycotts, extended and simultaneous sick leave actions, and difficulties in reaching amicable settlements.

The Bureau of Labor Statistics has been aware of these needs and has tried to keep abreast of the developments within the resources not fully committed to other programs. To date, the work has been only exploratory; the proposed program would provide a much more adequate foundation for decision making in public bargaining situations than now exists.

THE PROGRAM

The program would involve (1) development of an adequate file of agreements and related documents open for public inspection, (2) surveys providing information on characteristics of union and association organizations in the public service, and (3) a systematic series of studies of collective bargaining experiences, selected agreement provisions, and methods of dispute settlement. The initial studies would present a broad view of the status of employee-management relations at the different public service levels. These would be followed by more specialized studies.

The program would also include cross-industry and comprehensive studies of individual groups such as nurses, teachers, engineers, and policemen.

BASE

Positions: None. Estimated Cost: None.

ADDITIONAL COST

Positions: 15. Man-years: 13.5. Estimated Cost: $166.000.

BASIS FOR ESTIMATES

Staff will perform analyses based on an estimated 1,500 Federal contracts and 2,000 State contracts and at least several hundred State and municipal letters of understanding. Based on staff requirements for the conduct of similar studies, a minimum of 15 positions can be effectively utilized.

Decreases:

| | |
|---|---|
| Management improvement and cost reduction in travel and transportation of persons | —$40, 400 |
| Management improvement and cost reduction in painting and reproduction | —12, 900 |

*Activity 4. Productivity, technology, and growth*

| | |
|---|---|
| 1968 (positions, 96) | $1, 205, 100 |
| 1969 (positions, 96) | 1, 422, 100 |

NARRATIVE DESCRIPTION OF PROGRAM

This program provides for the preparation of productivity indexes and analysis of productivity trends for the private economy as a whole, separately for the agricultural, manufacturing, and nonmanufacturing sectors, and for

individual industries. Studies are made of automation and other technological changes within industries, as well as across industry lines. The displacement of workers resulting from the effects of technological change is analyzed. Up-to-date information is developed on labor requirements for selected types of construction.

The current program also provides for the preparation of projections of employment, output, and productivity of the U.S. economy to 1975 and 1980 based on alternative assumptions as to the rates and patterns of economic growth and technology.

*Productivity measures*

Measures of output per man-hour and unit labor cost are prepared for the total economy and for the major sectors: agriculture, nonagriculture, manufacturing, and nonmanufacturing. Data are analyzed for trends and for the effects of employment shifts among various sectors.

Productivity measures are also prepared for 33 different manufacturing and nonmanufacturing industries. For each of these series, indexes of output per man-hour and related data on output, employment, and man-hours are prepared and published on an annual basis.

In addition to the development of productivity indexes, the relation of these measures to other economic variables is analyzed. Studies cover such subjects as the relationship between productivity, wages, prices, labor and nonlabor costs of production. Special studies are also being conducted to relate industry productivity and employment, project industry productivity levels based on the experience of high productivity establishments, and analyze changes in investment, technology, energy and other factors affecting industry levels of productivity.

*In fiscal year 1967*, some preliminary work was done on evaluation of the problem of non-labor (capital) inputs. Productivity indexes were constructed for four additional industries. Of particular significance is the preparation, of a highly complex index of output per man-hour for the motor vehicle industry.

*In fiscal year 1968*, work began on a single index of productivity based on man-hours worked, for the private economy and nonfarm sectors.

Currently, two series of output per man-hour for the private economy and major sectors are being published, using two different sources of man-hour data. One series is based primarily on payroll (establishment) man-hour data approximating hours paid. The other is based on hours obtained from the labor force (household) survey approximating hours worked. The differences between the two series reflect statistical reporting as well as conceptual differences. A single index will take advantage of new and more comprehensive data on hours worked and constitute a major improvement.

*In fiscal year 1969*, the program will continue without substantial change.

*Construction labor requirements*

Studies of the labor requirements for various types of construction are conducted annually for one or two major types of construction (schools, hospitals, public housing, etc.). These studies provide information on on-site man-hours worked, by occupations, materials, and equipment used, and the off-site man-hours generated by consumption of materials.

*In fiscal year 1967*, a study of labor requirements in sewer construction was completed. Progress made toward the integration of construction labor requirements studies with the work of the Economic Growth project enables the Bureau to develop more comprehensive and detailed estimates of on-site and off-site jobs created by construction. These data are used in estimating manpower requirements arising from government expenditures for public works and other projects.

*In fiscal year 1968*, a study of construction labor requirements for schools will be published.

*In fiscal year 1969*, the program will continue without substantial change.

*Technological studies*

Four major types of technology studies are currently prepared: (1) A periodic survey of over 40 major industries providing summary information on technological prospects over the next 5–10 years and their economic and manpower implications; (2) Industry outlook studies which provide detailed information about technological developments in a specific major industry undergoing significant changes; (3) Technological innovation studies which provide detailed

information about the status, outlook, and impact of a major type of development such as computerization, instrumentation, and conveyorization that will affect broad sectors of the economy; (4) Case studies of adjustment to technological change which focus on problems of minimizing employee displacement and explore the results of job redesign and on-the-job training.

*In fiscal year 1967*, studies were completed on technological change in textiles and health services and on plant adjustment to technological change.

*In fiscal year 1968*, the Bureau expects to complete a study of the impact of computers in process industries; a report on technological trends in the railroad industry; case studies of manpower adjustments to technological change; and a report on economic aspects of automation.

*In fiscal year 1969*, the program will continue without substantial change.

*Economic growth*

The major objective of the Interagency Economic Growth Project (which involves the Department of Labor and Commerce and the Bureau of the Budget under the guidance of the Council of Economic Advisers) is to provide a more comprehensive and integrated framework than has previously been available for analyzing some of the implications of long-run economic growth for employment opportunities, as well as for other important economic problem areas. Projections and data from the Economic Growth Project are widely used by government agencies in planning manpower programs and by businessmen in developing economic and market forecasts for long term company planning.

*In fiscal year 1967*, special projections of Federal, State, and local government expenditures and employment were completed for the Presidential Task Force on Career Development of Government Employees. Special work was undertaken on estimating the volume of employment in each industry attributable to the Viet Nam build up.

*In fiscal year 1968*, the Bureau will complete 1980 projections of employment, output and productivity, for 80 industries, based on different assumptions about the level of unemployment and patterns of final demand. To meet increasing demands for information on manpower implications of goverment actions, work is being conducted on estimating for each industry the number of employees affected by exports and imports, defense spending, highway expenditures and other government programs.

*In fiscal year 1969*, the program will continue without substantial change.

*Changes for 1969*

| | |
|---|---|
| Mandatory changes amount to | +$222,700 |
| Program changes amount to | —$5,700 |
| Positions | None |
| Proposal: | |
| Management improvement and cost reduction in travel and transportation of persons | —$3,100 |
| Management improvement and cost reduction in printing and reproduction | —2,600 |

*Activity 5. Foreign labor and trade.*

| | |
|---|---|
| 1968 (positions, 41) | $453,100 |
| 1969 (positions, 41) | 471,500 |

NARRATIVE DESCRIPTION OF PROGRAM

This program provides for the collection, analysis and publication of statistics and other information on labor conditions in foreign countries. Special attention is given to foreign experience which may be of interest to the United States, such as methods of handling industrial disputes, the consequences of particular kinds of labor legislation, and methods of measuring employment and unemployment. The program also includes analysis and international comparisons of wages, levels of living, productivity, trade union activities and working conditions. Research is conducted on the impact of foreign trade on employment in the United States. In all of these areas, policy suport is provided on an ad hoc basis.

*Foreign labor research*

The research work on labor conditions in foreign countries includes the acquisition and maintenance of data from both foreign and domestic sources, the preparation of analytical studies, research memoranda, and a monthly publication, *Labor Developments Abroad*. This publication contains articles and statistical tables presenting data for one or more countries, U.S. Department of State indexes of living costs, abroad (annual October issue), and bibliographies on selected subjects.

*In fiscal year 1967*, material was provided for a reinstituted regular section in the *Monthly Labor Review*, entitled "Foreign Labor Briefs." A compendium, *Labor Digests on Countries in Africa*, was published, thus completing the first cycle of such publications for all major countries in the world.

*In fiscal year 1968*, a series of revised digests on labor conditions in a number of Asian countries will be published.

*In fiscal year 1969*, the program will continue without substantial change.

*International comparisons*

Research and comparative analysis are conducted on trends in unit labor cost and, where possible, the absolute level of labor cost per unit of output as well as per unit of labor input. Similar analysis is also done on unemployment, manpower policies, etc. Special attention is given to the comparison of manufacturing industries and industry groups in other industrial countries with those in the United States.

*In fiscal year 1967*, a major report, *Wages in Japan and the United States*, was published jointly by the governments of the two countries.

*In fiscal year 1968*, a comparative study of unit labor costs in the steel industry in the United States, France, Germany, and the United Kingdom is being published.

*In fiscal year 1969*, the progam will continue without substantial change.

*Foreign trade research*

Research is conducted on the impact of exports and imports on employment and other aspects of labor conditions in the United States. The research in this field is chiefly to support Department of Labor representatives and other U.S. agency representatives who are concerned with tariff and trade matters.

*In fiscal year 1967*, reports were completed on a series of import-sensitive industries for the use of U.S. representatives engaged in the Kennedy Round negotiations. Staff members also participated in several task forces and provided frequent policy support to the negotiations staff on specific products or industries being considered for tariff adjustment.

*In fiscal year 1968*, staff participation in task force and special studies is continuing. Considerable attention is being given to the textile industry area.

*In fiscal year 1969*, the progam will continue without substantial change.

*Changes for 1969*

| | |
|---|---|
| Mandatory changes amount to | +$21,200 |
| Program changes amount to | —$2,800 |
| Positions | None. |

PROPOSALS

| | |
|---|---|
| Management improvement and cost reduction in travel and transportation of persons | —$1,400 |
| Management improvement and cost reduction in printing and reproduction | —$1,400 |

*Activity 6. Program staff services*

| | |
|---|---|
| 1968 (positions 153) | $1,659,900 |
| 1969 (positions 153) | 1,708,600 |

NARRATIVE DESCRIPTION OF PROGRAM

This activity includes the following:

*Statistical standards*

Under this program Bureau policies are established for the maintenance of statistical standards and improvements of statistical methodology. Statistical aspects of all Bureau programs are reviewed and evaluated, with special attention to data collection forms, sample design, estimation procedures, and error calculations.

*Economic studies*

The Division of Economic Studies conducts programs which interpret current economic developments and provide special analyses of economic and social issues, such as the effect of defense programs on the economy, the problems and needs of a low-income housing market, and decentralization of jobs—putting them out of reach of the city-center poor. Special economic reports are prepared for the Commissioner, the Office of the Secretary and others.

*Program planning and evaluation*

This office initiates, stimulates, and evaluates Bureau programs, budgets, and special projects; develops long-range Bureau plans and programs; coordinates Bureau research and reports involving several program offices; and reviews, analyzes, and recommends actions on pending legislation or executive orders.

*Systems development*

This program develops and insures use of efficient data systems throughout the programs of the Bureau and promotes the standardization and interchangeability of numerical analysis concepts within the Bureau and among its cooperating agencies.

*Publication services and correspondence*

This program plans the publication programs of the Bureau; edits and approves all publications and releases; maintains a central Bureau inquiry service; and reviews official correspondence.

*Field administration*

Six regional offices are operated to supervise the field collection of statistical data and to provide needed information to local government officials, business, and the public.

*Changes for 1969*

| | |
|---|---|
| Mandatory changes amount to | +$71,700 |
| Program changes amount to | —23,000 |
| Positions | None |

PROPOSAL

| | |
|---|---|
| Management improvement and cost reduction in travel and transportation of persons | —$1,700 |
| Management improvement and cost reduction in printing and reproduction | —21,300 |

*Activity 7. Administration and management services*

| | |
|---|---|
| 1968 (positions, 26) | $2,388,600 |
| 1969 (positions, 26) | 2,443,800 |

NARRATIVE DESCRIPTION OF PROGRAM

This activity includes the following:

*Office of the Commissioner*

The over-all operation of the Bureau, including plans, program, and administration, is formulated and its implementation is directed by the Commissioner, the Deputy Commissioner, and their immediate staff. This Office provides substantive staff support to the Department and other organizations on economic matters, and represents the Bureau, Department, or the U.S. Government at conferences and other meetings of national or international significance.

*Chief Economist*

The Chief Economist provides leadership and policy direction to the Bureau's program of economic analysis, undertakes special studies of economic and social issues, and develops and manages a comprehensive system of program planning and evaluation activities.

*Chief Statistician*

The Chief Statistician provides leadership and policy direction in the use and development of statistical standards and improved statistical techniques and provides for the development and introduction of improved data systems.

*Field administration*

Central office: The Bureau's field administrative and operating activities are coordinated through this office.

*Management services*

Management planning, personnel coordination, fiscal operations, and service functions are directed by this office. It also has a function to ensure that the administration is responsive to changing Bureau demands, consistent with the highest possible efficiency and productivity. This Office conducts liaison and labor-management activities for the Bureau with the authorized bargaining unit.

*Changes for 1969*

| | |
|---|---|
| Mandatory changes amount to | +$57,200 |
| Financing changes amount to | +1,300 |
| Program changes amount to | −3,300 |
| Positions | None |

PROPOSAL

| | |
|---|---|
| Management improvement and cost reduction in travel and transportation of persons | −1,800 |
| Management improvement and cost reduction in printing and reproduction | −1,500 |

DISTRIBUTION OF FIELD STAFF

PERMANENT POSITIONS

| Regional offices | 1968 | | | 1969 | | |
|---|---|---|---|---|---|---|
| | Professional | Clerical | Total | Professional | Clerical | Total |
| Atlanta, Ga. | 35 | 25 | 60 | 38 | 25 | 63 |
| Boston, Mass. | 18 | 25 | 43 | 20 | 25 | 45 |
| Chicago, Ill. | 43 | 18 | 61 | 46 | 18 | 64 |
| Kansas City, Mo. | 22 | 11 | 33 | 24 | 12 | 36 |
| New York, N.Y. | 53 | 25 | 78 | 56 | 25 | 81 |
| San Francisco, Calif. | 32 | 16 | 48 | 34 | 16 | 50 |
| Total permanent | 203 | 120 | 323 | 218 | 121 | 339 |

INTERMITTENT EMPLOYMENT

| Regional offices | 1968 | 1969 |
|---|---|---|
| Atlanta, Ga. | 33 | 33 |
| Boston, Mass. | 17 | 17 |
| Chicago, Ill. | 47 | 47 |
| Kansas City, Mo. | 26 | 26 |
| New York, N.Y. | 43 | 43 |
| San Francisco, Calif. | 56 | 56 |
| Total intermittent | 222 | 222 |

EXPLANATION OF ESTIMATE BY OBJECT

*Personnel compensation, $13,398,700*

The estimate includes $12,818,900 for 1,478 permanent positions and 1,323 man-years of permanent full-time positions of which (a) $10,080,800 provides for 1,018 man-years of departmental employment, and (b) $2,738,100 for 305 man-years of field employment. The estimate also includes $344,600 for 74 man-years of temporary and intermittent employment; $180,000 for overtime, holiday and premium pay for nightwork; and $54,000 for one extra day of pay in 1969 (includes $2,800 due to program increases). The estimate provides for a mandatory increase of $369,500 for full year cost of pay increases effective in fiscal year 1968 (P.L. 90–206). The estimate also provides for a mandatory increase of $66,600 for the net additional cost of within-grade promotions effective on a part-year basis in 1968 and $88,600 for the net additional cost of within-grade promotions effective in 1969.

Included in the estimate are program increases amounting to $670,300 which will provide for 87 positions and 78 man-years of permanent full-time positions of which 64 are allocated to departmental employment and 14 to field employment.

*Personnel benefits, $996,030*

The estimate provides for a net increase of $95,300. An increase of $51,300 is attributable to new programs, $38,600 provides for mandatory increase for full year cost of pay increases effective in fiscal year 1968 (P.L. 90–206), $5,100 for additional cost of within-grade increases effective on a part-year basis in 1968, $6,600 to finance the cost of benefits due to within-grade promotions becoming effective in 1969 and $3,700 due to one extra day of pay in 1969.

A decrease of $10,000 is due to reduction in cost of contributions to the Federal Employees' Compensation Fund.

The estimate is based on approximately 7.5% of the amount provided for full-time personnel compensation costs. Employer's contribution under FICA is based on intermittent and temporary employment.

| | |
|---|---|
| Civil service retirement fund (computed at 6.5 percent of full-time personal services exclusive of employees subject to the Federal Insurance Contribution Act) | $824,900 |
| Employer's contribution under the Federal Insurance Contribution Act | 13,000 |
| Employee group life insurance | 66,300 |
| Employee health benefits | 77,100 |
| Incentive awards program | 10,000 |
| Employee injury compensation benefits | 4,730 |
| Total | 996,030 |

*Travel and transportation of persons, $706,700*

The estimate provides for per diem and transportation expenses for full-time employees and mileage for intermittent employees. Included in the estimate are program increases amounting to $30,500, offset by a decrease of $78,000 for a management improvement and cost reduction item.

| | 1968 | 1969 | Change |
|---|---|---|---|
| Number of travelers | 681 | 711 | +30 |
| Number of days traveled | 28,637 | 27,000 | −1,637 |
| Miles of intermittent travel | 564,444 | 558,844 | −5,600 |
| Per diem at $16 | $458,200 | $432,000 | −$26,200 |
| Transportation and other costs | 245,200 | 224,400 | −20,800 |
| Intermittent travel at 9 cents per mile | 50,800 | 50,300 | −500 |
| Total | 754,200 | 706,700 | −47,500 |

*Transportation of things, $20,000*

No increase is requested for 1969. The estimate, based on past experience, provides:

| | 1968 | 1969 | Change |
|---|---|---|---|
| Moving and drayage | $8,500 | $8,500 | ---------- |
| Shipment of supplies and materials | 10,700 | 10,700 | ---------- |
| G.S.A. motor truck rental | 800 | 800 | ---------- |
| Totals | 20,000 | 20,000 | ---------- |

*Rent, communications and utilities, $1,226,270*

The estimate provides an increase of $64,800 for new programs which includes $36,400 for space rental costs due to the net increase of 71 positions in the District of Columbia and 16 positions in the field offices. Also included is $5,500 for tabulating equipment rental, $3,700 for communication services and an increase of $19,200 in the Working Capital Fund for the new programs.

The total estimate provides for:

| | 1968 | 1969 | Change |
|---|---|---|---|
| Rental of office space | | $36,400 | +$36,400 |
| Rental of tabulating equipment | $470,170 | 475,670 | +5,500 |
| Telephone, teletype, and telegraph services | 42,900 | 46,600 | +3,700 |
| Federal telecommunications service | 48,000 | 48,000 | ---------- |
| Paid official mailings | 278,700 | 278,700 | ---------- |
| Working capital fund | 321,700 | 340,900 | +19,200 |
| Totals | 1,161,470 | 1,226,270 | +64,800 |

*Printing and reproduction, $655,800*

The estimate includes an increase of $23,500 for new programs, offset by a decrease of $72,000 for a management improvement and cost reduction item. The total estimate provides for:

| | 1968 | 1969 | Change |
|---|---|---|---|
| Bulletins | $79,100 | $67,100 | −$12,000 |
| Periodicals | 54,900 | 42,300 | −12,600 |
| Forms and schedules | 97,300 | 79,500 | −17,800 |
| Envelopes | 25,000 | 23,200 | −1,800 |
| Monthly Labor Review | 120,100 | 99,400 | −20,700 |
| Occupational Outlook Handbook | 30,000 | 30,000 | ---------- |
| Other | 6,700 | 5,500 | −1,200 |
| Working capital fund | 291,200 | 308,800 | +17,600 |
| Totals | 704,300 | 655,800 | −48,500 |

*Other services, $5,308,500*

The estimate includes an increase of $315,400 composed of $7,700 for program increases, mandatory increases of $211,400 to finance full year cost of pay increase effective in fiscal year 1968 (P.L. 90–206); $95,000 for payments to States for increased salary rates in connection with the cooperative employment statis-

tics and labor turnover statistics program; and an increase of $1,300 in Working Capital Fund, due to financing change. The total estimate provides for:

| | 1968 | 1969 | Change |
|---|---|---|---|
| Services of other agencies: | | | |
| Payments to the Bureau of the Census for collection and tabulations of data | $3,172,900 | $3,201,900 | +$29,000 |
| Special reports and tabulations from other Federal agencies in connection with the economic growth project | 129,300 | 204,300 | +75,000 |
| Payment to the Social Security Administration for annual earnings statistics | 5,200 | 5,200 | |
| Security investigations | 6,000 | 6,000 | |
| Other Bureau services | 40,600 | 40,600 | |
| Working capital fund | 184,000 | 200,400 | +16,400 |
| Total | 3,538,000 | 3,658,400 | +120,400 |
| Other services: | | | |
| Payments to cooperative States for employment and labor turnover statistics | 1,367,800 | 1,462,800 | +95,000 |
| Newspaper clipping services of work stoppages and strikes | 13,000 | 13,000 | |
| Special reports and tabulations in connection with the economic growth project | 7,900 | 107,900 | +100,000 |
| Miscellaneous special reports and tabulations | 14,900 | 14,900 | |
| Training employees | 30,000 | 30,000 | |
| Office machine repairs | 9,000 | 9,000 | |
| Maintenance and miscellaneous services | 12,500 | 12,500 | |
| Total | 1,455,100 | 1,650,100 | +195,000 |
| Total, other services | 4,993,100 | 5,308,500 | +315,400 |

*Supplies and materials, $190,300*

The estimate includes an increase of $11,600 created by new programs. The total estimate provides for:

| | 1968 | 1969 | Change |
|---|---|---|---|
| Supplies and materials | $22,600 | $24,400 | +$1,800 |
| Working capital fund | 156,100 | 165,900 | +9,800 |
| Total | 178,700 | 190,300 | +11,600 |

*Equipment, $166,700*

The estimate includes an increase of $46,300 to provide equipment needs for 87 new positions created by requested program increases. The total estimate provides for:

| | 1968 | 1969 | Change |
|---|---|---|---|
| Office furniture and machines | $59,400 | $105,300 | +$45,900 |
| Replacement and acquisition of machines | 20,000 | 20,000 | |
| Magnetic tape | 41,000 | 41,400 | +400 |
| Totals | 120,400 | 166,700 | +46,300 |

SUMMARY OF NEW POSITIONS

| | Number | Grade | Amount |
|---|---|---|---|
| **ACTIVITY 2—PRICES AND COST OF LIVING** | | | |
| International price competitiveness: | | | |
| Departmental: | | | |
| Economist | 2 | GS–14 | $31,682 |
| Senior price index or commodity specialist | 1 | GS–12 | 11,461 |
| Price index or commodity specialist | 1 | GS–11 | 9,657 |
| Do | 1 | GS–9 | 8,054 |
| Senior price index or commodity assistant | 2 | GS–7 | 13,468 |
| Clerk or stenographer | 5 | GS–5 | 27,825 |
| Total | 12 | | 102,147 |
| Industry sector indexes: | | | |
| Departmental: | | | |
| Economist | 1 | GS–15 | 18,404 |
| Do | 1 | GS–14 | 15,841 |
| Senior price index or commodity specialist | 3 | GS–13 | 40,521 |
| Do | 4 | GS–12 | 45,844 |
| Price index or commodity specialist | 5 | GS–11 | 48,285 |
| Do | 3 | GS–9 | 24,162 |
| Senior price index or commodity assistant | 6 | GS–7 | 40,404 |
| Clerk or stenographer | 4 | GS–5 | 22,260 |
| Do | 2 | GS–4 | 9,990 |
| Total | 29 | | 265,711 |
| Field: | | | |
| Price index or commodity specialist | 2 | GS–11 | 19,314 |
| Field representative | 2 | GS–9 | 16,108 |
| Do | 4 | GS–7 | 26,936 |
| Total | 8 | | 62,358 |
| Portion of data processing allocated to this program: | | | |
| Departmental: | | | |
| Digital computer programer | 1 | GS–9 | 8,054 |
| Card punch operator | 1 | GS–4 | 4,995 |
| Total departmental | 2 | | 13,049 |
| Total | 39 | | 341,118 |
| Total, prices and cost of living | 51 | | 443,265 |
| **ACTIVITY 3—WAGES AND INDUSTRIAL RELATIONS** | | | |
| Employee management relations in Federal, State, and local governments: | | | |
| Departmental: | | | |
| Labor economist | 1 | GS–14 | 15,841 |
| Senior wages and industrial relations specialist | 2 | GS–13 | 27,014 |
| Do | 2 | GS–12 | 22,922 |
| Wages and industrial relations specialist | 2 | GS–11 | 19,314 |
| Do | 4 | GS–9 | 32,216 |
| Clerk | 3 | GS–5 | 16,695 |
| Do | 1 | GS–4 | 4,995 |
| Total | 15 | | 138,997 |
| General wage changes in nonmanufacturing: | | | |
| Departmental: | | | |
| Senior wages and industrial relations specialist | 1 | GS–13 | 13,507 |
| Do | 1 | GS–12 | 11,461 |
| Statistician | 1 | GS–12 | 11,461 |
| Wages and industrial relations specialist | 1 | GS–11 | 9,657 |
| Do | 4 | GS–9 | 32,216 |
| Clerk | 1 | GS–5 | 5,565 |
| Do | 3 | GS–4 | 14,985 |
| Total | 12 | | 98,852 |
| Field: | | | |
| Field representative | 6 | GS–9 | 48,324 |
| Do | 1 | GS–7 | 6,734 |
| Clerk or stenographer | 1 | GS–3 | 4,466 |
| Total | 8 | | 59,524 |
| Portion of data processing allocated to this program: | | | |
| Departmental: Machine operator | 1 | GS–5 | 5,565 |
| Total | 21 | | 163,941 |
| Total, wages and industrial relations | 36 | | 302,938 |
| Grand total | 87 | | 746,203 |

PREPARED STATEMENT

Senator HILL. Mr. Ross.

Mr. Ross. Mr. Chairman, the Bureau has a prepared statement which I would like to enter into the record.

(The statement follows:)

The Bureau of Labor Statistics is the basic source of facts and figures on vital aspects of the American economy—consumer prices, wholesale prices, family budgets, wages and working conditions, collective bargaining practices, labor force, employment and unemployment, short-term and long-term occupational outlook, productivity, labor costs, industrial injuries and other topics. The output of the Bureau is frequently indispensable for decisions made by business, labor, consumer, legislative bodies and government officials.

The Bureau's budget for the current fiscal year is $20,985,000. For fiscal year 1969, we are requesting $22,669,000, an increase of $1,684,000. Of this increase, $928,000 is for mandatory and financing items and $756,000 represents improvements in programs.

Let me cite a few ways in which the Bureau's activities during the past year have contributed to knowledge in urgent and special areas.

We have begun to issue regularly employment and unemployment data for the 15 major metropolitan areas and the 9 largest cities within them. This is the first time these data have been made available.

A forthcoming study "Tomorrow's Manpower Needs" will furnish guides to States and localities to provide data that can help them plan their education and training programs.

A special analysis, "Social and Economic Conditions of Negroes in the United States," was prepared jointly with the Bureau of the Census and in response to a special request from the President.

A revised budget for a four-person city worker's family, living according to a moderate standard, was published for each of 39 metropolitan areas, and four regional classes of nonmetropolitan areas, and also for the United States urban average. Within the next few months, additional budgets based on a lower and a higher standard will be issued.

The program for improvement of the Consumer Price Index included reworking specifications of items to incorporate better quality attributes, introduction of improved procedures for the measurement of rent and food price changes, and exploration of better methods of measuring changes in hospital room rates and overall hospital costs.

The reference period for the Professional, Administrative, Technical, and Clerical Salary Survey was advanced in order to give Congress more nearly current data for their consideration of the Government pay scale. Professional, Administrative, Technical, and Clerical data were also provided to States for their wage administration work.

For the first time, quarterly series of output per man-hour and unit labor cost for the private economy and its major sectors were released. The Bureau was asked to furnish information by the Joint Economic Committee.

During the past year the 50th monograph on labor law and practice in foreign countries was completed. These studies used, for example, by American businessmen overseas, provide information on such subjects as wages, hours and other conditions of employment, social insurance, and labor management relations, as well as a description of the labor force and of social and cultural factors which affect manpower utilization.

A forthcoming study of the iron and steel industry will provide comparable data on unit labor costs in the United States, the United Kingdom, Germany, and France.

Our regional offices have been reorganized to provide greater capability for exploiting more efficiently and in greater scope the local and regional data which are collected by BLS. They are making greater efforts to get useful information on such subjects as employment and unemployment, family budgets, prices, wages, and vocational guidance into the hands of local users.

Now I should like to indicate four major areas where additional funds are requested for work we consider to be essential.

Information is urgently needed on prices in sectors of the economy that are covered inadequately or not at all. We have good data on price levels and trends at the consumer level but statistics of similar quality are lacking for many seg-

ments of the economy which contribute to the final product and its price. For example, there are no indexes for transportation, finance and insurance, or construction. We have no measures of prices paid by Federal, State, and local governments in their purchases of goods. Even in the purchase of materials by manufacturers, our price indexes are deficient since they reflect "list" prices rather than "transaction" prices actually paid. This is information that business, labor and government need to chart economic decisions for the future. ($410,000 and 39 positions)

A particularly large gap in our price data, and one which recent events have highlighted, concerns prices of U.S. products in foreign markets. How do prices of American products compare competitively with those of comparable foreign items? More information on the relative prices of U.S. and competing foreign countries is needed to evaluate the potential effects of the Kennedy Round and of the devaluation of the British pound. At the present time, only the scantiest of data are available on which to base any judgments on these issues. The funds requested would initiate an energetic program to develop the needed information. ($123,000 and 12 positions)

The other two new programs for which we are requesting funds are concerned with wages and industrial relations. At the present time, information on general wage and benefit changes is obtained and analyzed only for nonsupervisory workers in manufacturing. Almost no data exist on wage changes in nonmaufacturing establishments. Yet these establishments employ fully three quarters of all the workers in the United States.

How can we form a useful judgment on the significance of wage developments when information is lacking on changes in wages for most employees? For example, in hospitals which employ about 1.3 million workers or a sixth of all workers in the service industry, wage changes in 1966 (according to a one-time pilot survey) averaged 7.6 percent, compared with 3.3 percent in manufacturing. Funds are requested to gather and analyze wage changes for nonmanufacturing industries, comparable to those currently collected for manufacturing. ($207,000 and 21 positions)

Finally, the Bureau is requesting funds to develop an intensive program of studies and information concerned with employee-management relations in Federal, State, and local governments. This area of the economy has grown so rapidly that governments now employ almost 12 million persons, with over 9 million in State and local units. The rapid expansion of personnel and the heightened interest in collective representation has led increasingly to points of friction between unions and government managers. Numerous employee organizations have been developed to handle the burgeoning problems of relations with management, but inexperience on both sides and a lack of information on which decisions can be based often make it difficult to reach amicable agreements. The Bureau proposes to initiate a continuing program of analytical studies of employee organizations, collective bargaining agreements, and experience in setting disputes in the public sector. These studies would be similar to those currently available on industrial relations in the private sector which have found complete support among both union and management negotiators. ($166,000 and 15 positions.)

Mr. Ross. Mr. Chairman, I know you are very familiar with the work of the Bureau so I will make my remarks very short.

This is only my third opportunity to appear before you, but I do want to say how much I appreciate the unfailing courtesy and fairness that you have shown us.

Senator Hill. We are glad to have you here, sir.

Mr. Ross. Thank you.

Senator Hill. Your predecessor was before us for a good many years as I remember.

Mr. Ross. Yes, he was—Mr. Clague.

Senator Hill. Where is he now?

Mr. Ross. He is extremely active, so active it is hard to say where he might be today. He has been doing work for the city of New York. He has been teaching at various universities. He is writing a book on statistics.

I understand he is going to India for 3 months to help them with their statistical programs.

Senator HILL. He was with us for quite a few years, as I recall.

Mr. Ross. Yes, he was here almost 20 years.

Senator HILL. Well, we are glad to have you here, sir.

### NONMANDATORY INCREASES

Mr. Ross. Thank you.

The increase requested by the Bureau of Labor Statistics this year, aside from mandatory items, comes to $756,000.

There are four items, Mr. Chairman, three of them are very directly and importantly concerned with the problem of price inflation which you commented on when the Secretary was here.

### COLLECTION OF PRICE DATA

Senator HILL. Tell us about that.

Mr. Ross. The largest one is for a program to get price information on many sectors of the economy which are now not covered or not adequately.

For example, we don't have price indexes for transportation. You know how important that is. We don't have price indexes for construction or for finance or insurance.

We don't have any measures of the prices paid by the Federal Government and how much they are going up, or by State or local governments. Even where we do have price measures, the wholesale prices are generally based on the list prices rather than what the people are actually charged.

This is a request which the President, himself, has endorsed in the Economic Report, for $410,000 to get additional price information vitally needed by Government, business and labor.

### PRICE INFORMATION RESPECTING U.S. PRODUCTS IN FOREIGN MARKETS

The second request which has also been endorsed in the President's program, specifically in the Report of the Council of Economic Advisers, is for price indexes and price information respecting U.S. products in foreign markets.

We don't have any measures of this type. Of course, I need not say how important it is to measure whether we are doing better or worse in the world markets.

### WAGE DEVELOPMENTS IN NONMANUFACTURING INDUSTRIES

Mr. Chairman, the third program which is also very relevant to the inflation problem is to measure and keep up with wage developments in the nonmanufacturing industries.

We have very good wage information for manufacturing but, of course, right now about 75 percent of the economy is not manufacturing.

We think we ought to do as well, keeping up with what is going on in the wage field outside of manufacturing.

The fourth request, Mr. Chairman, is a small request to let us get started making studies of employee-management relations in the field of Federal, State, and local governments.

This would include fields such as teaching, hospitals, refuse collectors, State employees——

Senator HILL. You have not done that up to date, have you?

Mr. Ross. No, sir; our program has been just in the private sector.

The employee-management problems for Federal employees would also be included.

Government is now one of our biggest employers, and we really think we ought to cover employee-management relations there as well as in the private sector.

That is the summary of our request, Mr. Chairman.

Senator HILL. That is what you propose to do?

Mr. Ross. If we are permitted to, I think all those four items would be real contributions.

Senator HILL. I want to thank you very much for what you are doing and for the statement you have brought us here this morning.

Mr. Ross. Thank you, sir.

Senator HILL. We appreciate it very much.

## Bureau of International Labor Affairs

### Salaries and Expenses

**STATEMENT OF GEORGE L-P WEAVER, ASSISTANT SECRETARY FOR INTERNATIONAL AFFAIRS**

**ACCOMPANIED BY:**

**DARWIN M. BELL, DEPUTY ASSISTANT SECRETARY FOR INTERNATIONAL AFFAIRS**

**PAUL K. PASCHKE, DIRECTOR, DIVISION OF ADMINISTRATION AND MANAGEMENT**

**MRS. MYRTICE M. GOODWIN, BUDGET OFFICER, DIVISION OF ADMINISTRATION AND MANAGEMENT**

**RICHARD E. MILLER, DIRECTOR, OFFICE OF PROGRAM AND BUDGET REVIEW**

#### Appropriation Estimate

"Bureau of International Labor Affairs, Salaries and Expenses

"For expenses necessary for the conduct of international labor affairs, [$1,348,000] *$1,410,000.*"

AMOUNTS AVAILABLE FOR OBLIGATION

| | 1968 | 1969 |
|---|---|---|
| Appropriation or estimate | $1,348,000 | $1,410,000 |
| Amount reserved under H.J. Res. 888 (Public Law 90-218) | 38,000 | ---------- |
| Amount of reserve applied to increased pay costs | 38,000 | ---------- |
| Appropriation or estimate, revised | 1,348,000 | 1,410,000 |

OBLIGATIONS BY ACTIVITY

| Description | Appropriation revised, 1968 | | Estimate, 1969 | | 1969 change | |
|---|---|---|---|---|---|---|
| | Positions | Amount | Positions | Amount | Positions | Amount |
| 1. International organizations affairs | 11 | $147,200 | 11 | $151,400 | ---------- | +$4,200 |
| 2. Foreign labor policy development | 20 | 264,300 | 20 | 272,800 | ---------- | +8,500 |
| 3. Labor and manpower technical services | 8 | 129,700 | 10 | 159,300 | +2 | +29,600 |
| 4. Trade negotiations and economic policy development | 25 | 461,800 | 25 | 470,600 | ---------- | +8,800 |
| 5. Administration and management services | 27 | 345,000 | 27 | 355,900 | ---------- | +10,900 |
| Total obligations | 91 | 1,348,000 | 93 | 1,410,000 | +2 | +62,000 |

## OBLIGATIONS BY OBJECT

| | Appropriation revised, 1968 | Estimate, 1969 | 1969 change |
|---|---|---|---|
| Total number of permanent positions | 91 | 93 | +2 |
| Positions other than permanent | 2 | 2 | |
| Average number of all employees | 82 | 90 | +8 |
| 11 Personnel compensation | $997,700 | $1,061,000 | +$63,300 |
| 12 Personnel benefits | 75,000 | 80,500 | +5,500 |
| 13 Benefits for former personnel | 4,800 | 4,800 | |
| 21 Travel and transportation of persons | 44,100 | 40,100 | −4,000 |
| 22 Transportation of things | 100 | 100 | |
| 23 Rent, communications, and utilities | 32,300 | 31,700 | −600 |
| 24 Printing and reproduction | 20,100 | 17,400 | −2,700 |
| 25 Other services | 64,000 | 66,700 | +2,700 |
| Services of other agencies | 89,000 | 86,800 | −2,200 |
| 26 Supplies and materials | 18,000 | 17,200 | −800 |
| 31 Equipment | 2,900 | 3,700 | +800 |
| Total obligations | 1,348,000 | 1,410,000 | +62,000 |
| Working capital fund items included above | (75,400) | (75,700) | (+300) |

## SUMMARY OF CHANGES

| | Positions | Amount |
|---|---|---|
| 1968 enacted appropriation | 91 | $1,348,000 |
| Amount reserved under H.J. Res. 888 (Public Law 90-218) | | −(38,000) |
| Amount of reserve applied to increased pay costs | | (38,000) |
| 1968 appropriation, revised | 91 | 1,348,000 |
| 1969 estimate | 93 | 1,410,000 |
| Total change | +2 | +62,000 |
| Mandatory items (increases): | | |
| Net additional pay increase costs not completely funded in 1968 | | +45,000 |
| Net additional cost of within-grade promotions effective for part year in 1968 | | +1,900 |
| Net cost of within-grade promotions becoming effective in 1969 | | +2,300 |
| To provide for 1 extra day of pay in 1969 for current year staff | | +4,600 |
| Total, mandatory items | | +53,800 |
| Financing items: To provide for full cost of centralized services purchased from the working capital fund | | −4,000 |
| Program items: | | |
| Increases: To increase technical assistance to developing countries in creating and strengthening democratic labor and manpower institutions, techniques and standards | +2 | +23,800 |
| Decreases: | | |
| Nonrecurring equipment purchases | | −400 |
| Management improvement and cost reduction savings: | | |
| Security investigations | | −5,000 |
| Travel costs | | −4,000 |
| Federal Telecommunications Systems services | | −200 |
| Printing and reproduction costs | | −2,000 |
| Subtotal, decreases | | −11,600 |
| Subtotal, program items | +2 | +12,200 |
| Total change | +2 | +62,000 |

MANDATORY AND FINANCING CHANGES BY ACTIVITY

| Type of change | Activity 1 | | Activity 2 | | Activity 3 | | Activity 4 | | Activity 5 | | Total | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | Position | Amount | Position | Amount | Position | Amount | Position | Amount | Position | Amount | Position | Amount |
| Mandatory items: | | | | | | | | | | | | |
| Net additional pay increase costs | | $4,900 | | $8,800 | | $5,700 | | $13,700 | | $11,900 | | $45,000 |
| Net additional cost of within-grade promotions effective for part-year in 1968 | | 300 | | 500 | | 100 | | 400 | | 600 | | 1,900 |
| Net within-grade promotion costs initially effective in 1969 | | 400 | | 700 | | 100 | | 500 | | 600 | | 2,300 |
| To provide for 1 extra day of pay in 1969 for current year staff | | 600 | | 1,200 | | 500 | | 1,100 | | 1,200 | | 4,600 |
| Subtotal, mandatory items | | 6,200 | | 11,200 | | 6,400 | | 15,700 | | 14,300 | | 53,800 |
| Financing items: Cost of centralized services | | −500 | | −1,000 | | −500 | | −1,000 | | −1,000 | | −4,000 |
| Total | | 5,700 | | 10,200 | | 5,900 | | 14,700 | | 13,300 | | 49,800 |

*Mandatory and financing changes for 1969*

| | |
|---|---|
| Mandatory items: | |
| Increases: To provide for full-year cost of pay increases effective Oct. 8, 1967 and to provide full funding of part-year costs | $45,000 |
| *Within-grade promotion costs:* | |
| 1969 net additional cost of within-grade promotions effective for part year in 1968 | +5,900 |
| Personnel compensation | 5,692 |
| Deduct lapse | −192 |
| Personnel benefits | 400 |
| Net cost | 5,900 |
| Absorption of a portion of above increases | −4,000 |
| Adjusted net additional cost of within-grade promotions effective for part year in 1968 | 1,900 |
| Net cost of within-grade promotions becoming effective during 1969 | +7,400 |
| Personnel compensation | 7,173 |
| Deduct lapse | −273 |
| Personnel benefits | 500 |
| Net Cost | 7,400 |
| Absorption of a portion of above increases | −5,100 |
| Adjusted net cost of within-grade promotions becoming effective during 1969 | 2,300 |
| To provide for 1 extra day of pay in 1969 for current year staff | 4,600 |
| Total, mandatory items | 53,800 |
| *Financing Items:* | |
| Amount originally in base budget | 75,400 |
| Amount currently required in base budget | 71,400 |
| Changed financing required | −4,000 |

Changes in fees charged for centralized services (such as visual exhibits or reproduction) and changes in anticipated services rendered by the working capital fund require adjustments to the funds provided in the base budget.

## PROGRAM CHANGES BY ACTIVITY

| Object classification | Activity 1 | | Activity 2 | | Activity 3 | | Activity 4 | | Activity 5 | | Total | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | Position | Amount | Position | Amount | Position | Amount | Position | Amount | Position | Amount | Position | Amount |
| 11 Personnel compensation | | | | | 2 | 19,800 | | | | | 2 | 19,800 |
| 12 Personnel benefits | | | | | | 1,500 | | | | | | 1,500 |
| 21 Travel and transportation of persons | | | | | | | | −4,000 | | | | −4,000 |
| 23 Rent, communications and utilities | | | | | | 400 | | −100 | | −100 | | 200 |
| 24 Printing and reproduction | | −300 | | −300 | | | | −500 | | −800 | | −1,900 |
| 25 Other services | | −1,200 | | −1,400 | | 800 | | −900 | | −1,500 | | −4,200 |
| 31 Equipment | | | | | | 1,200 | | −400 | | | | 800 |
| Total | | −1,500 | | −1,700 | 2 | 23,700 | | −5,900 | | −2,400 | 2 | 12,200 |

*Activity 1. International organization affairs*

| | |
|---|---|
| 1968 (positions, 11) | $147,200 |
| 1969 (positions, 11) | 151,400 |

NARRATIVE DESCRIPTION OF PROGRAM

This program provides for a focal point within the Department of Labor for contributing the Department's resources in support of U.S. participation in the International Labor Organization, the United Nations and its family of organizations, the Organization for Economic Cooperation and Development, and other international organizations which have labor or human resources activities.

*International Labor Organization*

The International Labor Organization, founded in 1919, is a tripartite organization—Government, Workers, Employers—devoted to the improvement of working and living conditions of workers throughout the world. In 1967, there were 117 countries in the International Labor Organization. The International Labor Organization activities in setting standards, research and technical assistance aimed at improving the economic and social status of the workers provide a unique opportunity for U.S. tripartite influence on the human resources developments in other countries with particular stress on economic and political stability. Conversely, U.S. representatives are constantly on the search for new ideas in the international sphere that could materially contribute to the solution of domestic problems.

The Assistant Secretary of Labor for International Affairs is the U.S. Representative on the Governing Body of the International Labor Office and heads the U.S. delegation to the Annual Conference and other major meetings. Staff support for the Assistant Secretary is provided by the Bureau of International Labor Affairs under this activity. In addition, particularly since the International Labor Organization is tripartite in nature as is U.S. participation, the Department works with the American Federation of Labor and Congress of Industrial Organizations and the Chamber of Commerce of the United States, obtaining and taking into consideration the U.S. worker and employer views with respect to issues arising in the International Labor Organization and, as appropriate, issues arising in other international organizations.

*Other international organizations*

The Bureau, under this activity, provides staff support for U.S. participation, as it relates to manpower and labor issues, in the Organization for Economic Cooperation and Development, the regional Commissions of the United Nations, the United Nations Economic and Social Council, the Commission for Human Rights, the Commission for Social Development, the Commission on the Status of Women, the United Nations Statistical Commission, and Committees II (Economic) and III (Social) of the United Nations General Assembly.

Demands for technical information from the Department for the policy guidance of U.S. delegations to various meetings of the Organization for Economic Cooperation and Development and the United Nations and its specialized agencies are increasing as the activities of these organizations expand. These information requests relate to the field of human resources, labor and social affairs: discrimination, human rights, programs for the disadvantaged, manpower, youth, women's affairs, and levels of living. The demands by the developing countries to international organizations for assistance to industrialize has increased the workload involved for the Department of Labor in furnishing data concerning manpower, vocational training, and labor-institution building.

*Accomplishments and plans*

*In 1967,* there were ten important International Labor Organization meetings, and a number of lesser ones. The delegates to these meetings totaled 95, of which 47 were Government representatives, including State officials, 22 from the U.S. trade union movement, and 26 from U.S. employer organizations. A substantial proportion of these Government representatives was drawn from the Department of Labor. These meetings in total attendance time consumed approximately five man-years by all the U.S. participants.

For the meetings, some 150 position papers were prepared or their preparation supervised by the Bureau. These position papers are in effect U.S. Government instructions for the guidance of U.S. Delegations to International Labor Organization sponsored meetings. The position papers reflect the expertise of the De-

partment of Labor, and frequently they must also reflect the coordinated views of other interested Executive Departments and agencies, the U.S. employers and the U.S. workers. The papers express U.S. Government policies, practices and objectives, particularly in the labor and human resources fields.

In addition, a significant number of questionnaires, requests for documentation, and inquiries concerning law and practice in the U.S. as related to specified technical subjects were prepared for the International Labor Organization, which is developing a system of review and evaluation for improvement of its programs. In this respect, the multilateral technical assistance experience of the International Labor Organization in developing solutions to technical assistance problems may prove of benefit to the U.S. Agency for International Development's bilateral programs. The annual International Labor Organization expenditure in the technical assistance field is approximately $20,000,000. Its total on-going technical assistance programs currently approximate $200,000,000.

The Bureau also represented the Department at three major meetings of the Manpower and Social Affairs Committee of the Organization for Economic Cooperation and Development, while other areas of the Department supplied experts for technical meetings of the Organization. The Bureau supplied a member for the U.S. Delegation to the 41st Session of the United Nations Economic and Social Council, participating on discrimination issues. Representatives of the Bureau participated in a number of intradepartmental and interdepartmental meetings, where basic issues were discussed and policy formulated with respect to labor and human resources issues in other international meetings. For these activities essential position papers were prepared.

*In 1968*, during the second half of the fiscal year it is planned to prepare for, and to participate in four major meetings, including the General Conference and sessions of the Governing Body. In addition, there will be several meetings of experts called by the International Labor Organization to discuss such questions as Youth Services, Programming of Prevocational Training Schemes, and Statistical Wages and Employee Income. The Annual Conference of the International Labor Organization will consider agenda items covering agricultural workers and social security in which the U.S. has considerable interest. The Bureau will also be represented on the U.S. Delegation to the United Nations Commission on the Status of Women. Departmental experience and expertise will be supplied to the U.S. Delegations to the United Nations Commission for Social Development, Commission for Human Rights, the Industrial Development Board of the United Nations Industrial Development Organization, and the United Nations Economic and Social Council. There will also be several important meetings of the Manpower and Social Affairs Committee of the Organization for Economic Cooperation and Development requiring considerable preparation and relating to the integration of manpower policies in general economic policies.

Based upon the workload during the first half of 1968, it is quite apparent that the overall workload for the year will be every bit as heavy, if not heavier, than previous years. For example, there were a number of major International Labor Organization meetings, and one of the Manpower and Social Affairs Committee of the Organization for Economic Cooperation and Development. Work for the United Nations was heavy, particularly for Committee II (Economic) and Committee III (Social) of the General Assembly. The Department supplied the manpower specialist on the U.S. Delegation to the Industrial Symposium in Athens in November and December 1967, convened by the United Nations Industrial Development Organization.

*In 1969*, it is planned to continue in the same activities with no significant program changes. However, the program is constantly under review and evaluation to determine how to improve program management and effectiveness. These procedures have led to increased productivity in recent years. Efforts will continue to be made in this direction as well as in improving U.S. participation in international organizations in which the Department has some area of competence. Likewise, every effort will be made to increase over previous years the volume of international experience and developments which may be of use to the domestic programming of the Department.

*Changes for 1969*

| | |
|---|---|
| Mandatory changes amount to | +$6,200 |
| Financing changes amount to | —500 |
| Program changes amount to | —1,500 |

Mandatory changes provide for pay increase costs, within-grade promotions and for one extra day of pay in 1969.

Financing changes result from decreases in cost of centralized services from Working Capital Fund.

Program changes result from management improvement and cost reductions for printing and reproduction and security investigations.

BASIS FOR THE ESTIMATE

The workload of the Bureau is responsive to and controlled by demands placed upon the Department of Labor as a direct result of U.S. participation in international organizations and their expanding programs. This makes demands on the Department in several ways: attendance at international meetings, preparation for U.S. participation in these meetings, and responding to an unpredictable number of requests deriving directly from U.S. membership. These requests include research on U.S. domestic activities, information concerning domestic programs, and technical data.

Workload forecasts and staff requirements are largely predicated upon past experience, current demands, and positive indications of increasing demands. In the past decade, for example, the membership in the International Labor Organization has grown from 79 to 117, or an increase of 50 per cent. The United Nations as well as its member organizations have grown correspondingly. These increases in memberships have given rise to an increasing number of problems flowing from the questioning by the new member nations of the role and leadership by the developed countries in international organizations, the redirection and expansion of programs, and corresponding budgetary increases. U.S. participation in this expanded international activity contributes directly to the increasing workload.

A staff of 11 is the absolute minimum required for the program activity to fulfill the responsibilities assigned to the Bureau. For the past several years the present staff in this activity has coped with its increased workload by increasing productivity. Further productivity advances can only be marginal with existing personnel.

*Activity 2. Foreign labor policy development*

| | |
|---|---|
| 1968 (positions, 20) | $264,300 |
| 1969 (positions, 20) | 272,800 |

NARRATIVE DESCRIPTION OF PROGRAM

This activity is concerned with providing technical and policy guidance in the development and achievement of U.S. foreign policy goals as related to labor and manpower factors and with developing and executing action proposals for specific countries and geographic areas. Expertise is provided on the labor and manpower implications of political and economic developments abroad. Assistance is rendered in the Department's participation in the labor attache program of the Foreign Service. Substantive support is furnished for the participation by the United States in the specialized labor agencies of the Organization of American States.

*In 1967*, accomplishments were the analysis of labor and manpower problems and developments abroad and the rendering of advice to officials of the Department of Labor, the Department of State, and other foreign affairs agencies on the implications of such developments in terms of both domestic and foreign policy and program objectives. The proposals were initiated either for new approaches to the attainment of such objectives or as the result of evaluation of existing policies and programs.

Although this activity is carried out primarily on a geographic basis by area specialists, other specialists, on a global basis, followed and reported on developments in the international trade union field and furnished related policy and program advice. On a continuing basis, information was supplied to the U.S. trade union movement on specific activities or developments in the international labor movements and the International Trade Secretariats to assist policy determination or the execution of action programs of the U.S. labor movement in its relations with the international trade union bodies.

This activity provided a focal point in the Labor Department for contacts with U.S. labor attaches and other Foreign Service officers concerned with labor matters in U.S. overseas posts and made recommendations concerning the assign-

ments of such officers as well as the establishment of new posts. The activity collaborated with other offices of the Department in providing guidance, servicing, training, and evaluation of labor attaches. The following table shows the number of labor officers in our missions abroad assigned in each area:

| | |
|---|---|
| Africa | 9 |
| American Republics | 23 |
| East Asia and Pacific | 11 |
| Europe | 19 |
| Near East and South Asia | 7 |

*In 1968*, it is planned to continue the activities outlined above. Also, increasing emphasis will be given to obtaining and passing on to domestic labor and manpower program officials information on techniques and practices in other countries that might have applicability in solving U.S. domestic problems. For example, an inquiry was sent to selected foreign service posts regarding youth employment on behalf of the Department's Wage and Labor Standards Administration. U.S. officials are looking for more effective programs for coping with unemployment, school drop-outs, racial unrest, shortages of skilled labor, and industrial strife. Most foreign countries have also been plagued with these difficulties at one time or another to varying degrees. The area specialists provided in this activity will make special efforts to identify significant foreign labor developments that might help domestic policy makers.

*In 1969*, it is planned to continue the same programs as outlined for 1968.

*Changes for 1969*

| | |
|---|---|
| Mandatory changes amount to | +$11,200 |
| Financing changes amount to | −1,000 |
| Program changes amount to | −1,700 |

Mandatory changes provide for pay increase costs, within-grade promotions, and for one extra day of pay in 1969.

Financing changes result from decreases in cost of centralized services purchased from the Working Capital Fund.

Program changes result from management improvement and cost reduction savings in printing and reproduction, and in security investigations.

BASIS FOR THE ESTIMATE

The work under this activity is brought about primarily as the result of developments, domestic or foreign, which affect U.S. interests in the international labor and manpower field. Foreign developments are reported by U.S. officers overseas, primarily the Foreign Service labor attachés. Action thereon involving the Labor Department may be initiated by the State Department or other foreign affairs agency or by the Labor Department, depending on the nature of the problem. Domestic developments which have some relationship to the international scene are identified by domestic program officials and may require special attention or the obtaining of special information from overseas posts. The development or problem is analyzed and either a proposal for action is made or information is passed on to interested officials. Experience has proved that current staff provides no more than the minimum necessary for the activity. The workload has increased over a number of years, as relationships with other countries have multiplied and the staff has been reduced. This has been accomplished in large measure through increases in productivity of the staff.

*Activity 3. Labor and manpower technical services*

| | |
|---|---|
| 1968 (positions, 8) | $129,700 |
| 1969 (positions, 10) | 159,300 |

NARRATIVE DESCRIPTION OF PROGRAM

This activity provides for mobilizing and making available technical resources to support the overseas technical assistance programs of U.S. agencies, particularly the Agency for International Development and international organizations particularly the International Labor Organization.

The United States is seeking to assist developing countries to achieve sound economic development within the framework of democratic principles and institutions. An essential element in this process is the effective training and

utilization of a nation's human resources through the establishment and implementation of a positive manpower program and the stimulation of viable and effective Labor Ministries and related government-labor institutions.

Three inter-related tools are used in the international technical assistance activity:

1. The Department of Labor International Technical Assistance Corps program to supply American technicians for overseas technical assistance activities under either the Agency for International Development (bilateral) or the International Labor Organization (multilateral) auspices.

2. Technical training courses for foreign nationals through such devices as manpower seminars administered by our International Manpower Institute and similar formalized technical training programs.

3. Technical manuals and resource materials designed for use in less-developed countries in the development of manpower and government-labor institutions.

The eight positions now provided for this activity carry out the tasks of program development, executive direction, policy planning, and other services which cannot properly be charged to other agencies and which are necessary to assure effective Department of Labor controls and coordination.

During the two previous years, the demands from foreign affairs agencies upon the Department for technical assistance support, and the consequent workload, have increased significantly. During the previous year new emphases, particularly related to multilateral technical assistance activities of the international Labor Organization and other United Nations bodies, required additional work which cannot properly be charged to other agency budgets.

*In 1967*, through the Department of Labor International Technical Assistance Corps, 58 technical assistance assignments in 25 less-developed countries were handled. This represented more than double the total man-years of on-site technical assistance as compared with the previous fiscal year. None of the 1966 or 1967 were multilateral (International Labor Organization) assignments.

*In 1968*, it is anticipated that 80 technical assistance assignments will be handled including, for the first time, 4 under International Labor Organization auspices.

*In 1969*, it is anticipated that the total will increase and the number of assignments under the International Labor Organization auspices will rise.

*Changes for 1969*

| | |
|---|---|
| Mandatory changes amount to | +$6,400 |
| Financing changes amount to | −$500 |
| Program changes amount to | +$23,700 |
| Positions | +2 |

Mandatory changes provide for pay increase costs, within-grade promotions and for one extra day of pay in 1969.

Financing changes result from decreases in cost of centralized services purchased from the Working Capital Fund.

*Proposal:* Program changes provide for an increase of two positions.

*The Need:* The two positions (one professional, one secretarial) are requested to extend the Department of Labor International Technical Assistance Corps and other Department of Labor technical assistance resources to the International Labor Organization. They will assist particularly in facilitating the utilization of the Department of Labor International Technical Assistance Corps in the International Labor Organization and other multilateral international organization technical assistance projects. From the U.S. foreign policy standpoint, it is desirable that additional well-qualified American technicans be employed by the International Labor Organization in its technical assistance projects in less-developed countries. The International Labor Organization's current over-all technical assistance activity is approximately $200,000,000, including funds from all sources. Of the 670 technicians employed by the International Labor Organization at present in this operation. 21 are Americans.

In recent months, the International Labor Organization has evidenced interest in employing the Department of Labor International Technical Assistance Corps technicians and this will result in improving the imbalance between participation by Americans and the level of United States contributions, thus increasing U.S. influence among the largest possible number of technical assistance projects.

*The Program.*—The two new positions will provide essential staff resource particularly for strengthening U.S. participation in multilateral (particularly the International Labor Organization) technical assistance activities in less-developed countries. The utilization of the Department of Labor International Technical Assistance Corps by the International Labor Organization will involve considerable planning, negotiating, and staff work and the recruitment of qualified American personnel. For example, a high percentage of the International Labor Organization technical assistance posts call for apprenticeship and occupational-trades training technicians with specialized foreign language and technical qualifications. There have been relatively few requests for this type of technician by the Agency for International Development and, consequently, the Department of Labor International Technical Assistance Corps does not yet include many individuals with these particular qualifications. To satisfy, at least partially, the International Labor Organization and the U.S. objectives of providing more American participation in this type of the International Labor Organization assignment will, therefore, require effective positive recruitment efforts to supplement the Department of Labor International Technical Assistance Corps resources.

There is also a need to improve the coordination between bilateral (the Agency for International Development) and multilateral (the International Labor Organization) technical assistance activities in the labor and manpower fields and to stimulate effective direct ministry-to-ministry technical assistance relationships between the labor ministries of less-developed countries and the U.S. Department of Labor.

These activities in addition to requiring positive recruitment efforts will involve development of extensive briefing and technical support to better equip American technicians for the particular demands of the International Labor Organization or other international organization employment, and providing active liaison with those organizations to assure that the objective of increasing the use of American technicians is achieved properly.

BASIS FOR THE ESTIMATE

The staff resources requested for this activity directly relate to the Department-wide coordination of technical resources for two purposes. The first, mobilization of the technical assistance capabilities for overseas programs, and secondly, but of equal importance, assuring maximum input into domestic programs of overseas experience. The staff available for this two-way flow represent the minimum needs.

*Activity 4. Trade negotiations and economic policy development*

| | |
|---|---|
| 1968 (positions, 25) | $461,800 |
| 1969 (positions, 25) | 470,600 |

NARRATIVE DESCRIPTION OF PROGRAM

This program provides for the staff services required to enable the Secretary of Labor to fulfill the functions assigned to him under the Trade Expansion Act of 1962 and to determine the eligibility of groups of workers and firms to receive adjustment assistance under the Automotive Products Trade Act of 1965 and Executive Order 11254. It also provides the Departmental participation in the work of international trade organizations such as the General Agreement on Tariffs and Trade, the Organization for Economic Cooperation and Development, and the United Nations' Committee for Trade and Development. The Department's participation in the development of trade policy and trade negotiations is designed to assure that full consideration is given to issues involving domestic employment in the United States and other manpower problems and policies.

*Commodity and industry problems, textiles*

*In 1967*, accomplishments included extension of the Long-Term Cotton Textile Arrangement for an additional three years; active participation in the administration of the Arrangement in the United States; and the negotiation and maintenance of 22 bilateral arrangements, covering the trade in specific cotton textile and apparel products with individual countries. The Bureau provided the Departmental representation on the six-member Interagency Textile Administrative Committee responsible for administering the Long-Term Cotton Textile

Arrangement in the United States, and the Management-Labor Textile Advisory Committee which met with the Interagency Committee each month. The Long-Term Cotton Textile Arrangement is designed and administered to insure that employment opportunities for U. S. workers in the textile and apparel industry are not impaired by disruptive import competition.

*In 1968 and 1969*, it is planned to maintain the Long-Term Cotton Textile Arrangement to insure that excess of imports, either in total or for specific groups of commodities, do not disrupt U. S. markets. The various bilateral agreements, which will number over 30 by the end of the fiscal year 1968, will require constant surveillance and maintenance as new suppliers arise and negotiations are undertaken with them. An intensive study is currently under way to determine whether or not some form of import limitation should be applied to wool and man-made textile articles rather than be confined solely to cotton articles. The Department is making special studies of the labor force in the textile and apparel industry to assist in these determinations.

*Commodity and industry problems, except textiles*

*During 1967*, accomplishments included participation by the Bureau in a series of reviews of outstanding escape clause actions under the Trade Expansion Act following Tariff Commission reports on the economic effects of such action. The escape clause reviews involve extensive interagency deliberation and coordination. The Bureau represented the Department on staff interagency work related to all tariff and trade issues. In accordance with the Trade Expansion Act, the Secretary of Labor is required to render advice to the President before any change in a tariff rate including extension, modification, or termination of an escape clause rate can be made. In particular, the Department concentrated on the problems of the effects of proposed changes in tariffs on employment opportunities in the affected industries. In his determination to extend until January 1, 1970, the escape clause tariff rate for Wilton carpets and sheet glass, the President indicated that he was guided by the opinion of the Departments of Commerce and Labor. The Departments stated that the adjustment assistance provisions of the Trade Expansion Act were not at that time an adequate remedy for the dislocations which would result from terminating the escape clause. The President further appointed a task force of representatives of the Departments of Commerce and Labor and the Small Business Administration to work out long-term solutions to the problems of the industries, communities, and job dislocation involved.

*In 1968*, it is planned to develop a solution to the problem of increasing exports of logs from the Pacific Northwest to Japan with a consequent disruptive effect on workers in the smaller saw mills and plywood plants in the area. Negotiations with the Japanese are being undertaken to attempt to devise a program involving their purchase of more finished lumber, diversification of their purchases geographically and by species, and financial assistance in the cost of opening new logging territories. These programs will be designed, among other considerations, to improve employment opportunities in domestic sawmills and plywood plants and not decrease employment among the port and transportation workers. Work on problems of specific industries will also be greatly intensified. Currently, there are before the Congress a multitude of proposals to apply quotas or other restrictions against imports of products ranging from mink, steel, shoes, electronics, to glassware, etc. The actual and potential domestic employment impact of both increased imports and the effect on our exports of restricting imports are most important in consideration of the merits of each proposal. The Department of Labor is uniquely qualified to supply and evaluate such information. In the first six months of 1968, the Bureau staff and personnel from other agencies prepared analyses of 125–130 bills in response to requests from the House Ways and Means Committee and the Senate Finance Committee for Department views. Many of these bills required interagency coordination and deliberations. In 1968, the Department carried out a survey of the labor force in the dye and pigment segment of the chemical industry as a basis for evaluating the possible employment impact of eliminating the American Selling Price System of customs valuation for such products.

*In 1969*, it is planned to continue and expand our work on the problems of specific industries, many of which will carry over from 1968. For example, the proposed solutions to the problems of the carpet and glass industries must be submitted to the President early in the year. The volume of individual item trade and tariff bills on which the Department has commented has increased steadily

since the passage of the Trade Expansion Act in 1962 and there is no apparent reason to expect a significant decline in this type of activity in 1969.

*Adjustment assistance*

*In 1967*, accomplishments were determinations and payments of adjustment assistance authorized by the Automotive Products Trade Act of 1965. This Act implements an agreement between the United States and Canada for duty-free trade in selected automotive products and provides that firms or groups of workers who suffer dislocation as a result of the U.S.-Canadian Agreement may petition for a determination of their eligibility to apply for the adjustment assistance described in Title III of the Trade Expansion Act of 1962. The responsibility for these determinations is assigned to the Automotive Agreement Adjustment Assistance Board, chaired by the Secretary of Labor. The Department of Labor furnishes staff support and the Executive Secretariat necessary to the Board's operations in rendering decisions.

*In 1967 and 1968*, the Automotive Agreement Adjustment Assistance Board rendered decisions on 17 cases for relief filed by groups of workers. The Board issued certifications of eligibility covering approximately 2,500 individual workers, some 1,900 of whom actually filed for and were found eligible to receive assistance. Total benefit payments, including training allowances were approximately $3 million. (Payments include reimbursement to the States for unemployment insurance paid to these individuals.)

*In 1968*, it is also planned that the Automotive Agreement Adjustment Assistance Board will act upon at least another 5–10 petitions for assistance filed by groups of workers. It is not possible to forecast the number of individual workers who may be covered by such petitions.

No new petitions for adjustment assistance under the Automotive Products Trade Act may be filed after the end of Fiscal Year 1968. However, since the adjustment of the industry to duty-free treatment does not appear to have been completed, the Congress may be expected to receive requests for extension of the filing period. Regardless of the decision with respect to extension, cases filed up to June 30, 1968, will require determinations in Fiscal Year 1969, and earlier certification can result in payments of benefits through 1971. Terminations of certifications issued in earlier years will also require Board, and staff, activity in 1969. Terminations are made when the Board determines that the operation of the Agreement is no longer the primary factor causing layoffs of workers in a particular plant.

The standards of eligibility for adjustment assistance for firms and workers under the Trade Expansion Act of 1962 have proven too rigid for any petitions to be certified by the Tariff Commission. Proposed revisions in these standards were prepared in Fiscal Year 1967 and Fiscal Year 1968 and are expected to be submitted to the Congress in the second half of Fiscal Year 1968.

The Automotive Agreement between the United States and Canada calls for a major intergovernmental review during Fiscal Year 1968, including consideration of possible modifications. The Bureau represents the Department on the U.S. team and participates intensively, both because of the employment aspects of the Agreement and as the staff arm of the Automotive Agreement Adjustment Assistance Board.

*In 1969*, an appreciable increase in adjustment assistance activity is expected as the tariff reductions of the Kennedy Round come into effect. If the standards of eligibility are relaxed as proposed, the increase will be even more pronounced.

*Trade policy*

*In 1967*, the Kennedy Round of tariff negotiations were completed with the granting by the participating countries of tariff concessions covering about $40 billion in world trade. The Bureau of International Labor Affairs represented the Department throughout these negotiations, and extensive staff work and industry analyses were performed to assure that the potential employment effects of both increased exports and imports were given full consideration. The Bureau also supplies the permanent Department representation on the interagency committees, both staff and policy level, which constantly consider and reach decisions on a broad range of foreign trade and economic policy problems. In this period, the countries particularly concentrated on specific tariff questions raised in the process of the Kennedy Round negotiations.

*In 1968*, it is planned to concentrate on three major problems: (1) the trade relations between the developing countries and the developed nations, particularly the question of how to design and implement a meaningful system of

tariff preferences for the exports of the developing countries; (2) methods of gaining international acceptance for an enforceable program of fair labor standards for goods moving in international trade; (3) legislation to replace those portions of the Trade Expansion Act of 1962 which expire as of June 30, 1968, and to modify the American Selling Price System of customs valuation for a limited number of products.

The problem of relations with the developing nations centers around the major meeting of the United Nations' Committee on Trade and Development, scheduled to be held in the third quarter of 1968. Labor-directed issues are extremely important in this context since the exports of manufactured or semi-manufactured goods by the developing nations tend to be labor-intensive and, accordingly, potentially disruptive of U.S. employment. The adjustment assistance program is also directly related to the export drive of these countries in the sense that it offers U.S. firms and workers an alternative to import restrictions in those instances where developing nations' exports might disrupt a U.S. market.

The question of fair labor standards cuts across both developing and developed countries but will have particular focus in the United Nations" Committee on Trade and Development. The Bureau is expected to play a major role in attempting to convince the United Nations' Committee on Trade and Development participants that the appeal for the development of adequate labor standards and practices is based on objective consideration of the requirements of economic development and not primarily motivated by protectionism. The General Agreement on Tariffs and Trade and the International Labor Organization staffs have started an intensive evaluation of the possibility of utilizing existing International Labor Organization conventions as a basis for international fair labor standards.

Both the immediate problem of legislation to extend the expired tariff-reduction authority of the Trade Expansion Act of 1962 and a longer range study on U.S. trade policy faced the Administration at the start of Fiscal Year 1968. Legislation to extend the Long-Term Cotton Textile Arrangement will also include provisions to modify the standards of eligibility for trade adjustment assistance and provisions to eliminate the American Selling Price System of customs valuation. The changes in adjustment assistance standards, the impact of the proposed change in the valuation system on workers in the United States chemical industry, the labor impact of the tariff reductions negotiated in the Kennedy Round and any reductions possible under any new legislation are of direct interest to the Department. In 1968, interagency work was started on the major study of trade policy requested by the President.

In *1969* we expect that the problems of relations with the developing countries—and particularly the question of enforceable fair labor standards—will require extensive staff time and policy determinations. The President's major study of trade policy will also extend through the year.

*Changes for 1969*

| | |
|---|---|
| Mandatory changes amount to | +$15,700 |
| Financing changes amount to | —1,000 |
| Program changes amount to | —5,900 |

Mandatory changes provide for pay increase costs, within-grade promotions, and for one extra day of pay in 1969.

Financing changes result from decreases in cost of centralized services purchased from the Working Capital Fund.

Program changes result from management improvement and cost reduction savings in travel, rent and communications, printing and reproduction, and security investigations.

BASIS FOR THE ESTIMATE

The estimates are based on resources required for the development of recommendations with respect to foreign economic policy which affects domestic labor. They also encompass resources for the administration of the adjustment assistance and Long-Term Cotton Textile Arrangement programs. Staff resources and staff support must be provided for United States participation in international trade organizations and activities and for Departmental participation in interagency working groups or negotiating teams such as the Trade Staff Committee, Trade Executive Committee, Automotive Agreement Adjustment Assistance Board and Interagency Textile Administration Committee. The bulk of

the work of the staff is of a non-recurring specialized, and professional nature not amendable to workload analysis. However, enough petitions for adjustment assistance under the Automotive Act have been processed roughly to standardize man-hour costs. Each case, from original acceptance of the petition through the determination process and publication of the final report, requires approximately 4 man-weeks of professional analysis and 2–3 weeks of stenographic time. This does not include routine surveillance of outstanding certifications and necessary supervisory and overhead costs.

*Activity 5. Administration and management services*

| | |
|---|---|
| 1968 (positions, 27) | $345,000 |
| 1969 (positions, 27) | 355,900 |

NARRATIVE DESCRIPTION OF PROGRAM

This activity provides Department-wide policy guidance, coordination, and direction of all activities in international affairs. This involves the Department's participation jointly with the Department of State and others for management of the Foreign Service; servicing of labor officers overseas; internal management of the Bureau; Department-wide fiscal guidance and control in connection with international programs; and coordination and direction of analyses, planning, budgeting, execution, and review of Bureau programs under the Department's Management System.

*In 1967*, accomplishments included positive actions to provide for greater emphasis of Department-wide coordination of international programs for the benefit of the domestic programs of the Department. The Department's Management Committee at the Under Secretary and Assistant Secretary level provided the forum for this coordination. Areas of primary international concern, but also of concern in connection with domestic programs which have had attention and guidance of the Department's Management Committee include: (1) the Long Term Cotton Textile Arrangement, (2) adjustment assistance under the Automotive Products Trade Act of 1965, (3) the completion of the Kennedy Round with its implications for domestic employment opportunities, (4) the concern of the Department in connection with representation at the Organization for Economic Cooperation and Development, (5) the Department's participation in programs of bilateral and multilateral technical assistance, (6) participation with the Department of State and other agencies in administration of the Foreign Service, (7) utilization of excess foreign currency for conduct of Labor Attache Conferences overseas, and (8) interest of the Department in the benefit to domestic programs to be derived from continued participation in the activities of international organizations.

*In 1968*, it is planned to continue the utilization of the Department's Management Committee as the principal forum for coordination of international and domestic program activity. Continued consideration by the Committee of all international activities of the Department, against the background of domestic needs and programs in the labor and manpower areas, are expected to produce significant benefits.

Continued emphasis will be given in 1968 to management improvement and cost reduction. Possibilities for further savings in travel, communications, reproductions, and investigations are under study.

*In 1969*, it is planned to continue international activities on a Department-wide basis, but to continue review of program and administration for potential savings. Possibilities for centralization of functions, both program and administrative, will be examined.

*Changes for 1969*

| | |
|---|---|
| Mandatory changes amount to | +$14,300 |
| Financing changes amount to | −1,000 |
| Program changes amount to | −2,400 |

The program decreases result from management improvement and cost reduction savings for security investigations, reproductions, and communications.

BASIS FOR THE ESTIMATE

The estimates are based on resources required for Department-wide policy guidance, coordination and direction of international activities and for administrative and management support functions. The resources requested represent minimal requirements based on experience and interagency fiscal and program demands.

EXPLANATION OF ESTIMATE BY OBJECT

*Personnel compensation, $1,061,000*

This estimate provides for 93 positions and 89.6 man years of employment. This represents mandatory increases of $3,800 for within-grade promotion costs, $4,200 for one extra day of pay for current year staff, $35,500 for increased pay costs under P.L. 90–206, and a program increase of 2 positions and $19,800.

*Personnel benefits, $80,500*

This estimate is based upon 7.5 percent of net personnel compensation and reflects mandatory increases of $400 for within-grade promotion costs, $400 for one extra day of pay for current year staff, and $3,200 to meet increased pay costs under P.L. 90–206. It also provides for an increase of $1,500 for 2 new positions.

*Benefits for former personnel, $4,800*

This amount is required to provide personnel benefits for former employees currently serving with international organizations. The estimate covers the following items:

| | 1968 | 1969 | Change |
|---|---|---|---|
| Contributions to C.S.C. retirement fund | $3,800 | $3,800 | ---------- |
| Employees group life insurance | 400 | 400 | ---------- |
| Employees health benefits | 600 | 600 | ---------- |
| Total | 4,800 | 4,800 | ---------- |

*Travel and transportation of persons, $40,100*

This estimate provides for domestic and international travel of area or functional specialists, consultants, and experts; transportation of technical advisers; and a program decrease of $4,000 for MICR savings.

| | 1968 | 1969 | Change |
|---|---|---|---|
| Number of travelers | 46 | 46 | ---------- |
| Number of days traveled | 700 | 625 | 75 |
| Estimated cost | $44,100 | $40,100 | —$4,000 |

*Transportation of things, $100*

This estimate provides for shipment of household goods.

| | |
|---|---|
| 1968 | $100 |
| 1969 | 100 |
| Change | --- |

*Rent, communications and utilities, $31,700*

This estimate provides for the following items:

| | 1968 | 1969 | Change |
|---|---|---|---|
| Telephone rental | $3,600 | $3,600 | ---------- |
| Federal telecommunications systems services | 4,000 | 3,800 | —$200 |
| Teletype and telegrams | 2,600 | 2,600 | ---------- |
| Paid official mail | 1,600 | 1,600 | ---------- |
| Rents and utilities | 1,100 | 1,500 | +400 |
| Working capital fund | 19,400 | 18,600 | —800 |
| Estimated cost | 32,300 | 31,700 | —600 |

The reduction represents a decrease in Working Capital Fund financing of $800; management improvement and cost reduction saving of $200; and a program increase of $400 for two new positions.

*Printing and reproduction, $17,400*

This estimate provides for the following items:

| | 1968 | 1969 | Chqnge |
|---|---|---|---|
| Publications International Labor | $6,000 | $6,000 | ---------- |
| Miscellaneous printing (pamphlets, translated materials, etc.) | 2,400 | 500 | −$1,900 |
| Working capital fund | 11,700 | 10,900 | −800 |
| Estimated cost | 20,100 | 17,400 | −2,700 |

The reduction represents a decrease in Working Capital Fund financing of $800; management improvement and cost reduction savings of $2,000; and a program increase of $100 for two new positions.

*Other services, $153,500*

This estimate provides for the following items:

| | 1968 | 1969 | Change |
|---|---|---|---|
| Machine and miscellaneous repairs | $4,000 | $4,000 | ---------- |
| Training programs | 6,300 | 6,300 | ---------- |
| Building maintenance and alterations | 1,700 | 1,700 | ---------- |
| Miscellaneous machine tabulations | 25,000 | 25,000 | ---------- |
| Services of other agencies | 89,000 | 86,800 | −$2,200 |
| Working capital fund | 27,000 | 29,700 | +2,700 |
| Estimated cost | 153,000 | 153,500 | +500 |

The increase reflects a netting of the following items:

| | |
|---|---|
| Civil service investigations: | |
| MICR | −$5,000 |
| Program increase (2 positions) | +800 |
| Increased pay costs (other agencies) | +2,000 |
| Services of other agencies | −2,200 |
| Working capital fund: | |
| Decrease in current financing | −1,600 |
| Increase for pay costs | +4,300 |
| Total | +2,700 |

*Supplies and materials, $17,200*

This estimate provides for the following items:

| | 1968 | 1969 | Change |
|---|---|---|---|
| Subscriptions and miscellaneous supplies | $700 | $700 | ---------- |
| Working capital fund | 17,300 | 16,500 | −$800 |
| Estimated cost | 18,000 | 17,200 | −800 |

The reduction of $800 represents a decrease in Working Capital Fund financing.

*Equipment, $3,700*

| | |
|---|---|
| 1968 | $2,900 |
| 1969 | 3,700 |
| Change | +800 |

This estimate provides for an increase of $1,200 for two new positions and a decrease of $400 for nonrecurring equipment purchases.

SUMMARY OF NEW POSITIONS

| | Number | Grade | Amount |
|---|---|---|---|
| Activity 3—Departmental: | | | |
| Program development coordinator | 1 | GS–14 | $15,841 |
| Secretary | 1 | GS–6 | 6,137 |
| Total | 2 | | 21,978 |

PREPARED STATEMENT

Senator HILL. Now, Mr. Weaver, of the Bureau of International Labor Affairs.

Mr. WEAVER. Mr. Chairman, may I introduce Mr. Darwin Bell, who is the Deputy Assistant Secretary. He succeeded Mr. Weiss, who appeared before you many times. Mr. Weiss retired last year.

Senator HILL. We are glad to have him here.

Mr. WEAVER. Mr. Chairman, with your permission, I would like to submit our detailed statement for the record.

I would seek to summarize both requests for appropriations, one for the foreign currency and the other for our regular salaries and expenses.

Senator HILL. All right, sir.

(The statement follows:)

Mr Chairman, I welcome this opportunity to appear before you. Our estimate for 1969 is for $1,410,000 and 93 positions, an incerase of $62,000 and 2 positions over 1968. The $62,000 increase is primarily for mandatory items.

The 2 positions will improve the Department's capability for rendering technical assistance to the developing nations through multilateral channels and particularly the International Labor Organization. From the U.S. foreign policy viewpoint, I feel it to be urgent that the best qualified technicians the United States can provide be made available to the International Labor Organization. Funds from all sources for International Labor Organization technical assistance approximates $200,000,000 and of 670 technicians, at present only 21 are Americans.

This capability would both directly and indirectly serve the interests of the American people. Directly through increasing the number of U.S. technicians substantially above the current 21. Indirectly in the knowledge that the interests of the American people are best served when people throughout the world are gainfully and constructively employed in developing to their fullest potential the human and material resources at their disposal.

To accomplish these purposes all the Bureau's programs complement and reinforce each other. Human resource development and utilization is the essence of the Department of Labor's mission. Under the policy guidance of the State Department, our participation in international organizations such as the International Labor Organization, the Organization for Economic Cooperation and Development, the General Agreement on Tariffs and Trade, the United Nations Conference on Trade and Development, and various other United Nations organizations provide a forum to state and advance U.S. objectives with respect to the social and economic development of human resources. The programs of the Bureau of Intrenational Labor Affairs serve to assist other nations realize their resource potential through self-help. At the same time, we obtain the benefit of foreign experiences that may be relevant to our domestic programs. For example, each year the Organization for Economic Cooperation and Development reviews the economic development and policies of member countries. These are objective analyses by experts who give us and other countries the benefit of their thinking.

Our participation in the selection and training of foreign service personnel assures that our interests are represented overseas and improves the relevancy of reports. Our assistance in stimulating international interchange and training between trade union and labor ministry officials helps prepare the institutional framework for constructive relations at al levels in all areas—citizen to citizen: businessman to businessman; government to government—between the United States and foreign countries, particularly the developing countries who are preoccupied with nation building.

Ten years ago there were 79 members of the International Labor Organization; now there are 118. The United Nations Conference on Trade and Development did not exist nor did the United Nations Industrial Development Organization—both of these latter organizations in a real sense are creatures of the developing countries and are indications of the extent to which all countries rely on international cooperation, assistance, and communications to achieve national objectives.

We estimate that last Fiscal Year alone, five man years were expended in the U.S. participation at International Labor Organization meetings. We have the major responsibility for that participation and we expect the burdens on our small staff to increase commensurately with U.S. increasing involvement in the International Labor Organization and other international organizations in which the Department has an interest. We have a vital concern with labor standards for example, and we are using several international forums to take positive action. We have been successful in bringing this to the attention of the General Agreement on Tariffs and Trade; the International Labor Organization has always had a strong interest in this matter and at our urging is pursuing it more vigorously now; and we hope to have it discussed at the United Nations Conference on Trade and Development. Our ability to provide foreign governments with technical assistance to establish effective labor ministries and labor programs will further advance our objectives in the labor standards area. We have made somewhat more progress on this issue in the past year than previously, and I attribute this to the Department's increasing effectiveness in the international community.

This effectiveness is well illustrated by events in foreign economic policy and trade adjustment assistance. We come up here year after year and tell you about our responsibilities to advise the President on escape clause matters—and often times it is difficult to illustrate the substance of this work because no startling event occurs after an escape clause action—although this in itself is a measure of success. But recently, in October 1967, we advised the President that adjustment assistance as presently set forth in the Trade Expansion Act might not adequately handle the employment displacement that might materialize if certain escape clause tariffs were removed. On the basis of that advice, and the advice of other Executive Branch agencies, the President continued the tariffs on carpets and glass and established a Task Force to assist the industries and the communities in which they are located in taking the necessary steps required to avoid dislocating workers and firms when the tariffs will be lowered in 1970. We are working on that Task Force as is the Commerce Department and the Small Business Administration now, and we expect to involve considerable resources of the Bureau and the Department to insure a successful result.

As you know, we are deeply involved in another preventive program, the Long Term Cotton Textile Arrangement, which permits the regulation of trade in cotton textiles while safeguarding the interests of 2.4 million workers in textiles and apparel industries in the United States. We have agreements with 22 countries under this program and negotiation of the agreements themselves, or their administration, is going on constantly. The activity in the textile area will continue to increase as the Administration considers what measures are necessary to deal with possible disruption with regard to wool and man-made fiber products.

The adjustment assistance activities of the Bureau are expected to increase also as a result of the implementation of the Kennedy Round tariff cuts, proposed liberalization of the Trade Expansion Act eligibility criteria that workers must meet to gain access to adjustment assistance, and the possibility that the program authorized in connection with the Automotive Products Trade Act will be extended by Congress.

The Department, through the Bureau, is called upon by the Congress to comment on numerous special pieces of trade legislation. In addition, major legislative items—an important Trade Expansion Act package, review of the U.S.-

Canadian Auto Agreement—will be submitted to the Congress by the Administration. The Department is deeply involved in this legislation and will appear before the Congress to present the implications of these major items for labor and the economy. In connection with the American Selling Price proposal and in connection with the recent Congressional interest in textiles, the Department performed a thorough labor force analysis of the chemical and textile industries to provide the Administration and the Congress with a clear picture of the labor force involvement. Both of these studies were coordinated and supervised by the Bureau. This activity is becoming increasingly relevant and important as we realize the potential, as well as the limitations, of our abilities to help workers adjust to mass layoff situations.

Mr. Chairman, I hope I have been successful in conveying to you the substantive nature of the Bureau's work. I have dwelled on certain aspects of our programs to emphasize the direct connection that so-called international activities have to our domestic interests. All elements of our program are equally important to the welfare of the American worker and citizen.

Our technical assistance and trade activities, perhaps have more immediate measureable impact. Yet we must be aware that the millions of words we have exchanged in the past international forums have influenced the groundwork and efficacy of our trade and technical assistance policies. And the words we will exchange in the future similarly will provide the basis for effective programs involving international fair labor standards, orderly marketing arrangements for sensitive U.S. industries, and increased technical assistance in the labor and manpower area provided by U.S. technicians through international organizations.

Mr. Chairman, if you wish, I shall discuss our special foreign currency request now and later respond to questions which you and other Members of the Committee may have on both requests.

### BUDGET REQUEST AND NEW POSITIONS

Mr. Weaver. Mr. Chairman, our request for 1969 is for $1,410,000 and 93 positions. This represents an overall increase of two positions and $62,000.

Senator Hill. The $62,000 is the whole increase, is it not?

Mr. Weaver. Yes, sir. Although this increase is primarily for mandatory items, it also includes the program increase for the two positions which amounts to $23,800.

This is offset by decreases totaling $11,600. The two new positions we are requesting, sir, will permit improvement in the Department's capability for rendering assistance to developing nations, particularly through the International Labor Organization.

We urgently need to expand our representation and our technical assistance where Americans now number only 21 out of 670 technicians utilized by the ILO in the technical assistance work, and the resources available to the ILO technical assistance now approximates $200 million.

As you well know, Mr. Chairman, our programs in the Department in the international area are interrelated. Our efforts place strong emphasis in providing feedback for domestic program benefit.

### IMPACT OF FOREIGN ECONOMIC POLICY ON DOMESTIC ECONOMY

One area in which we are deeply involved has extensive impact on the domestic economy and this area concerns foreign economic policy with all of its implications on employment opportunities resulting from exports and the impact on the domestic employment opportunities resulting from tariff changes.

In the latter case, our efforts are directed to elimination of the adverse impact of tariff changes through utilization of programs of adjustment assistance.

Mr. Chairman, there are many other elements of our program activities which are important to the American working citizens which I could discuss should time permit, but I would be most pleased to respond to any questions that you may have.

## Appropriation Estimate

"Bureau of International Labor Affairs, Special Foreign Currency Program

"For payments in foreign currencies which the Treasury Department determines to be excess to the normal requirements of the United States, for necessary expenses of the Bureau of International Labor Affairs, as authorized by law, [$75,000] *$360,000*, to remain available until expended: *Provided*, That this appropriation shall be available, in addition to other appropriations to such agency for payments in the foregoing currencies."

U.S. DEPARTMENT OF LABOR, BUREAU OF INTERNATIONAL LABOR AFFAIRS
SPECIAL FOREIGN CURRENCY PROGRAM

| | Budget request | Budget estimate | House allowance | Senate allowance | Appropriation |
|---|---|---|---|---|---|
| 1967 | (1) | (1) | $75,000 | $75,000 | $75,000 |
| 1968 | $75,000 | $75,000 | 75,000 | 75,000 | 75,000 |
| 1969 | 1,340,000 | 360,000 | | | |

[1] Dollars were not estimated. All estimates were made in foreign currencies.

AMOUNTS AVAILABLE FOR OBLIGATION

| | 1968 | 1969 |
|---|---|---|
| Appropriation or estimate | $75,000 | $360,000 |
| Balance available from prior year | 42,614 | |
| Appropriation or estimate, revised | 117,614 | 360,000 |

OBLIGATIONS BY ACTIVITY

| Description | Appropriation revised, 1968 | | Estimate, 1969 | | 1969 change | |
|---|---|---|---|---|---|---|
| | Position | Amount | Positions | Amount | Positions | Amount |
| 1. Labor attaché conferences | | $117,614 | | $50,000 | | −$67,614 |
| 2. Overseas labor and manpower programs | | | | 310,000 | | +310,000 |
| Total obligations | | 117,614 | | 360,000 | | +242,386 |

OBLIGATIONS BY OBJECT

| | | Appropriation revised, 1968 | Estimate, 1969 | 1969 change |
|---|---|---|---|---|
| 21 | Travel and transportation of persons | $117,614 | $100,000 | −$17,614 |
| 25 | Services of other agencies | | 155,000 | +155,000 |
| 26 | Supplies and materials | | 1,000 | +1,000 |
| 31 | Equipment | | 19,000 | +19,000 |
| 41 | Grants, subsidies, and contributions | | 85,000 | +85,000 |
| | Total obligations | 117,614 | 360,000 | +242,386 |

SUMMARY OF CHANGES

| | Positions | Amount |
|---|---|---|
| 1968 appropriation | | $75,000 |
| Balance available from prior year | | 42,614 |
| 1968 appropriation, revised | | 117,614 |
| 1969 estimate | | 360,000 |
| Total change | | +242,386 |
| Mandatory items: | | |
| Decreases: Nonrecurring balance available from prior year | | −42,614 |
| Total, mandatory items | | −42,614 |
| Program items: | | |
| Increases: | | |
| To establish a program of overseas labor internships and scholarships which would provide international training opportunities in the labor field on a systematic basis | | +100,000 |
| To form closer associations between labor ministries of selected foreign countries and governmental labor agencies and institutions in the U.S. by sending more U.S. Government labor officials to these countries | | +25,000 |
| To provide for translation of U.S. and foreign labor publications, preparation of bibliographies and acquisition of technical books and periodicals to facilitate exchange of ideas in the development of international labor and manpower programs | | +100,000 |
| To conduct a program of research on labor and manpower in Poland and Yugoslavia | | +85,000 |
| Subtotal, increases | | +310,000 |
| Decreases: | | |
| To decrease estimated cost of regional labor attaché conferences | | −25,000 |
| Total, program items | | +285,000 |
| Total change | | +242,386 |

MANDATORY AND FINANCING CHANGES BY ACTIVITY

| Type of change | Activity 1 | | Activity 2 | | Total | |
|---|---|---|---|---|---|---|
| | Position | Amount | Position | Amount | Position | Amount |
| Mandatory items: Nonrecurring balance available from prior year | | −42,614 | | | | −42,614 |

Financing items ---------- None

*Mandatory and financing changes for 1969*

*Mandatory Items*

Decreases:

Nonrecurring balance available from prior year ---------- −$42,614

Total, mandatory items ---------- −$42,614

Financing items ---------- None

PROGRAM CHANGES BY ACTIVITY

| Object classification | | Activity No. 1 | | Activity No. 2 | | Total | |
|---|---|---|---|---|---|---|---|
| | | Positions | Amount | Positions | Amount | Positions | Amount |
| 21 | Travel and transportation of persons | | −25,000 | | +50,000 | | +25,000 |
| 25.2 | Services of other agencies | | | | +155,000 | | +155,000 |
| 26 | Supplies and materials | | | | +1,000 | | +1,000 |
| 31 | Equipment | | | | +19,000 | | +19,000 |
| 41 | Grants, subsidies and contributions | | | | +85,000 | | +85,000 |
| | Total | | −25,000 | | +310,000 | | +285,000 |

*Activity 1. Labor attaché conferences*

| | |
|---|---|
| 1968 | $117,614 |
| 1969 | 50,000 |

NARRATIVE DESCRIPTION OF PROGRAM

This activity provides for the convening of labor officer conferences overseas, either on a regional or on a sub-regional basis through the purchase of excess foreign currencies. These conferences provide overseas labor officers policy guidance in sensitive areas, a forum for discussion of regional problems, information on developments in domestic labor programs in the United States for their interpretation of these programs in the countries in which they are stationed, and an opportunity to orient the reporting of the labor attaches towards the needs of our domestic bureaus.

*In 1967*, the first regional labor officer conference under this special foreign currency appropriation was convened in New Delhi, India. Officers from 15 Near East and Asian posts, numbering 22, were present. The conference was headed by the Secretary of Labor. The limited number of countries that are in the excess currency category, coupled with other problems in these countries, primarily political in nature, delayed planning of additional conferences.

*For 1968*, the Departments of Labor and State are currently developing plans for two conferences. The basic decisions have been made for a European labor officer conference to be held in Tel Aviv in May 1968. The Departments of State and Labor consider Tel Aviv to be an appropriate location (excess currency country) for European-based labor officers since Poland and Yugoslavia are the only European excess currency countries. In addition, plans are well under way for a conference of regional labor officers stationed in Africa. This conference is tentatively scheduled for Tunis, also in the spring of 1968.

*Changes for 1969*

| | |
|---|---|
| Mandatory changes amount to | —$42,614 |
| Program changes amount to | —25,000 |

Program changes are based on the experience of the New Delhi conference and consider revised estimates for the European and African conferences. The estimate for regional conferences on a biannual basis indicates that only $50,000 for the purchase of excess foreign currencies would be required in Fiscal Year 1969. This represents a reduction of $25,000 from the amount appropriated for labor attaché conferences in Fiscal Year 1968. In the interest of orderly planning, funds from 1968 will be carried over into 1969. The 1969 appropriation would provide for two regional conferences: (1) Near East and South Asia, and (2) East Asia and Pacific.

BASIS FOR THE ESTIMATE

The estimate of $50,000 for two regional conferences in 1969 was derived from the anticipated number of participants from overseas and Washington and the per diem for the conference and round-trip travel for each to a South Asian country.

*Activity 2. Overseas labor and manpower programs*

| | |
|---|---|
| 1968 | None |
| 1969 | $310,000 |

NARRATIVE DESCRIPTION OF PROGRAM

This activity will permit initiation of the following programs through the purchase of excess foreign currencies: internships and scholarships abroad for U.S. nationals; interchange with foreign labor ministry officials; translations, bibliographies and acquisition of books and periodicals on labor and manpower problems; and research on labor and manpower in Poland and Yugoslavia.

*In 1967 and 1968*, excess foreign currency appropriations for overseas labor and manpower programs, other than for labor attaché conferences, have not been available to the Department of Labor.

*Changes for 1969*

| | |
|---|---|
| Mandatory changes amount to | None |
| Program changes amount to | +$310,000 |

*Labor Internships and Scholarships, $100,000*

*Proposal.*—The Department plans to initiate a program of labor internships and scholarships.

*The need.*—The available pool of international labor specialists from which the Foreign Service, the Department of Labor, the American labor movement, and universities can recruit staff to work on foreign labor and manpower programs is limited.

*The program.*—Through a systematic program of labor internships and scholarships, training and study opportunities overseas would be made available to younger American trade union officials, students, and teachers in labor economics and manpower areas. In excess currency countries such as Israel, India, Pakistan, and Ceylon, the scholarships could include area training at universities (e.g., the New Delhi School of Social Research in India), labor study at trade union institutes (for example, the Afro-Asian Institute for Trade Unions and Cooperation in Israel), or language training. Trade union candidates applying for internships would be rated competitively by an advisory panel composed of representatives of U.S. trade unions active in international affairs. We expect that candidates who have received specialized training and education in the international labor field will seek employment related to their specialization upon their return to the United States. Research topics on labor and manpower developments abroad would be an important by-product. It is estimated, a grant would average approximately $10,000 equivalent in excess foreign currencies.

*Labor Ministry Interchange, $25,000*

*Proposal.*—The Department plans to initiate a program of labor ministry interchange with selected foreign countries.

*The need.*—As United States labor agencies and foreign labor ministries are faced with mounting problems of a similar nature—unemployment and underemployment, shortages of skilled workers, racial unrest and strife—there is a need for closer associations and enduring international relationships between our respective labor agencies. A number of foreign labor ministry officials have visited the United States in the past under U.S. economic assistance or cultural exchange programs but few United States officials have visited their foreign counterparts.

*The program.*—Travel grants would be made available to enable labor experts from the United States federal, state, and local labor agencies and private institutions and organizations to visit their counterparts in selected excess currency countries. An opportunity would be provided also for United States officials to determine effectiveness of programs conducted in the United States for foreign nationals. Approximately 25 visits could be financed among India, Pakistan, Ceylon, Israel, Tunisia, Poland, Yugoslavia, Congo, and Guinea.

*Translations, Acquisition of Books and Periodicals, $100,000*

*Proposal.*—The Department plans to initiate a program of translating foreign language labor and manpower materials into English and vice versa to prepare bibliographies and to acquire foreign labor and manpower materials.

*The need.*—Consultations with the labor attachés overseas and domestic bureaus in the Department of Labor indicate that there is a backlog of some 20,000 pages of labor and manpower material which should be translated into English and made available for U.S. and international research purposes. For example, safety experts in our Bureau of Labor Standards have requested translation of over 3,000 pages of safety, health, and factory inspection publications issued in German, French, Italian, and other languages. At the same time, our labor attachés, AID missions, and foreign training participants have repeatedly requested more foreign language versions of U.S. labor and manpower publications. The United States Information Agency, the Agency for International Development, and the Department of State have only been able to arrange for the translation of a small fraction of this material.

*The program.*—Facilities for translating these materials exist in Israel (Western European languages), Tunisia (Arabic), Poland, Yugoslavia and India (Eastern European languages) which are excess currency countries. The equivalent of $90,000 in excess currencies would cover approximately 7,000 pages (5,000 into English and 2,000 from English) during the first year. We propose also to prepare annotated labor and manpower bibliographies in the excess currency countries—a sum of $5,000 is requested for preparation of the first bibliography.

In addition to translations and bibliographies, a sum of $5,000 is requested for acquiring English-language labor and manpower materials from such countries as India, Pakistan, Ceylon, and Israel.

*Labor and Manpower in Poland and Yugoslavia, $85,000*

*Proposal.*—The Department plans to initiate a program of research on labor conditions and manpower in Poland and Yugoslavia.

*The need.*—University centers of Eastern European Studies, the Departments of Labor and State, the United States Information Agency, other goverment agencies, business firms, and labor organizations have need to increase their knowledge on labor conditions in Eastern Europe. The changes developing in Eastern Europe, the technical assistance involvements of countries including Yugoslavia, their increasing independent involvement in international activities, require more detailed knowledge of their economic institutions and the direction of their development.

*The program.*—Inasmuch as Poland and Yugoslavia are excess currency countries, the Department of Labor proposes to conduct a program of research on labor in these two countries. The Department would prepare, or contract for the preparation of, seven monographs each on labor and manpower in Poland and Yugoslavia on the following topics: political, economic, and social factors affecting labor; manpower; wages, hours, prices, and the level of living; labor organizations; government and labor; social insurance; industrial relations. The cost of each of the 14 monographs would be the foreign currency equivalent of about $6,000.

*Explanation of estimate by object*

Travel and transportation of persons ..... $100,000

This estimate provides for international travel and related costs of recipients of labor internships and scholarships, U.S. Government labor officials visiting labor ministries of other countries, and other officials conducting research program in excess currency countries.

| | 1968 | 1969 | Change |
|---|---|---|---|
| Number of travelers | 134 | 113 | −21 |
| Number of days traveled | 1,471 | 1,247 | −224 |
| Estimated cost | $117,614 | $100,000 | −$17,614 |

Services of other agencies ..... $155,000

This estimate provides for the following items:

| | 1968 | 1969 | Change |
|---|---|---|---|
| Translations | | $80,000 | +$80,000 |
| Research | | 75,000 | +75,000 |
| Estimated cost | | 155,000 | +155,000 |

This estimate reflects program increases for translation of foreign labor publications and research on foreign labor and manpower problems.

Supplies and materials ..... $1,000

This estimate provides for the following items:

| | 1968 | 1969 | Change |
|---|---|---|---|
| Pamphlets and periodicals | | $1,000 | +$1,000 |

The estimate of $1,000 provides for the acquisition of technical periodicals in excess currency countries.

| | |
|---|---|
| Equipment | $19,000 |

This estimate provides for the purchase of technical books in excess currency countries.

| | |
|---|---|
| 1968 | ---- |
| 1969 | $19,000 |
| Change | +19,000 |
| Grants, subsidies, and contributions | 85,000 |

This estimate provides for grants for scholarships and internships in excess currency countries which would provide training in the field of international labor on a systematic basis.

| | |
|---|---|
| 1968 | ---- |
| 1969 | $85,000 |
| Change | +85,000 |

## Special Foreign Currency Program

Senator Hill. You have submitted your statement, have you not?

Mr. Weaver. Yes, sir; in detail.

Then we have the other request, sir, on the Special Foreign Currency Program.

Senator Hill. What about that now? We will insert your prepared statement in the record.

(The statement follows:)

Mr. Chairman, our estimate for Fiscal Year 1969 for this program is for $360,000 for the purchase of those foreign currencies which the Treasury Department determines to be excess to the normal requirements of the United States. This represents an increase of $242,386 over the revised appropriation for 1968 of $117,614. Last year, I reported on the success of the joint State and Labor Departments regional labor officer conference in New Delhi, India. Our plans are in process for two additional labor attache conferences involving labor officers in European and African posts.

For 1969, we have reduced our request for funds for labor officer conferences by $25,000. The $50.000 and the balance of unobligated funds in 1968 would provide for two conferences—one for Near East and South Asia and the other for East Asia and Pacific labor officers. The benefits to both the labor officers stationed overseas and to the State and Labor staff attending these conferences from Washington cannot be overemphasized. They provide opportunity to render policy guidance in sensitive areas, a forum for discussion of regional problems and information on developments in domestic programs in the United States.

Our estimate for 1969 proposes additional uses for excess foreign currencies overseas, totaling the equivalent of $310,000. In my prior statement on our regular request, I made reference to the essence of the Department's mission as being human resource development and utilization. I feel quite positive that this objective would be furthered through a series of programs financed through excess foreign currencies and that both our domestic and international programs would benefit.

I would like to briefly comment on each of four proposals. We have a real need to provide a pool of labor specialists from which the Foreign Service, the Department of Labor, the American labor movement, and universities can recruit staff to work on foreign labor and manpower programs. Our estimate would provide the equivalent of $100,000 for internships and scholarships abroad.

A significant number of foreign labor ministry officials have come to the United States in the past. Labor officials from U.S. federal, state, and local agencies and private institutions, through personal observations overseas, could assure closer associations, improve relationships, and provide opportunity for mutually beneficial exchanges. For the equivalent of $25,000, 25 visits to excess currency countries could be financed.

A third area concerns translations and acquisition of books and periodicals. Labor and manpower materials could be translated into English for U.S. and international research, and U.S. materials could be translated into foreign languages. Both the demand for and the benefit to be derived from U.S. publications translated for use overseas is incalculable. Our estimate would provide $100,000 for translations and book purchases.

The last area concerns Yugoslavia and Poland, both excess currency countries. The need for additional information about the changes occurring in Eastern Europe can partially be met through labor and manpower studies. The changes taking place in Eastern Europe and the increasingly independent involvement of some countries in international activities point up the desirability for more knowledge of their institutions and direction of their development. Monographs can be produced on such topics as social insurance; industrial relations; wage hour and price data; manpower; labor organizations; government and labor; and

the political, economic, and social factors affecting labor. Our estimate would provide the equivalent of $85,000 for 14 monographs.

Mr. Chairman, this concludes my presentation, and I would be most pleased to respond to any questions which you or other members of the Committee have.

BUDGET REQUEST

Mr. WEAVER. For fiscal year 1969, our request for the purchase of foreign currencies that are determined to be excess to the normal requirements of the United States is in the amount of $360,000.

This is an increase of $242,386 over the revised appropriation for 1968 of $117,614.

Our request for 1969 for regional labor officer conferences overseas has been reduced to $50,000 for 1969.

Senator HILL. Reduced $50,000?

Mr. WEAVER. Reduced from $75,000 to $50,000. This will provide for two regional conferences.

Our request for 1969 also proposes four additional uses for excess foreign currencies totaling the equivalent of $310,000.

Four additional areas are concerned. First, improving the pool of younger international labor specialists available both to Government and non-Government organizations. The second would provide for travel of labor experts from the United States from Federal, State, and local labor agencies to visit and work with their counterparts in excess currency countries.

RESEARCH ON LABOR AND MANPOWER CONDITIONS IN POLAND AND YUGOSLAVIA

The third program would provide for translation of foreign language labor and manpower materials into English and the last one, sir, would be to initiate a program of research on labor conditions and manpower in Poland and Yugoslavia, two countries where we have excess currencies.

Senator HILL. Why did you name those two countries?

Mr. WEAVER. Because we have excess currencies in those two countries.

We feel those programs represent a real benefit to the U.S. and particularly since they would be funded through the use of excess foreign currencies and would not represent any dollar outflow.

Senator HILL. It would mean no dollar outflow, would it?

Mr. WEAVER. No, sir, there would not be any dollar outflow.

This concludes my summary. I will be pleased to answer any questions on either of these two presentations.

Senator HILL. Anything you gentlemen would like to add?

Mr. BELL. No, sir. It is a pleasure to be here for the first time. I hope I can remain as long and as pleasantly as you have, sir.

Senator HILL. Thank you.

Is there anything you other gentlemen would like to add?

Mr. WEAVER. Mr. Chairman, I would like to express my pleasure and appreciation for the opportunity to work with you during the last several years.

We have found you to be most helpful. The encouragement you have offered through your help and cooperation has meant a lot to our Bureau as well as to the Department.

Senator HILL. Thank you, sir. I was pleased to work with you.

Thank you very, very much.

## Office of the Solicitor

**STATEMENT OF CHARLES DONAHUE, SOLICITOR**
**ACCOMPANIED BY:**
**J. J. LAFRANCHISE, ADMINISTRATIVE OFFICER**
**GEORGE M. UBER, BUDGET ANALYST**
**RICHARD E. MILLER, DIRECTOR, OFFICE OF PROGRAM AND BUDGET REVIEW**

### Appropriation Estimate

"Office of the Solicitor, Salaries and Expenses

"For expenses necessary for the Office of the Solicitor, [$5,741,000] *$6,226,000*, together with not to exceed $144,000 to be derived from the Employment Security Administration account, Unemployment Trust Fund."

AMOUNTS AVAILABLE FOR OBLIGATION

| | 1968 | 1969 |
|---|---|---|
| Appropriation or estimate | $5,885,000 | $6,370,000 |
| Amount reserved under H.J. Res. 888 (Public Law 90-218) | −166,000 | |
| Amount of reserve applied to increased pay costs | 166,000 | |
| Proposed transfer from "Office of Manpower Administrator, salaries and expenses" for pay increases (Public Law 90-206 effective Oct. 8, 1967) | 18,000 | |
| Nonrecurring rental costs transferred to GSA | −145 | |
| Appropriation or estimate, revised | 5,902,855 | 6,370,000 |

OBLIGATION BY ACTIVITY

| Description | Appropriation revised, 1968 | | Estimate, 1969 | | 1969 change | |
|---|---|---|---|---|---|---|
| | Position | Amount | Position | Amount | Position | Amount |
| 1. (a) Litigation | 44 | $582,600 | 46 | $633,600 | +2 | +$51,000 |
| (b) Interpretations and opinions | 59 | 740,400 | 61 | 801,300 | +2 | +60,900 |
| (c) Wage determinations | 91 | 906,500 | 91 | 948,400 | | +41,900 |
| (d) Legislation | 39 | 552,200 | 39 | 581,500 | | +29,300 |
| (e) Labor-management laws | 32 | 366,700 | 32 | 389,400 | | +22,700 |
| 2. Field legal services | 188 | 2,330,055 | 198 | 2,562,700 | +10 | +232,645 |
| 3. Administration and management services | 37 | 424,400 | 37 | 453,100 | | +28,700 |
| Total obligations | 490 | 5,902,855 | 504 | 6,370,000 | +14 | +467,154 |

## OBLIGATIONS BY OBJECT

| | Appropriation revised, 1968 | Estimate, 1969 | 1969 change |
|---|---|---|---|
| Total number of permanent positions | 490 | 504 | +14 |
| Positions other than permanent | 10 | 10 | |
| Average number of all employees | 465 | 475 | +10 |
| 11 Personnel compensation | $4,793,266 | $5,184,359 | +$391,093 |
| 12 Personnel benefits | 364,926 | 404,933 | +40,007 |
| 21 Travel and transportation of persons | 163,500 | 153,700 | −9,800 |
| 22 Transportation of things | 10,174 | 10,174 | |
| 23 Rent, communications, and utilities | 161,337 | 186,102 | +24,765 |
| 24 Printing and reproduction | 121,858 | 114,498 | −7,360 |
| 25 Other services | 124,048 | 140,868 | +16,820 |
| Services of other agencies | 20,000 | 20,000 | |
| 26 Supplies | 117,972 | 129,292 | +11,320 |
| 31 Equipment | 25,774 | 26,074 | +300 |
| Total obligations | 5,902,855 | 6,370,000 | 467,145 |
| Working capital fund items included above | (300,700) | (335,650) | (+34,950) |

## SUMMARY OF CHANGES

| | Appropriation | | Trust fund | | Total available | |
|---|---|---|---|---|---|---|
| | Position | Amount | Position | Amount | Position | Amount |
| 1968 enacted appropriation | 490 | $5,741,000 | | $144,000 | 490 | $5,885,000 |
| Amount reserved under H.J. Res. 888 (Public Law 90-218) | | −166,000 | | | | −166,000 |
| Amount of reserve applied to increase pay costs | | 166,000 | | | | 166,000 |
| Proposed transfer from "Office of Manpower Administrator" for pay increases (Public Law 90-206 effective Oct. 8, 1967) | | 18,000 | | | | 18,000 |
| Nonrecurring rental costs transferred to GSA | | −145 | | | | −145 |
| 1968 appropriation, revised | 490 | 5,758,855 | | 144,000 | 490 | 5,902,855 |
| 1969 estimate | 504 | 6,226,000 | | 144,000 | 504 | 6,370,000 |
| Total change | +14 | +467,145 | | | +14 | +467,145 |
| Mandatory items (increases): | | | | | | |
| Net additional pay increase costs not completely funded in 1968 | | | | | | +211,275 |
| Net additional cost of within-grade promotions effective for part year in 1968 | | | | | | +23,252 |
| Net cost of within-grade promotions becoming effective in 1969 | | | | | | +30,608 |
| 1969 net cost of promotions to be granted under a career-ladder promotion plan | | | | | | +13,844 |
| Net additional rental cost for space acquired in 1968 for only a portion of the year | | | | | | +10,845 |
| To provide for a net increase in contributions to the Federal employees' compensation fund | | | | | | +4,702 |
| To provide for 1 extra day of pay in 1969 for current year staff | | | | | | +20,619 |
| Total, mandatory items | | | | | | +315,145 |
| Financing items: To provide for full cost of centralized services purchased from the Working Capital Fund | | | | | | +27,900 |
| Program items (increases): To provide for the administration of the Fair Labor Standards Act Amendments of 1966 ($133,900 personal services, $21,300 nonlabor) (total) | | | | | +14 | +155,200 |
| Decreases: | | | | | | |
| Nonrecurring equipment costs for new positions in 1968 | | | | | | −1,100 |
| Management improvement and cost reduction savings from travel ($17,000) and printing ($13,000) | | | | | | −30,000 |
| Subtotal, decreases | | | | | | −31,100 |
| Total, program items | | | | | | +124,100 |
| Total change | | | | | +14 | +467,145 |

## MANDATORY AND FINANCING CHANGES BY ACTIVITY

| Type of change | Activity 1(a) | | Activity 1(b) | | Activity 1(c) | | Activity 1(d) | | Activity 1(e) | | Activity 2 | | Activity 3 | | Total | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | Positions | Amount | Positions | Amount | Positions | Amount | Positions | Amount | Positions | Amount | Positions | Amount | Positions | Amount | Positions | Amount |
| Mandatory items: | | | | | | | | | | | | | | | | |
| Net additional pay increase costs | | +$22,385 | | +$26,991 | | +$28,564 | | +$20,705 | | +$13,576 | | +$83,301 | | +$15,753 | | +$211,275 |
| Net additional cost of within-grade promotions effective for part year in 1968 | | +2,367 | | +2,736 | | +2,313 | | +3,410 | | +1,757 | | +8,764 | | +1,905 | | +23,252 |
| Net within-grade promotion costs initially effective in 1969 | | +2,566 | | +3,065 | | +5,066 | | +2,602 | | +2,418 | | +13,126 | | +1,765 | | +30,608 |
| Contributions to FEC fund | | | | | | | | | | | | | | +4,702 | | +4,702 |
| Net cost of career-ladder promotions effective in 1967 | | +953 | | +2,684 | | +3,200 | | +803 | | +1,626 | | +4,578 | | | | +13,844 |
| Nonrecurring extra day of pay for current year staff | | +2,119 | | +2,584 | | +2,837 | | +2,020 | | +1,363 | | +8,231 | | +1,465 | | +20,619 |
| Net additional rental cost for space acquired in 1968 for only a portion of the year | | | | | | | | | | | | +10,845 | | | | +10,845 |
| Subtotal, mandatory items | | +30,390 | | +38,060 | | +41,980 | | +29,540 | | +20,740 | | +128,845 | | +25,590 | | +315,145 |
| Financing items: Cost of centralized services | | +2,660 | | +4,040 | | +5,320 | | +2,660 | | +2,660 | | +6,400 | | +4,160 | | +27,900 |
| Total | | +33,050 | | +42,100 | | +47,300 | | +32,200 | | +23,400 | | +135,245 | | +29,750 | | +343,045 |

*Mandatory and financing changes for 1969*

MANDATORY ITEMS

| | |
|---|---|
| Increases: To provide for full-year cost of pay increases effective Oct. 8, 1967, and to provide full funding of part-year costs | +$211,275 |
| Within-grade promotion costs: | |
| 1969 net additional cost of within-grade promotions effective for part year in 1968 | +29,652 |
| Personnel compensation | 34,887 |
| Deduct lapse | —1,222 |
| Deduct savings due to turnover | —6,629 |
| Personnel benefits | 2,616 |
| Net cost | 29,652 |
| Absorption of a portion of above increase | —6,400 |
| Adjusted net additional cost of within-grade promotions effective for part year in 1968 | 23,252 |
| Net cost of within-grade promotions becoming effective during 1969 | +38,508 |
| Personnel compensation | 44,088 |
| Deduct lapse | —1,542 |
| Deduct savings due to turnover | —7,344 |
| Personnel benefits | 3,306 |
| Net cost | 38,508 |
| Absorption of a portion of above increase | —7,900 |
| Adjusted net cost of within-grade promotions becoming effective during 1969 | 30,608 |
| To provide a net increase in contributions to the Federal employees' compensation fund from $3,646 to $8,348 | 4,702 |
| Career-ladder promotion costs: | |
| 1969 net costs of career-ladder promotions | +13,844 |
| Personnel compensation | 41,951 |
| Deduct lapse | —1,468 |
| Deduct turnover | —29,785 |
| Personnel benefits | 3,146 |
| Net cost | 13,844 |
| Net cost of career-ladder promotions | +13,844 |
| To provide for 1 extra day of pay in 1969 for current year staff | 20,619 |
| Net additional rental cost for space acquired in 1968 for only a portion of the year | 10,845 |
| Total, mandatory items | +315,145 |

*Mandatory and financing changes for 1969*—Continued

FINANCING ITEMS

| | |
|---|---|
| Amount originally in base budget | $299,900 |
| Amount currently required in base budget | 327,800 |
| Changed financing required | +27,900 |

Changes in fees charged for centralized services (such as visual exhibits or reproduction) and changes in anticipated services rendered by the working capital fund required adjustments to the funds provided in the base budget.

PROMOTION COSTS JUSTIFICATION

*Promotion plan.*—Since fiscal year 1967 the Office of the Solicitor has been authorized to operate a career ladder promotion plan for attorneys and wage analysts. The entrance level for attorneys is at GS–7, GS–9 or GS–11. Wage analysts enter at the GS–7 level. The journeyman levels for these two series have been set at GS–12 for attorneys and GS–11 for wage analysts. Promotions are granted in one year intervals up to the journeyman level, provided the employee has demonstrated an ability to master more complex duties and responsibilities. By observing this policy, the Office has realized the following manpower utilization advantages:

1. Higher quality applicants are attracted to the Office by the assurance of receiving merited promotions.
2. Turnover among attorneys and wage analysts is reduced—providing a more experienced staff and reducing time lost in training and orientation.
3. A spirit of professionalism is fostered by the recognition of a professional journeyman level at the GS–12 and GS–11 levels respectively.

*Funding the promotion plan.*—Sixty-seven positions have been identified as career ladder promotion positions. With only a few exceptions, these were the positions in grades GS–7, 9, 11 and 12 at the beginning of F.Y. 1967 which were eligible for promotions during that year and/or which had received promotions during F.Y. 1966. Average turnover in promotion plan positions over the past two fiscal years has been at the rate of 9 GS–12's, 5 GS–11's and 6 GS–9's per year. Projecting this turnover into F.Y. 1969 and future years, turnover should absorb all promotion costs for a given year by F.Y. 1970 or F.Y. 1971. Promotion funds budgeted for F.Y. 1968 provide for a spread of 27 GS–12's, 20 GS–11's, 19 GS–9's and 1 GS–7.

*Estimate for fiscal year 1969.*—The combined estimate for F.Y. 1969 promotions and full year cost of F.Y. 1968 promotions is $13,844. Actual and full year costs were determined on the basis of a position by position analysis. The amounts were reduced by the standard lapse rate and by a savings due to turnover factor of 71%. This factor (an average for two years) reflects the experienced ratio of savings due to replacement of higher level employees by entrance level employees to the projected promotion costs for the year.

## PROGRAM CHANGES BY ACTIVITY

| Object classification | Activity 1(a) | | Activity 1(b) | | Activity 1(c) | | Activity 1(d) | | Activity 1(e) | | Activity 2 | | Activity 3 | | Total | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | Positions | Amount | Positions | Amount | Positions | Amount | Positions | Amount | Positions | Amount | Positions | Amount | Positions | Amount | Positions | Amount |
| 11 Personnel compensation | 2 | +$16,652 | 2 | +$16,652 | | | | | | | 10 | +$91,215 | | | 14 | +$124,519 |
| 12 Personnel benefits | | +1,248 | | +1,248 | | | | | | | | +6,885 | | | | +9,381 |
| 21 Travel and transportation of persons | | | | +300 | | −$2,800 | | −$1,000 | | −$200 | | −5,600 | | −$500 | | −9,800 |
| 23 Rent, communications, and utilities | | +800 | | +800 | | | | | | | | +4,000 | | | | +5,600 |
| 24 Printing and reproduction | | −1,550 | | −1,000 | | −2,600 | | −1,900 | | −500 | | −2,200 | | −550 | | −10,300 |
| 25 Other services | | +200 | | +200 | | | | | | | | +1,000 | | | | +1,400 |
| 26 Supplies and materials | | +500 | | +500 | | | | | | | | +2,000 | | | | +3,000 |
| 31 Equipment | | +100 | | +100 | | | | | | | | +100 | | | | +300 |
| Total | 2 | +17,950 | 2 | +18,800 | | −5,400 | | −2,900 | | −700 | 10 | +97,400 | | −1,050 | 14 | +124,100 |

*Activity 1(a). Litigation*

| | |
|---|---|
| 1968 (positions, 44) | $582,600 |
| 1969 (positions, 46) | 633,600 |

NARRATIVE DESCRIPTION OF PROGRAM

This program provides for the Department's trial litigation activities. The Division directs and supervises the enforcement of several Federal labor standards statutes through civil court actions and administrative enforcement proceedings. It is responsible for the referral to the Department of Justice of criminal cases arising under these statutes and of civil cases for the recovery of moneys administratively determined to be due the United States under the Walsh-Healey Public Contracts Act and McNamara-O'Hara Service Contract Act of 1965. This unit also assists the Department of Justice in defending actions of all types brought against the Department and its officials in Federal and State courts. Other activities include review and authorization of cases to be instituted by the Regional Attorneys and the furnishing of advice, assistance, instructions to the regional staffs in connection with the preparation for trial, trial strategy, policy, legal research, motions, pleadings, and related matters.

In the Supreme Court and appellate litigation program, the Division represents the Department in cases on appeal to the higher courts where the Secretary of Labor or the Department, or the United States (in matters concerning the Department) is a party to the suit.

In the employees' compensation program, the Division furnishes legal representation to the Bureau of Employees' Compensation in cases involving appeals from decisions of the Bureau; directs and supervises the enforcement of various workmen's compensation laws covering Federal employees, District of Columbia employees, and all other employees working within the District of Columbia; supervises and directs enforcement proceedings and actions under maritime safety standards under the Longshoremen's Act; and supervises the adjustment of claims against the Department under the Federal Tort Claims Act and the Military Personnel and Civilian Employees' Claims Act of 1966.

*In 1967*, accomplishments were realized in basically three areas. First, through several court cases, the Division established Departmental positions on issues raised under the Equal Pay Act. Second, the first stages of litigation involving the constitutionality of the 1961 and 1966 amendments to the Fair Labor Standards Act were completed. Finally, the Division continued to make progress in clarifying legal issues under existing legislation. A record number of cases were filed in 1967 under the activity's supervision.

*In 1968*, it is planned to continue the above-mentioned activities. In particular, it is expected that a substantial number of appellate decisions (including several by the Supreme Court) will be obtained involving the 1961 and 1966 amendments to the Fair Labor Standards Act. These cases will also involve significant issues involving the integration of important provisions of the Fair Labor Standards Act with the Longshoremen's and Harborworkers' Compensation Act.

*Changes for 1969*

| | |
|---|---|
| Mandatory changes amount to | +$30,390 |
| Financing changes amount to | +2,660 |
| Program changes amount to (2 positions) | +17,950 |

*Proposal.*—To provide legal support to Wage and Hour's enforcement program under the provisions of the 1966 amendments to the Fair Labor Standards Act which become effective February 1, 1969.

*The need.*—Regional litigation requires constant supervision, coordination and assistance from the Washington staff in order to insure uniform application of the Government's labor standards policy. The currently-authorized staff will be unable to completely absorb the additional workload stemming from the new provisions.

*The program.*—The additional resources requested will supplement the work currently being done in the trial litigation program. Specifically, these resources will enhance the Division's capability in the preparation and conduct of trials,

reviewing and assisting the field staff in determining which cases should be prosecuted to final judgment so as to insure effective administration of the Fair Labor Standards Act, and carrying out other related legal functions.

| | |
|---|---|
| Base: | |
| Positions | 44 |
| Estimated cost | $612,900 |
| Additional cost: | |
| Positions | 2 |
| Estimated cost | $20,700 |

BASIS FOR THE ESTIMATE

Workload estimates for trial litigation are based upon past experience and the level of activity expected in field offices.

Of the projected 2,000 cases instituted in fiscal year 1969, it is estimated that 1,875 will be litigated under the Fair Labor Standards Act. Past experience indicates that a ratio of one attorney man-year is required in the Litigation Division for every 5 attorney man-years in the field offices. This formula would yield a requirement for an additional 1 attorney man-year for this activity in 1969 based upon the requested increase 6 attorney man-years in the field offices for 1969. The requested increase is for 1 attorney man-year for this activity under the assumption that any part of an attorney man-year will be absorbed through greater productivity on the part of existing staff.

The estimated workload under the Longshoremen's Compensation Act reflects a continuation of the relatively stable workload experienced over the past several years. Since neither funds nor positions have been budgeted for this function since fiscal year 1967, the office has been forced to utilize resources budgeted for other activities to support this function. Senate Report No. 1841, Supplemental Appropriation Bill, 1967, provides for this diversion of resources as follows: "In order to comply with the directions contained in the House report it will be necessary for the Solicitor to use funds budgeted for other activities".

Employees' compensation workloads are based upon estimated activities of the supported bureau. Workload increases will be absorbed through productivity increases in this area.

WORKLOAD STATISTICS

TRIAL LITIGATION

| | Fiscal year 1966, actual | Fiscal year 1967, actual | Fiscal year 1968, estimate | Fiscal year 1969, estimate |
|---|---|---|---|---|
| 1. Cases received from regional offices [1] | 1,559 | 2,180 | 2,200 | 2,350 |
| 2. Cases instituted by regional offices under Washington office supervision [1] | 1,672 | 1,817 | 1,850 | 1,950 |
| 3. Cases handled by Washington staff [1] | 71 | 112 | 125 | 130 |
| 4. Cases closed [1] | 1,481 | 1,741 | 1,800 | 1,900 |
| 5. Cases pending in court or administrative proceeding, end of year [1] | 1,032 | 1,084 | 1,100 | 1,150 |
| 6. Review and assistance | 13,808 | 15,000 | 15,000 | 15,500 |
| 7. Wage-hour investigations | 57,625 | 58,159 | 68,000 | 75,000 |
| 8. Restitution attributable to litigation activities (in millions) | $4.0 | $5.8 | $6.0 | $6.2 |
| **SUPREME COURT AND APPELLATE LITIGATION** | | | | |
| 1. Appellate court briefs filed: | | | | |
| (a) Supreme Court | 6 | 2 | 4 | 6 |
| (b) Circuit court of appeals | 36 | 25 | 30 | 35 |
| (c) Federal district court | 1 | 2 | 2 | 2 |
| (d) State courts | 2 | 0 | 1 | 1 |
| 2. Oral arguments presented | 17 | 28 | 30 | 35 |
| 3. Appeal recommendations | 60 | 37 | 45 | 55 |
| 4. Legal opinions, miscellaneous reports and memorandums, special research, case anaylses | 242 | 339 | 339 | 339 |
| 5. Cases in course of preparation at end of fiscal year | 24 | 37 | 40 | 45 |
| 6. Pending cases in Supreme Court and appellate courts at end of fiscal year | 37 | 17 | 22 | 25 |
| **EMPLOYEES' COMPENSATION** | | | | |
| 1. Longshoremen's Act litgated cases | 75 | 73 | 75 | 80 |
| 2. Federal Employees' Compensation Act litigated cases | 2 | 1 | 2 | 2 |
| 3. Appeals board litigation cases: | | | | |
| (a) Defenses prepared | 314 | 276 | 300 | 320 |
| (b) Cases presented at hearings | 66 | 37 | 50 | 50 |
| 4. Maritime Safety-Longshoremen's Act: | | | | |
| (a) Administrative complaints filed | 10 | 11 | 15 | 15 |
| (b) Injunctive actions | 1 | 1 | 3 | 3 |
| (c) Recommendations for criminal prosecution | 1 | 2 | 2 | 2 |
| 5. Federal Tort Claims Act: | | | | |
| (a) Accident reports received | 114 | 131 | 145 | 150 |
| (b) Administrative claims filed | 19 | 39 | 42 | 48 |
| 6. Military Personnel and Civilian Employees' Claims Act of 1964: (a) Claims filed | 6 | 10 | 18 | 22 |

[1] Includes only Fair Labor Standards Act, Walsh-Healey Public Contracts Act, McNamara-O'Hara Service Contracts Act and certain defensive actions.

*Activity 1 (b.) Interpretations and opinions*

| | |
|---|---|
| 1968 (positions, 59) | $740,400 |
| 1969 (positions, 61) | 801,300 |

NARRATIVE DESCRIPTION OF PROGRAM

This program provides for necessary legal interpretations, services, and advice with respect to most statutes and programs administered by the Department of Labor. More than 30 separate programs and statutes of widely varying content and application are involved. In addition, this activity provides necessary supervision of such services rendered in the regional and branch offices of the Office of the Solicitor and performs all services necessary to meet legal requirements for publication of documents in the Federal Register, and other administrative legal services as required.

Among the legal services provided, in addition to the legal interpretations and opinions required in the day-to-day administration of statutes and programs, are the drafting of regulations and interpretative bulletins and rules published in the Code of Federal Regulations; legal assistance in the planning, drafting, and implementing of Federal legislation relating to such statutes and programs and to areas included in the missions of the administering agencies; technical advice and assistance with respect to litigation cases arising under particular statutes and programs and not otherwise provided for; and, under Federal-State programs, the review of State law, decisions, and opinions, proposed State legislation, and State plans of operation to determine their conformity with pertinent Federal law.

*In 1967*, a wide variety of legal interpretative services related to the many new responsibilities of the Department were provided. Principal attention was given to such items as the 1966 amendments to the Fair Labor Standards Act, the McNamara-O'Hara Service Contract Act, and the training programs delegated to the Department under the Economic Opportunity Act.

*In 1968*, it is planned to: (1) answer the numerous inquiries stimulated by the 1966 amendments to the Fair Labor Standards Act which became effective this fiscal year and to issue the necessary regulations and to complete revision of Fair Labor Standards Act Interpretative Bulletins to reflect the recent amendments; and to issue rules and regulations and an Interpretative Bulletin on the McNamara-O'Hara Service Contract Act; (2) participate actively in the President's program of assistance to "ghetto" areas and in the Department's special programs for employment in target areas, to develop and draft regulations and agreements applicable to Labor Department Activities under the 1968 Amendments to the Economic Opportunity Act; and (3) assist in the preparation of a proposed Omnibus Bill which will include amendments to the Social Security Act and the Federal Unemployment Tax Act as well as a new special program for rehabilitation assistance for unemployment exhaustees.

*Changes for 1969*

| | |
|---|---|
| Mandatory changes amount to | +$38,060 |
| Financing changes amount to | +4,040 |
| Program changes amount to (2 positions) | +18,800 |

*Proposals.*—To provide interpretative support services needed to accommodate the additional workload required by the 1966 amendments to the Fair Labor Standards Act.

*The need.*—These recent amendments not only provide larger benefits to workers previously covered by the basic law but also broaden the Act's coverage to include employers and employees not previously covered. Therefore, a large number of inquiries will continue to be received during fiscal year 1969 as to the scope and applicability of the amendments. On February 1, 1969, an additional 100,000 establishments and more than 1.2 million additional workers will be covered by the Act. These enterprises and their employees have had no previous experience under the Act. Unless employers know their legal obligations and duties and employees recognize their legal rights under the Act, the benefits envisioned by the Congress will not be realized. This request will enable the Office of the Solicitor to carry out its responsibilities in this respect.

*The program.*—Extensive revisions of regulations and interpretative bulletins prior to the effective date of the amendments will be required. In addition, a continuation of legal advice and counsel will be carried out after the effective date of the recent amendments. Therefore, the two new positions are estimated to be the minimum necessary to carry out the Division's additional workload.

| | |
|---|---|
| Base: | |
| Positions | 59 |
| Estimated cost | $780,600 |
| Additional cost: | |
| Positions | 2 |
| Estimated cost | $20,700 |

BASIS FOR ESTIMATES

Workload estimates for this activity are based upon actual experience in fiscal years 1966 and 1967, known workload requirements for the current and budget years, and projections based upon contacts with service bureaus and offices. There has been no reduction in the overall volume of items handled and the difficulty and novelty of the legal questions requiring consideration has been increasing as a result of the many new statutes mentioned above. Item A.1 of the workload statistics on page SOL–19 reflects an increase of 2,500 legal opinions in Fair Labor Standards Act activity, a portion of which will be absorbed through productivity increases.

WORKLOAD STATISTICS

| | Fiscal 1966 actual | Fiscal 1967 actual | Fiscal 1968 estimate | Fiscal 1969 estimate |
|---|---|---|---|---|
| Labor standards: | | | | |
| A. Legal opinions: | | | | |
| 1. Fair Labor Standards Act | 12,311 | 16,167 | 17,000 | 19,500 |
| 2. Government contract labor standards | 6,036 | 8,092 | 9,000 | 9,000 |
| 3. Safety standards | 376 | 797 | 800 | 800 |
| 4. Workmen's compensation | 1,150 | 1,049 | 1,200 | 1,200 |
| B. Meetings and conferences | 1,886 | 3,453 | 3,500 | 3,500 |
| Manpower services and unemployment compensation: | | | | |
| A. Legal review: | | | | |
| 1. State documents | 4,785 | 4,688 | 4,500 | 4,500 |
| 2. D/L documents | 10,087 | 10,605 | 10,700 | 10,700 |
| 3. Federal legislation (prepared or reviewed) | 980 | 985 | 980 | 980 |
| B. Legal opinions: | | | | |
| 1. Advice on certification of State laws | 1,129 | 1,207 | 1,100 | 1,100 |
| 2. Memorandums, briefs, and other legal documents prepared | 4,089 | 5,981 | 5,000 | 5,000 |
| 3. Other advice | 10,675 | 9,849 | 9,800 | 9,800 |
| C. Meetings and conferences | 3,710 | 3,759 | 3,800 | 3,800 |
| Administrative legal services: | | | | |
| A. Proceedings and documents: | | | | |
| 1. Hearings services | 3 | 26 | 15 | 20 |
| 2. Formal opinions prepared | 2 | 12 | 10 | 10 |
| 3. FLSA wage orders | 36 | 102 | 40 | [1] 100 |
| 4. Federal Register documents | 120 | 156 | 175 | 175 |
| B. Legal review: | | | | |
| 1. Legislative proposals | 19 | 21 | 25 | 25 |
| 2. Litigation actions [2] | 124 | 28 | 30 | 30 |
| 3. Other Department of Labor documents | 179 | 187 | 200 | 200 |
| C. Legal opinions: [3] | | | | |
| 1. Memorandums, briefs, and other legal documents prepared | 136 | 143 | 140 | 140 |
| 2. Other advice | 117 | 109 | 120 | 120 |
| D. Meetings and conferences | 90 | 104 | 100 | 100 |

[1] Estimates based on biennial review required for Puerto Rico and Virgin Islands wage orders.
[2] Includes review, as required, of administrative law questions involved in litigation, and any necessary functions relating to veterans' reemployment rights cases referred for litigation.
[3] Includes legal advisory functions on the veterans' reemployment rights program.

*Activity 1(c). Wage determinations*

| | |
|---|---|
| 1968 (positions, 91) | $906,500 |
| 1969 (positions, 91) | 948,400 |

NARRATIVE DESCRIPTION OF PROGRAM

This program provides for administering the Davis-Bacon Act, including the Fringe Benefits Amendments of 1964, related prevailing wage standards statutes, the Copeland Act, the Contract Work Hours Standards Act, and Reorganization Plan No. 14 of 1950.

The staff included in this activity is responsible for predetermining prevailing hourly wage rates including fringe benefits payments as the minimums payable to laborers and mechanics employed on Federal and federally assisted construction projects subject to the Davis-Bacon Act and related prevailing wage statutes. No Federal or federally assisted construction contract can be let unless the predetermination is made. Current project wage data is gathered continuously as a basis for wage determinations and liaison is maintained with all parties interested in the program, such as Federal and State contracting agencies and national and local employee and employer organizations.

*In 1967*, accomplishments were made in refining and continuing the Division's policy of issuing wage determinations on a multiple project basis. This policy eliminates the necessity of preparing determinations for each construction project in certain stable, high activity areas. During 1967, the use of multi-agency wage determinations was expanded to cover 353 areas. In addition, work continued on updating and improving a uniform record system which will provide more accurate and complete data for wage determinations.

*In 1968*, it is planned to meet the demands of several government agencies—particularly the Department of Defense—for wage determinations applicable to public and military housing. Meeting these requests will require a substantial change in the Division's data collection and reporting requirements.

*In 1969*, it is planned to continue refining and improving the techniques necessary to accomplish the Division's additional responsibilities. At the present time, only moderate increases in workload are projected over that projected for fiscal year 1968.

*Changes for 1969*

| | |
|---|---|
| Mandatory changes amount to | +$41,980 |
| Financing changes amount to | +5,320 |
| Program changes amount to (positions: None) | −5,400 |

The program changes represent Management Improvement and Cost Reduction objectives to reduce travel costs from $27,450 to $24,650 and printing costs from $26,748 to $24,146.

BASIS FOR THE ESTIMATE

The data on dollar volume of construction projects covered by Davis-Bacon type provisions and the number of employees on covered projects are provided by the Business and Defense Service Administration, Department of Commerce. Projections are based upon an annual average increase of 6–7% in construction volume. The number of actual determinations and modifications issued in 1966 and 1967, as well as the estimated data for 1968 and 1969, reflect the effect of multi-use area wage determinations.

WORKLOAD STATISTICS

| | Fiscal year 1966, actual | Fiscal year 1967, actual | Fiscal year 1968, estimate | Fiscal year 1969, estimate |
|---|---|---|---|---|
| 1. Number of construction workers on contracts covered by wage determinations | 535,000 | 605,000 | 625,000 | 650,000 |
| 2. Dollar volume of construction contracts governed by wage determinations (billions) | $12.1 | $13.2 | $13.5 | $14.2 |
| 3. Number of wage determinations and modifications issued (includes multiuse area determinations) | 25,938 | 26,712 | 28,000 | 28,500 |
| 4. Estimated number of contract awards covered by Davis-Bacon determinations | 45,000 | 48,000 | 50,000 | 52,000 |
| 5. Residential construction surveys conducted | 4 | 11 | 360 | 360 |
| 6. Complaint cases on record at beginning of year | 1,032 | 1,029 | 968 | 968 |
| 7. New complaints recorded | 1,032 | 833 | 1,000 | 1,000 |
| 8. Complaint cases completed | 1,035 | 894 | 1,000 | 1,000 |
| 9. Complaint cases pending at end of year | 1,029 | 968 | 968 | 968 |
| 10. Restitution obtained | $375,992 | $293,646 | $300,000 | $300,000 |
| 11. Number of employees receiving restitution | 3,766 | 3,066 | 3,200 | 3,200 |
| 12. Penalties assessed | $35,665 | $49,049 | $30,000 | $30,000 |

*Activity 1 (d). Legislation*

1968 (positions, 39) ..... $552,200
1969 (positions, 39) ..... 581,500

NARRATIVE DESCRIPTION OF PROGRAM

This program provides for assistance and advice to the Solicitor in discharging his duties as the chief legal adviser to the Secretary of Labor with respect to legislative matters. The Division assists in the preparation of legislative proposals, testimony, analyses, explanatory statements, and other legislative materials for use by the Secretary and other Departmental officers in appearances before Congressional committees on legislation of interest to the Department.

The attorneys employed by this activity are consulted on questions concerning international affairs, Federal contracts, conflicts-of-interest, disclosure of information, and other fields of law. The activity has increased due to the issuance of the Executive Order establishing standards of conduct and requiring financial reports by top government officials and the enactment of legislation dealing with public disclosure of information.

Three Hearing Examiners, at the designation and direction of the Secretary, Under Secretary, or Solicitor, preside over administrative hearings and render decisions in proceedings based on complaints of violations of, and on procedural questions concerning the application of the Walsh-Healey Act, Davis-Bacon Act, the safety provisions of the Longshoremen's and Harbor Workers' Compensation Act, the Farm Labor Contractor Registration Act, Title VI of the Civil Rights Act, and conformity and compliance questions arising under the unemployment insurance program.

A digest and reference system is maintained for opinions, rulings, regulations, administrative determinations and court decisions under the wide variety of laws administered by the Department of Labor. Legislative histories of many of these statutes are also prepared.

*In 1967*, accomplishments were made in several areas. The Division rendered substantial assistance to the Solicitor and Secretary in formulating one of the most comprehensive legislative programs in the history of the Department. Much of the groundwork in formulating the recently-enacted Age Discrimination in Employment Act was carried out with this activity's assistance.

*In 1968*, it is planned to maintain the high level of activity generated during the 1967 fiscal year. Some increases in workload are anticipated and will be absorbed through productivity increases by the existing staff.

*In 1969*, it is planned to continue the function at about the same level as fiscal year 1968. Because of the relatively small size of the activity and the diversity of its functions, the opportunity for developing and taking advantage of further productivity increases is limited.

*Changes for 1969*

Mandatory changes amount to ..... +$29,540
Financing changes amount to ..... +2,660
Program changes amount to (positions, none) ..... −2,900

The program changes represent Management Improvement and Cost Reduction objectives to reduce travel costs from $10,900 to $9,900 and printing costs from $17,172 to $15,272.

BASIS FOR THE ESTIMATE

Workload statistics for this activity are based upon actual experience and upon projections based upon contacts with services, bureau, and offices. Operating requirements for this activity are based upon 1967 and 1968 requirements.

WORKLOAD STATISTICS

| | Fiscal year 1966 actual | Fiscal year 1967 actual | Fiscal year 1968 estimate | Fiscal year 1969 estimate |
|---|---|---|---|---|
| Legislation: | | | | |
| 1. Legislative reports | 349 | 256 | 325 | 350 |
| 2. Drafts of legislative language for consideration by administrative officials or for presentation to the Congress | 818 | 814 | 825 | 825 |
| 3. Analyses prepared, legislative | 2,851 | 2,855 | 2,900 | 2,900 |
| 4. Letters for signature of Secretary or Solicitor | 3,561 | 3,555 | 3,600 | 3,600 |
| 5. Opinions, analyses, memos, orders, etc., prepared for bureaus | 737 | 745 | 770 | 770 |
| Hearing examiners: | | | | |
| 1. Complaint proceedings under the Walsh-Healey Public Contracts Act: | | | | |
| Proceedings instituted | 38 | 37 | 38 | 38 |
| Hearings held | 24 | 20 | 20 | 20 |
| Prehearing conferences held | 27 | 29 | 30 | 30 |
| Examiner's decisions | 36 | 27 | 33 | 33 |
| Order dismissing proceedings | 6 | 2 | 5 | 5 |
| 2. Proceedings under Davis-Bacon Act and related statutes: | | | | |
| Hearings held | 3 | 0 | 3 | 3 |
| Decisions | 2 | 0 | 3 | 3 |
| 3. Longshoremen's and Harbor Workers' Act: | | | | |
| Proceedings instituted | 10 | 11 | 15 | 15 |
| Hearings held | 3 | 2 | 4 | 4 |
| Prehearing conferences held | 6 | 6 | 7 | 9 |
| Examiner's decisions | 7 | 14 | 16 | 16 |
| Dismissed by examiner's decision | 0 | 2 | 1 | 1 |
| 4. McNamara-O'Hara Service Contract Act (1st instituted in fiscal year 1967): | | | | |
| Proceedings instituted | 0 | 3 | 7 | 10 |
| Hearings held | 0 | 0 | 4 | 5 |
| Prehearing conferences | 0 | 0 | 3 | 4 |
| Examiner's decisions | 0 | 0 | 4 | 4 |
| 5. Farm Labor Contractor Registration Act—denial of licenses under (1st instituted in fiscal year 1967): | | | | |
| Proceedings instituted | 0 | 3 | 5 | 5 |
| Hearings held | 0 | 2 | 4 | 4 |
| Prehearing conferences | 0 | 2 | 2 | 2 |
| Examiner's decisions | 0 | 1 | 1 | 1 |
| Dismissed | 0 | 2 | 1 | 1 |
| 6. Miscellaneous hearings | 10 | 15 | 15 | 15 |
| Reports, digests, and analysis: | | | | |
| 1. Analysis of individual cases, opinions, or items | 1,150 | 2,500 | 2,500 | 2,500 |
| 2. Digests prepared | 850 | 1,000 | 1,000 | 1,000 |
| 3. Legislative histories | 0 | 1 | 1 | 1 |
| Decisions, Walsh-Healy Public Contracts Act: | | | | |
| 1. Orders of Secretary and Administrator | 3 | 0 | 2 | 2 |
| 2. Letters to the Comptroller General | 38 | 23 | 25 | 25 |
| 3. Decisions of the Administrator | 5 | 2 | 4 | 4 |
| Longshoremen's and Harbor Workers' Act, decisions of the Director | 1 | 0 | 2 | 2 |
| Decisions, Employees' Compensation Appeals Board: | | | | |
| 1. Backlog at end of previous year | 20 | 14 | 4 | 9 |
| 2. Cases received from Board for preparation of decisions during year | 272 | 201 | 275 | 280 |
| Total caseload | 292 | 215 | 279 | 289 |
| 3. Decisions written during year | 278 | 211 | 270 | 280 |
| 4. Backlog end of year | 14 | 4 | 9 | 9 |
| 5. Memorandums of law prepared for Board | 0 | 6 | 6 | 6 |

*Activity 1 (e). Labor management laws*

| | |
|---|---|
| Mandatory changes amount to | +$30,390 |
| 1968 (positions, 32) | $366,700 |

NARRATIVE DESCRIPTION OF PROGRAM

This program provides for supervising and coordinating the Department's legal functions under the Labor-Management Reporting and Disclosure Act of 1959 and the Welfare and Pension Plans Disclosure Act, as amended. The Division provides such services as the interpretation of the above statutes; drafting of reporting forms, regulations, interpretative bulletins and similar interpretative aids; preparation of and participation in civil litigation and administrative enforcement actions; preparation of criminal cases under these acts for submission to the Department of Justice; the defense of suits against the Department of Labor involving these acts; and supervision of field office activities in these program areas.

*In 1967*, accomplishments were made in clarifying a number of legal issues which will enhance the Department's position in carying out the intent of Congress under both of the afore-mentioned statutes. Of the 324 government cases considered for civil or criminal litigation by the Division, 114 resulted in cases instituted. Five of these cases involved locals of the International Union of Operating Engineers which resulted in the International Constitution being amended to insure a greater measure of democracy to each of its more than 300 local unions having more than 300,000 members.

*In 1968*, it is planned to strengthen the Department's position on several legal issues under the Acts by increasing its appellate activities. In addition, it is anticipated that the number of active cases will increase due to the administrative bureau's decision to continue recommending, as it did in the latter part of fiscal year 1967, court action to compel the filing of delinquent labor organization reports where it has been unsuccessful in achieving voluntary compliance.

*In 1969*, it is planned to moderately increase the level of activity begun in 1968. It is also anticipated that a substantial number of man-hours will be required to formulate legislative proposals for establishing fiduciary standards with regard to welfare and pension benefit plans, as well as providing legislative protection with regard to the funding and vesting of the plans.

*Changes for 1969*

| | |
|---|---|
| Mandatory changes amount to | +$20,740 |
| Financing changes amount to | +2,660 |
| Program changes amount to | —700 |

Positions: None.

The program changes represent Management Improvement and Cost Reduction objective to reduce travel costs from $1,900 to $1,700 and printing costs from $4,722 to $4,222.

BASIS FOR THE ESTIMATE

Workload estimates are based upon a projection of 1966 and 1967 activities, experience to date in 1968, and the projected requirements of the Office of Labor-Management and Welfare-Pension Reports. Where workload increases are reflected below, they will be met through productivity increases. Productivity increases in past years were taken into consideraton in fiscal year 1967 by eliminating two positions. Therefore, only limited increases in workload can be handled with the presently authorized staff.

WORKLOAD STATISTICS

| | Fiscal year 1966, actual | Fiscal year 1967, actual | Fiscal year 1968, estimate | Fiscal year 1969, estimate |
|---|---|---|---|---|
| Government litigation: | | | | |
| 1. Cases considered for civil or criminal litigation by Washington office (review of investigation files): | | | | |
| District court | 330 | 293 | 310 | 325 |
| Appellate court | 10 | 21 | 15 | 20 |
| Supreme Court | 4 | 10 | 10 | 10 |
| 2. Cases instituted: | | | | |
| A. Criminal indictments | 67 | 68 | 80 | 80 |
| B. Civil—Labor-Management Reporting and Disclosure Act and Welfare and Pension Plans Disclosure Act: | | | | |
| District court | 50 | 26 | 35 | 38 |
| Appellate court | 6 | 16 | 15 | 15 |
| Supreme Court | 1 | 4 | 6 | 5 |
| 3. Civil cases active during year: | | | | |
| District court | 96 | 82 | 78 | 98 |
| Appellate court | 11 | 19 | 20 | 20 |
| Supreme Court | 1 | 4 | 5 | 5 |
| 4. Civil cases closed during fiscal year | 36 | 41 | 35 | 37 |
| 5. Civil cases pending at end of fiscal year | 56 | 43 | 60 | 70 |
| 6. Civil pleadings drafted, briefs prepared, court appearances and related activities: | | | | |
| District court | 220 | 235 | 240 | 250 |
| Appellate court | 25 | 30 | 35 | 40 |
| Supreme Court | 1 | 6 | 6 | 6 |
| 7. Administrative Procedure Act and related administrative proceedings, including review and approval of related preliminary activities | 140 | 90 | 120 | 130 |
| Private litigation: | | | | |
| 1. Review of litigation to determine if basis exists for Government intervention | 160 | 180 | 170 | 200 |
| 2. Cases reviewed while pending in the Supreme Court | 2 | 6 | 10 | 10 |
| Interpretations and regulations: | | | | |
| 1. Labor-Management Reporting and Disclosure Act | 3,746 | 3,775 | 3,850 | 3,850 |
| 2. Welfare and Pension Plans Disclosure Act | 2,904 | 3,200 | 3,300 | 3,300 |

*Activity 2. Field legal services*

1968 (positions, 188) ..... $2,330,055
1969 (positions, 198) ..... 2,562,700

NARRATIVE DESCRIPTION OF PROGRAM

This program provides for legal services to the public and various officials of the Labor Department in the field. When necessary, the field staff institutes legal action through court and administrative proceedings, to enforce the various Federal labor laws for which the Department has responsibility. Its largest single program is enforcement of the Fair Labor Standards Act. These proceedings not only recover for employees wage and overtime payments unlawfully withheld from them, but also exercise a deterrent effect on other employers in the same industry or geographic area. The program, therefore, plays an important role in effectuating the wage standards program of the government—the benefits of which are increased wages and purchasing power throughout the nation, with the resultant increase, through demand, in job opportunities and tax receipt increases.

*In 1967*, accomplishments were made in reducing the backlog of work in progress which had developed during the prior year. During the year a record number of labor standards cases were filed by field offices. The 1,847 cases instituted represents an increase of 8.1% over the prior year. The benefits of these efforts to the government and employees is demonstrated by the fact that during the year restitution in Fair Labor Standards Act cases amounted to $5.2 million as compared to $3.8 million in fiscal year 1966.

*In 1968*, it is planned to continue the high level of vigorous enforcement activity of Federal labor laws which characterized fiscal year 1967. A number of cases

involving issues under the amendments to the Fair Labor Standards Act of 1966 which became effective February 1, 1967, will reach the litigation stage. It is expected that in 1968 the field offices will experience increased activity in providing legal services related to Neighborhood Youth Corps, Manpower Development and Training, Equal Pay and Civil Rights. Regional Attorneys will, therefore, be forced to be increasingly selective in accepting meritorious enforcement cases for litigation.

*Changes for 1969*

| | |
|---|---|
| Mandatory changes amount to | +$128,845 |
| Financing changes amount to | +6,400 |
| Program changes amount to | +97,400 |

Positions: *10.*

*Proposal.*—To provide litigation support services in the field to administer the provisions of the 1966 amendments to the Fair Labor Standards Act which become effective in 1969.

*The need.*—The additional 10 positions will enable the Regional Offices to handle many of the meritorious enforcement cases produced by the Wage and Hour Division under the amendments. The result for each meritorious case which does not go to litigation is to deny to employees in or closest to the "poverty level" wage and overtime payments legally theirs, a personal loss to the individual and family involved and a loss to the economy through lost job-creating purchasing power.

*The program.*—An important part of the compliance program is a vigorous program of enforcement through court action, if necessary, of the terms of the Act. Litigated cases not only compel compliance upon reluctant employers, but more importantly, they forcefully remind other employers in the same industry or geographical area that wage standards do exist and that underpayments will be found and corrected in court, if necessary. Further, carefully selected litigation cases carried through the trial and appellate stages will provide judicial interpretations of the amendments favorable to effective coverage and equitable enforcement. The Supreme Court has agreed to consider the question of the constitutionality of the extended coverage insofar as they pertain to certain state employees.

| | |
|---|---|
| Base: | |
| Positions | 188 |
| Estimated cost | $2,448,900 |
| Additional cost: | |
| Positions | 10 |
| Estimated cost | $113,800 |

BASIS FOR ESTIMATES

The workload data for fiscal year 1969 reflects a slight increase in the number of cases instituted and considered for litigation in areas other than the administration of the Fair Labor Standards Act.

Past experience indicates that for every 1,000 investigations performed by the Wage and Hours Division 33 cases reach the litigation stage. In addition, experience indicates that the Solicitor's field offices are able to dispose of 18 FLSA cases per attorney man-year. Using this formula, the field offices would require 138 attorney man years to handle Wage and Hour's projected investigatory plans for fiscal year 1969.

It is estimated, however, that, due to a change in the procedures Wage and Hour Division intends to employ in conducting investigations, fewer cases per 1,000 investigations will reach the litigation stage than has been true in the past. For purposes of estimation, we have based our request for 1969 on a factor of 25 cases litigated for every 1,000 investigations. Therefore, an estimated increase of 6 attorney man years would be necessary to support Wage-Hour's investigatory program under the 1966 amendments to the Fair Labor Standards Act.

WORKLOAD STATISTICS

| | Fiscal year 1966 actual | Fiscal year 1967 actual | Fiscal year 1968 estimate | Fiscal year 1969 estimate |
|---|---|---|---|---|
| 1. Cases received and analyzed by regional office from Wage-Hour Division | 8,887 | 8,370 | 8,800 | 9,000 |
| 2. Cases received and analyzed from other Bureaus | 2,727 | 2,339 | 2,400 | 2,500 |
| Total | 11,614 | 10,709 | 11,200 | 11,500 |
| 3. Cases referred to national office for litigation consideration [1] | 2,228 | 2,274 | 2,300 | 2,450 |
| 4. Cases instituted [1] | 1,753 | 1,895 | 1,900 | 2,000 |
| 5. Cases closed [1] | 1,577 | 1,847 | 1,900 | 1,950 |
| 6. Cases pending in court or administrative proceedings, end of year [1] | 1,214 | 1,264 | 1,250 | 1,275 |
| 7. Cases in course of review and preparation for legal actions [1] | 4,613 | 4,463 | 4,500 | 4,600 |
| 8. Court activity: | | | | |
| (a) Appearances at trial | 237 | 219 | 225 | 235 |
| (b) Other court appearances (motions, etc.) | 1,318 | 1,146 | 1,250 | 1,300 |
| (c) Legal memorandums prepared for filing in court | 848 | 787 | 800 | 850 |
| 9. Interpretations and opinions | 47,164 | 47,223 | 48,500 | 49,000 |
| 10. The following sums were recovered during fiscal 1967: | | | | |
| (a) Restitution in Fair Labor Standards Act cases | | | | $5,159,267 |
| (b) Amounts collected in administrative proceedings or court actions for liquidated damages for violations of the Walsh-Healey Act | | | | 89,473 |
| (c) Davis-Bacon and related acts | | | | 347,194 |
| (d) Contract Work Hours Standards Act | | | | 32,124 |
| (e) McNamara-O'Hara Service Contract Act | | | | 91,345 |
| (f) Other | | | | 83,416 |
| Total | | | | 5,802,821 |
| 11. Fines and penalties: | | | | |
| (a) Fair Labor Standards Act | | | | 35,421 |
| (b) Others | | | | 75,131 |
| Total | | | | 110,552 |

[1] All categories of activity for the Department.

*Activity 3. Administration and management services*

1968 (positions, 37) ..... $424,400
1969 (positions, 37) ..... 453,100

NARRATIVE DESCRIPTION OF PROGRAM

This program provides for direction, management and administrative services support activities of the Office of the Solicitor.

The Solicitor, Deputy Solicitor and the staff members of the Immediate Office give legal counsel and perform the diversified legal services required by the Secretary and other top officials of the Department.

The Administrative Office carries out such functions as budget, procurement, personnel administration, management analysis, mail and messenger services, central files, and the law library.

*In 1967*, accomplishments were made by the Office in recruiting a number of high quality recent law school graduates. A systematic program of interviewing and selecting applicants brought to the federal service individuals who will undoubtedly be a credit to the government service throughout their careers. In addition, the Office laid the ground work for a formalized attorney training program designed to enhance the perspective of employees in the field of labor law.

*In 1968 and 1969*, it is planned to continue and broaden the scope of the activities which began in 1967 as to recruitment and training. In addition the Administrative Office's budget staff plans to reorganize a number of its existing procedures to carry out the objectives and requirements of the Department's Management System.

*Changes for 1969*

Mandatory changes amount to ..... +$25,590
Financing changes amount to ..... +4,160
Program changes amount to ..... −1,050

Positions: None.

The program changes represent Management Improvement and Cost Reduction objectives to reduce travel costs from $5,050 to $4,550 and printing costs from $10,428 to $9,878.

DISTRIBUTION OF FIELD STAFF

| Regional and branch offices | 1968 | | | 1969 | | |
|---|---|---|---|---|---|---|
| | Professional | Clerical | Total | Professional | Clerical | Total |
| Boston, Mass | 5 | 4 | 9 | 5 | 4 | 9 |
| New York, N.Y | 10 | 6 | 16 | 10 | 6 | 16 |
| Philadelphia, Pa | 8 | 5 | 13 | 9 | 6 | 15 |
| Atlanta, Ga | 16 | 12 | 28 | 17 | 13 | 30 |
| Birmingham, Ala | 5 | 5 | 10 | 5 | 5 | 10 |
| Cleveland, Ohio | 8 | 5 | 13 | 9 | 5 | 14 |
| Detroit, Mich | 3 | 1 | 4 | 3 | 1 | 4 |
| Chicago, Ill | 10 | 6 | 16 | 10 | 6 | 16 |
| Kansas City, Mo | 7 | 3 | 10 | 8 | 4 | 12 |
| Denver, Colo | 1 | 1 | 2 | 1 | 1 | 2 |
| Dallas, Tex | 11 | 9 | 20 | 12 | 9 | 21 |
| San Francisco, Calif | 9 | 4 | 13 | 10 | 4 | 14 |
| Los Angeles, Calif | 4 | 3 | 7 | 4 | 3 | 7 |
| Seattle, Wash | 1 | 1 | 2 | 1 | 1 | 2 |
| Nashville, Tenn | 11 | 6 | 17 | 12 | 6 | 18 |
| Puerto Rico | 5 | 3 | 8 | 5 | 3 | 8 |
| Total | 114 | 74 | 188 | 121 | 77 | 198 |

EXPLANATION OF ESTIMATE BY OBJECT

*Personnel compensation, $5,184,359*

This estimate provides for 504 full-time positions, or 475 man years, and for compensation of witnesses ($13,000). A net increase of $391,093 over the 1968 level is proposed, consisting of the following:

*Fair Labor Standards Act amendments of 1966, +$124,519*

An additional 9 attorney and 5 clerical positions are requested to handle increased legal services engendered by the expanded coverage under the 1966 amendments to the Act.

*Within-grade promotions, +$48,938*

Allowance has been made for net within-grade promotions as they fall due in 1969 and for the net additional cost of within-grade promotions effective on only a part year basis for base staff in 1968. An allowance for savings due to turnover is provided with partial absorption of the total cost.

*Career-ladder plan promotions, +$10,698*

Allowance is made for the 1969 cost of promotions to be granted to attorneys in the GS–9 thru GS–12 levels and promotions to be granted to wage analysts at the GS–7 thru GS–11 levels. The estimate includes the 1969 net additional costs of promotions granted in 1968. An allowance for savings due to turnover of 71%, based upon prior year's experience, is also provided.

*Pay increase costs, +$187,757*

The pay raise enacted by P.L. 90–206 covered 190 work days in 1968. To finance the full year cost for 1969 at the higher pay scales, an additional amount is required. The cost has been reduced in 1969 by $26,000 by means of increasing the projected lapse amount.

*Non-recurring extra day of pay for current year staff, +$19,181*

Fiscal year 1969 contains one more day of pay than 1968. The estimate reflects this adjustment.

*Personnel benefits, $404,933*

This estimate is based upon personnel compensation and represents the following benefits:

| | |
|---|---|
| Contributions to the CSC retirement fund | $339,574 |
| Employees' group life insurance | 21,113 |
| Employees' health benefits | 27,921 |
| FICA | 7,977 |
| Payments to Federal employees' compensation fund | 8,348 |
| | 404,933 |

*Travel and transportation of persons, $153,700*

The estimate provides for commercial transportation, per diem, mileage and other transportation costs for the Office's staff. In addition, the estimate provides for the payments of witnesses not employed by the government. Use of less than first class accommodations is reflected in the estimate. The 1969 estimate was reduced by 9,800 from the 1968 estimate as a cost reduction and management improvement objective.

| | 1968 | 1969 | Change |
|---|---|---|---|
| Number of travelers | 230 | 222 | −25 |
| Number of days traveled | 1,100 | 1,080 | −120 |
| Estimated cost | $163,500 | $153,700 | −$9,800 |

*Transportation of things*

This estimate provides for the transportation of publications, equipment to field installations and for costs related to the movement of household goods of employees changing duty stations.

*Rent, communications, and utilities*

This estimate provides for the following services in 1968 and 1969:

| | 1968 | 1969 | Change |
|---|---|---|---|
| FTS long-distance communications | $27,000 | $27,000 | ---------- |
| Telephone and related communications | 27,914 | 27,914 | ---------- |
| Official mail | 9,100 | 9,100 | ---------- |
| Rental of equipment | 9,000 | 9,000 | ---------- |
| Rental of space | −145 | 13,540 | +$13,395 |
| Working capital fund | 88,468 | 99,838 | +11,370 |
| Total | 161,337 | 186,102 | +24,765 |

*Printing and reproduction, $114,498*

This estimate provides for the printing of legal briefs, wage determinations, handbooks, digests, legislative histories and miscellaneous administrative printing requirements. The base estimate has been reduced $7,360 from the 1968 estimate as a cost reduction and management improvement objective. The estimate provides for the following services in 1968 and 1969:

| | 1968 | 1969 | Change |
|---|---|---|---|
| Briefs | $12,000 | $10,800 | −$1,200 |
| Digests and legislative histories | 10,000 | 9,000 | −1,000 |
| Other printing | 7,700 | 6,900 | −800 |
| Working capital fund | 92,158 | 87,798 | −4,360 |
| Total | 121,858 | 114,498 | −7,360 |

*Other services, $160,868*

This estimate provides for the following services of other agencies and private firms in 1968 and 1969:

| | 1968 | 1969 | Change |
|---|---|---|---|
| Maintenance and repair of equipment, furniture, and real property | $18,094 | $18,094 | ---------- |
| Security investigations | 4,150 | 4,150 | ---------- |
| Training expenses | 7,500 | 7,500 | ---------- |
| Court reporting services | 16,000 | 16,000 | ---------- |
| Investigations by WHPC on a reimburseable basis | 20,000 | 20,000 | ---------- |
| Working capital fund | 78,304 | 95,124 | +$16,820 |
| Total | 144,048 | 160,868 | +16,820 |

*Supplies and materials, $129,292*

This estimate provides for desk top supplies, duplicating supplies, stationery supplies, subscriptions to periodical legal reference materials and for subscriptions to a construction reporting service. Amounts budgeted for 1968 and 1969 are:

| | 1968 | 1969 | Change |
|---|---|---|---|
| Office supplies | $21,202 | $21,402 | +$200 |
| Subscriptions | 55,000 | 55,000 | ---------- |
| Working capital fund | 41,770 | 52,890 | 11,120 |
| Total | 117,972 | 129,292 | 11,320 |

*Equipment, $26,074*

This estimate provides for all office equipment, furniture and law library reference books. Equipment and furniture are budgeted at $14,774 for 1968 and $15,074 for 1969. The estimate for new positions anticipates maximum utilization of rehabilitated and surplus equipment. The equipment estimate has been reduced by $1,100 to reflect non-recurring equipment costs for new positions authorized in the 1968 estimate. Law library reference books are budgeted at $11,000.

SUMMARY OF NEW POSITIONS

| | Number | Grade | Amount |
|---|---|---|---|
| Activity 1(a). Litigation: | | | |
| Attorneys | 1 | GS–13 | $13,507 |
| Clerk-stenographer | 1 | GS–4 | 4,995 |
| Total | 2 | ---------- | 18,502 |
| Activity 1(b). Interpretations and opinions: | | | |
| Attorney | 1 | GS–13 | 13,507 |
| Clerk-stenographer | 1 | GS–4 | 4,995 |
| Total | 2 | ---------- | 18,502 |
| Activity 2. Field legal services: | | | |
| Attorneys | 3 | GS–13 | 40,521 |
| Do | 4 | GS–12 | 45,844 |
| Clerk-stenographers | 3 | GS–4 | 14,985 |
| Total | 10 | ---------- | 101,350 |
| Grand total | 14 | ---------- | 138,354 |

PREPARED STATEMENT

Senator HILL. Now, Mr. Donahue. We will be glad to have you proceed in your own way, sir.

Mr. DONAHUE. Thank you very much, Mr. Chairman.

I would like to submit a statement for the record and then proceed to summarize the changes which we request.

Senator HILL. All right, sir.

(The statement follows:)

It is a pleasure to once again appear before you to explain the Office of the Solicitor's budget estimate.

Our request of $6,370,000 for fiscal year 1969 represents an increase of $467,145 above the fiscal year 1968 revised level. The only part of this increase attributable to an expansion of program is to meet an increased workload in carrying out the 1966 amendments to the Fair Labor Standards Act ($155,200). A portion of this increase is offset by a program decrease ($1,100) to reflect non-recurring equipment costs for new positions granted in 1968. There are also additional decreases totaling $30,000 arising from improved management of resources as savings ($17,000 for travel and $13,000 for printing).

The request includes an increase of $343,045 for mandatory and financing items. The largest single item in this category is for additional pay increase costs which are not completely funded in 1968 ($211,275). The remaining mandatory items include: $53,860 for the 1969 costs of within grade promotions; $13,844 for the 1969 promotions under the career-ladder promotion plan; $10,845 for additional rental costs for space acquired in 1968 for only a portion of the year; $4,702 for a net increase in contributions to the Federal Employees' Compensation Fund; and, $20,619 to provide for one extra day of pay in 1969 for the current year staff. The financing item ($27,900) is to provide for the full cost of centralized services purchased from the Working Capital Fund.

As mentioned above, the budget estimate includes a program item to enable the Office of the Solicitor to meet its responsibilities for providing legal services related to the 1966 amendments to the Fair Labor Standards Act which become effective in 1969. Some preliminary work related to the new coverage has already begun. We are now at the point where it is necessary to broaden our legal assistance program to provide legal interpretative services and enforcement litigation services related to the amendments.

Our estimated staffing requirements for fiscal year 1969 are directly tied to the level of activity projected by other bureaus in the Department. The additional positions we are requesting are believed to be the minimum necessary to achieve a ratio of 25 litigated cases per 1,000 investigations performed by the Wage and Hour Division. Since the Wage and Hour Division has modified its investigation procedures, we do not believe that the historical ratio of 33 cases per 1,000 investigations will be maintained in 1969. Therefore, our estimate has been revised downward to reflect this assumption.

Fourteen new positions are requested for fiscal year 1969—nine attorneys and five clerk stenographers. The distribution of these positions within our organization is as follows: one attorney and one clerk stenographer in the Litigation Division; one attorney and one clerk stenographer in the Interpretations and Opinions Division; one attorney and one clerk stenographer in our Philadelphia field office; one attorney and one clerk stenographer in our Atlanta field office; one attorney in our Cleveland field office; one attorney and one clerk stenographer in our Kansas City field office; one attorney in our Dallas field office; one attorney in our San Francisco field office; one attorney in our Nashville field office.

One additional attorney and one additional secretarial position is requested to provide legal interpretations of the complex provisions of the 1966 amendments. The additional positions are not only necessary to assist our present staff in preparing interpretative bulletins and other formal legal opinions, but also to provide timely responses to the multitude of questions and inquiries raising legal problems from employers and employees affected by additions or changes to coverage, from trade associations in newly covered industries, from members of Congress, labor organizations and the general public.

The remaining positions will provide litigation services supporting the Wage and Hour Division's enforcement program. One of the attorney positions and one of the secretarial positions will be located in Washington to serve as a coordina-

tor between headquarters and the field offices in litigation activities related to the amendments. The balance of the positions will be located in the Solicitor's field offices. Field offices will assist the Wage and Hour Division in the development of enforcement cases for possible litigation. In addition, the offices will provide at the regional level similar legal advisory services as performed in the Interpretations activity at the national level, including answers to legal inquiries from newly covered employees and newly involved employers, and assistance to field officials of the Department of Labor.

BUDGET REQUEST

Mr. DONAHUE. This year we are requesting $6,370,000 for the Solicitor's Office. This is an increase over last year of a total amount of $467,145.

Now most of this is for mandatory increases. They are summarized in my statement.

Senator HILL. Most of this is mandatory, is it not?

Mr. DONAHUE. Yes, sir.

Senator HILL. In other words, you have no discretion in the matter?

Mr. DONAHUE. We don't have very much. We are not asking for anything except that which is required in effect by law.

I might point out, of course, that some of it, while called mandatory, such as ladder increases, is a policy of the office rather than something that is absolutely required, for example.

AMENDMENTS TO WAGE AND HOUR ACT

But the other amounts are mandatory with one major exception, and that is in regard to the $155,200 for carrying out the 1966 amendments to the Wage and Hour Act.

Now translating that into terms of people, it means 14 positions and the support for them. There are five clerical positions and nine attorneys' positions. The attorneys will be located primarily in the field because that is primarily where the bulk of the work is done, mainly in enforcing the Wage and Hour Act and the Fair Labor Standards Act.

Two of the attorneys will be here in Washington, one in litigation work and the other one in opinions and interpretations.

The regional offices would receive one additional attorney with the exception of New York, Boston, Chicago, and San Juan, Puerto Rico.

The increase is based upon an estimated increase in the workload due to investigations made by the Wage and Hour Public Contracts Divisions in increased enforcement of that statute due to the 1966 amendments.

We based them, as you can see in the statement, on an estimate of 25 litigated cases per 1,000 investigations made.

We believe that this is a reasonably modest increase in view of the increased coverage of the Wage-Hour Act, in particular, as has been pointed out to you very effectively by Clarence Lundquist, the administrator of the statute.

I will be glad, Mr. Chairman, to answer any questions you may have.

Senator HILL. You have quite an increase due to those six amendments, don't you?

Mr. DONAHUE. We have had and will continue to have substantial increases. So far, we have not increased our staffs as a result of the amendments. We feel the need to do this at the present time.

Senator HILL. You are not asking for any very great increase, are you?

Mr. DONAHUE. No, sir, I would not say so.

### ATTORNEYS REQUIRED IN RELATION TO SERVICES RENDERED

Senator HILL. Has New York City gotten so small it does not need additional personnel?

Mr. DONAHUE. No, sir. It is a high-wage area, Mr. Chairman, in which we don't detect as many violations of the act as perhaps in some other parts of the country.

Nashville—we feel a need there. San Francisco and Los Angeles—we feel a need there. In the Birmingham and Atlanta offices we are asking for an increase.

Senator HILL. Do you think this increase will take care of the situation for the time being, anyway?

Mr. DONAHUE. That is correct.

It is sometimes problematical as to how many attorneys you actually need in relation to the legal services which we render.

I have always been just a little bit skeptical as to how many additional lawyers you need, having in mind that there are all sorts of ways to give legal advice and opinions entirely aside from litigating cases. Sometimes a telephone call will do.

I certainly try to encourage that as much as possible rather than writing a long memorandum which is repetitious of those which have been frequently written before and serve no really useful purpose.

When all an administrator usually wants is yes or no, can I do it, and how can I get it done?

Senator HILL. You get a good many requests, don't you?

Mr. DONAHUE. Yes, we do. They are summarized in here by numbers of opinions rendered, for whatever advice and use that is to the committee.

### REGRET OVER SENATOR HILL'S RETIREMENT

Senator HILL. Is there anything you gentlemen would like to add?

Mr. DONAHUE. This is Mr. Lafranchise, our administrative officer, Mr. Chairman, and Mr. Uber, his assistant for budgetary work.

Mr. LAFRANCHISE. I would like to say it has been a pleasure over the last 3 years I have appeared before you, Mr. Chairman.

Senator HILL. Thank you. I am glad to have you gentlemen before us.

Mr. DONAHUE. I would like to say I am sorry you are leaving the Senate. I have worked with you for years and years.

Senator HILL. We have worked on many things, have we not?

Mr. DONAHUE. Yes, we have. It is a real loss to the Senate, a loss to the Department of Labor and to the Government that you will no longer be here.

Senator HILL. Thank you. It is mightly kind of you.

Mr. DONAHUE. It is sincerely felt, I tell you.

Senator HILL. I will miss you because you and I have worked on many matters.

Mr. DONAHUE. Yes, we have.

Senator HILL. I want to thank you very, very much.

Mr. DONAHUE. Thank you, sir.

## Office of the Secretary

STATEMENT OF LEO R. WERTS, ASSISTANT SECRETARY FOR ADMINISTRATION

ACCOMPANIED BY:

TOM KOUZES, DIRECTOR, OFFICE OF FINANCIAL MANAGEMENT AND AUDIT

CHARLES D. CARLSON, DIRECTOR, OFFICE OF MANAGEMENT SERVICES

RICHARD E. MILLER, DIRECTOR, OFFICE OF PROGRAM AND BUDGET REVIEW

### Appropriation Estimate

"Office of the Secretary, Salaries and Expenses

"For expenses necessary for the Office of the Secretary of Labor [$4,388,000] *$5,128,000*, together with not to exceed $538,000 to be derived from the Employment Security Administration account, Unemployment Trust Fund."

AMOUNTS AVAILABLE FOR OBLIGATION

| | 1968 | 1969 |
|---|---|---|
| Appropriation or estimate[1] | $4,926,000 | [1] $5,666,000 |
| Amount reserved under H.J. Res. 888 (Public Law 90-218) | −103,000 | |
| Amount of reserve applied to increased pay costs | 103,000 | |
| Proposed transfer from "Office of Manpower Administrator, salaries and expenses" for pay increases (Public Law 90-206 effective Oct. 8, 1967) | 45,000 | |
| Comparative transfer to Wage and Labor Standards Administration | −247,970 | |
| Nonrecurring rental costs transferred to GSA | −2,855 | |
| Appropriation or estimate, revised | 4,720,175 | 5,666,000 |

[1] Includes $538,000 to be derived from the Employment Security Administration account, "Unemployment trust fund."

OBLIGATIONS BY ACTIVITY

| Description | Appropriation revised, 1968 | | Estimate, 1969 | | 1969 change | |
|---|---|---|---|---|---|---|
| | Position | Amount | Position | Amount | Position | Amount |
| 1. Executive direction | 49 | $985,430 | 49 | $1,023,000 | ---- | +$37,570 |
| 2. Office of Information | 22 | 326,100 | 22 | 336,800 | ---- | +10,700 |
| 3. Office of Assistant Secretary for Administration: | | | | | | |
| a. Immediate Office | 5 | 127,545 | 5 | 131,400 | ---- | +3,855 |
| b. Office of Management Services | 6 | 82,500 | 6 | 86,900 | ---- | +4,400 |
| c. Office of Financial Systems and Audit | 67 | 966,200 | 114 | 1,767,400 | +47 | +801,200 |
| d. Personnel operations | 78 | 1,111,500 | 78 | 1,154,500 | ---- | +43,000 |
| e. Library | 36 | 367,600 | 36 | 380,800 | ---- | +13,200 |
| f. Office of Organization and Management | 16 | 240,400 | 16 | 246,900 | ---- | +6,500 |
| g. Office of Program and Budget Review | 22 | 321,700 | 22 | 338,400 | ---- | +16,700 |
| h. Field administration | 19 | 191,200 | 19 | 199,900 | ---- | +8,700 |
| Total obligations | 320 | 4,720,175 | 367 | 5,666,000 | +47 | +945,825 |

OBLIGATIONS BY OBJECT

| | Appropriation Revised, 1968 | Estimate, 1969 | 1969 change |
|---|---|---|---|
| Total number of permanent positions | 320 | 367 | +47 |
| Positions other than permanent | 7 | 7 | ---- |
| Average number of all employees | 295 | 347 | +52 |
| 11 Personnel compensation | $3,493,045 | $4,149,000 | +$655,955 |
| 12 Personnel benefits | 257,420 | 306,487 | +49,067 |
| 21 Travel and transportation of persons | 195,780 | 246,200 | +50,420 |
| 22 Transportation of things | 9,700 | 26,700 | +17,000 |
| 23 Rent, communications, and utilities | 146,861 | 196,215 | +49,354 |
| 24 Printing and reproduction | 203,464 | 236,808 | +33,344 |
| 25 Other services | 304,924 | 358,640 | +53,716 |
| 26 Supplies and materials | 54,831 | 64,390 | +9,559 |
| 31 Equipment | 54,150 | 81,560 | +27,410 |
| Total obligations | 4,720,175 | 5,666,000 | +945,825 |
| Working capital fund items included above | (354,170) | (471,070) | (+116,900) |

SUMMARY OF CHANGES

| | Direct appropriation | | Trust fund | | Total available | |
|---|---|---|---|---|---|---|
| | Positions | Amount | Positions | Amount | Positions | Amount |
| 1968 enacted appropriation | 310 | $4,388,000 | 24 | $538,000 | 334 | $4,926,000 |
| Amount reserved under H.J. Res. 888 (Public Law 90-218) | | −103,000 | | | | −103,000 |
| Amount of reserve applied to increased pay costs | | 103,000 | | | | 103,000 |
| Proposed transfer from "Office of Manpower Administrator, salaries and expenses," for pay increases (Public Law 90-206 effective Oct. 8, 1967) | | 45,000 | | | | 45,000 |
| Comparative transfer to Wage and Labor Standards Administration | −14 | −247,970 | | | −14 | −247,970 |
| Nonrecurring rental costs transferred to GSA | | −2,855 | | | | −2,855 |
| 1968 appropriation, revised | 296 | 4,182,175 | 24 | 538,000 | 320 | 4,720,175 |
| 1969 estimate | 343 | 5,128,000 | 24 | 538,000 | 367 | 5,666,000 |
| Total change | −47 | +945,825 | | | +47 | +945,825 |
| Mandatory items: | | | | | | |
| Increases: | | | | | | |
| Net additional pay increase costs not completely funded in 1968 | | | | | | +117,112 |
| Net additional cost of within-grade promotions effective for part year in 1968 | | | | | | +9,005 |
| To provide for 1 extra day of pay in 1969 for current year staff | | | | | | +14,700 |
| Total, mandatory items | | | | | | +140,817 |
| Financing Items: To provide for full cost of centralized services purchased from the working capital fund | | | | | | +54,300 |
| Program items: | | | | | | |
| Increases: | | | | | | |
| To provide for the full-year cost of new positions which were financed for part year in 1968 | | | | | | +23,000 |
| To provide the Division of Audit with additional staff and funds to speed up and increase the number of audits of contracts under the Manpower Development and Training Act and the work training programs ($457,400 personnel costs; $197,600 nonlabor) | | | | | +40 | +655,000 |
| To provide for the establishment of required accounting systems, including cost accounting systems at all levels throughout the Department and its constituent organizations in accordance with the Budget and Procedures Act of 1950, as amended ($94,905 personnel costs; $26,295 nonlabor) | | | | | +7 | +121,000 |
| Subtotal, increases | | | | | +47 | +799,000 |
| Decreases: | | | | | | |
| Nonrecurring equipment costs for new positions in 1968 | | | | | | −8,250 |
| Management improvement and cost reductions: | | | | | | |
| In travel | | | | | | −19,578 |
| In printing | | | | | | −20,464 |
| Subtotal, decreases | | | | | | −48,292 |
| Subtotal, program items | | | | | +47 | +750,708 |
| Total change | | | | | +47 | +945,825 |

## MANDATORY AND FINANCING CHANGES BY ACTIVITY

| Type of change | Activity 1 | | Activity 2 | | Activity 3a | | Activity 3b | | Activity 3c | | Activity 3d | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | Positions | Amount | Positions | Amount | Positions | Amount | Positions | Amount | Positions | Amount | Positions | Amount |
| Mandatory items: | | | | | | | | | | | | |
| Net additional pay increase costs | | $22,340 | | $7,950 | | $2,850 | | $2,945 | | $24,880 | | $26,668 |
| Net additional cost of within-grade promotions effective for part year in 1968 | | 1,150 | | 1,510 | | 22 | | 284 | | | | 3,008 |
| 1 extra day of pay in 1969 for current year staff | | 3,100 | | 990 | | 313 | | 276 | | 3,100 | | 3,302 |
| Subtotal, mandatory items | | 26,590 | | 10,450 | | 3,185 | | 3,505 | | 27,980 | | 32,978 |
| Financing items: Cost of centralized services | | 8,330 | | 3,750 | | 830 | | 995 | | 11,420 | | 13,240 |
| Total | | 34,920 | | 14,100 | | 4,015 | | 4,500 | | 39,400 | | 46,218 |

| Type of change | Activity 3e | | Activity 3f | | Activity 3g | | Activity 3h | | Activity total | |
|---|---|---|---|---|---|---|---|---|---|---|
| | Positions | Amount | Positions | Amount | Positions | Amount | Positions | Amount | Positions | Amount |
| Mandatory items: | | | | | | | | | | |
| Net additional pay increase costs | | $9,475 | | $6,409 | | $8,600 | | $4,995 | | $117,112 |
| Net additional cost of within-grade promotions effective for part year in 1968 | | 571 | | 1,230 | | 680 | | 550 | | 9,005 |
| 1 extra day of pay in 1969 for current year staff | | 1,129 | | 820 | | 1,070 | | 600 | | 14,700 |
| Subtotal, mandatory items | | 11,175 | | 8,459 | | 10,350 | | 6,145 | | 140,817 |
| Financing items: Cost of centralized services | | 6,075 | | 2,755 | | 3,750 | | 3,155 | | 54,300 |
| Total | | 17,250 | | 11,214 | | 14,100 | | 9,300 | | 195,117 |

*Mandatory and financing changes for 1969*

MANDATORY ITEMS

| | |
|---|---|
| Increases: To provide for full-year costs of pay increases effective Oct. 8, 1967, and to provide full funding of part-year costs | $117,112 |
| Within-grade promotion costs: 1969 net additional cost of within-grade promotions effective for part-year in 1968 | 16,654 |
| Personnel compensation | 16,052 |
| Deduct lapse | —560 |
| Personnel benefits | 1,162 |
| Net cost | 16,654 |
| Absorption of a portion of above increases | —7,649 |
| Adjusted net additional cost of within-grade promotions effective for part-year in 1968 | 9,005 |
| Net cost of within-grade promotions becoming effective during 1969 | 29,651 |
| Personnel compensation | 28,813 |
| Deduct lapse | —1,231 |
| Personnel benefits | 2,069 |
| Net cost | 29,651 |
| Absorption of above increases | —29,651 |
| To provide for 1 extra day of pay in 1969 for current year staff | 14,700 |
| Total, mandatory items | +140,817 |

FINANCING ITEMS

| | |
|---|---|
| Amount originally in base budget | 354,170 |
| Amount currently required in base budget | 408,470 |
| Changed financing required | +54,300 |

NOTE.—Changes in fees charged for centralized services (such as visual exhibits or reproduction) and changes in anticipated services rendered by the working capital fund require adjustments to funds provided in the base budget.

## PROGRAM CHANGES BY ACTIVITY

| Object classification | Activity No. 1 | | Activity No. 2 | | Activity No. 3a | | Activity No. 3b | | Activity No. 3c | |
|---|---|---|---|---|---|---|---|---|---|---|
| | Positions | Amount | Positions | Amount | Positions | Amount | Positions | Amount | Positions | Amount |
| 11 Personnel compensation | | $14,790 | | | | | | | 47 | $513,505 |
| 12 Personnel benefits | | 1,110 | | | | | | | | 38,600 |
| 21 Travel and transportation of persons | | −4,400 | | −$600 | | −$60 | | | | 58,200 |
| 22 Transportation of things | | | | | | | | | | 17,000 |
| 23 Rent, communications, and utilities | | | | | | | | | | 42,945 |
| 24 Printing and reproduction | | −3,600 | | −2,900 | | −100 | | −$100 | | 23,500 |
| 25 Other services | | | | | | | | | | 26,750 |
| 26 Supplies and materials | | | | | | | | | | 5,640 |
| 31 Equipment | | −5,250 | | | | | | | | 35,660 |
| Total | | 2,650 | | −3,500 | | −160 | | −100 | +47 | +761,800 |

| Object classification | Activity No. 3d | | Activity No. 3e | | Activity No. 3f | | Activity No. 3g | | Activity No. 3h | | Total | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | Positions | Amount | Positions | Amount | Positions | Amount | Positions | Amount | Positions | Amount | Positions | Amount |
| 11 Personnel compensation | | | | | | | | $6,610 | | | 47 | $534,905 |
| 12 Personnel benefits | | | | | | | | 490 | | | | 40,200 |
| 21 Travel and transportation of persons | | −$1,516 | | −$50 | | −$250 | | −300 | | −$600 | | 50,424 |
| 22 Transportation of things | | | | | | | | | | | | 17,000 |
| 23 Rent, communications, and utlities | | | | | | | | | | | | 42,945 |
| 24 Printing and reproduction | | −1,702 | | −4,000 | | −4,464 | | −1,200 | | | | 5,434 |
| 25 Other services | | | | | | | | | | | | 26,750 |
| 26 Supplies and materials | | | | | | | | | | | | 5,640 |
| 31 Equipment | | | | | | | | −3,000 | | | | 27,410 |
| Total | | −3,218 | | −4,050 | | −4,714 | | 2,600 | | −600 | +47 | +750,708 |

*Activity 1. Executive direction*

| | |
|---|---|
| 1968 (positions, 49) | $985,430 |
| 1969 (positions, 49) | 1,023,000 |

NARRATIVE DESCRIPTION OF PROGRAM

This activity covers the executive functions of the top staff involved in the formulation of governmental policy in the field of labor and manpower and in the overall direction of all programs and functions assigned to the Department.

Included here are provisions for the Secretary and his staff, the Under Secretary and his staff, the Assistant Secretary for Labor-Management Relations, the Assistant Secretary for Manpower, the Office of Policy Planning and Research, and the Office of Legislative Liaison.

Each Assistant Secretary financed by this appropriation has a small support staff to assist him and his program managers in policy formulation, review and analysis, and administration of the program operations functionally assigned him. In addition, there is the Office of Policy Planning and Research, which has over-all responsibility for providing direction in terms of the Department's policy objectives, for review of new proposals coming to the Secretary from various sources, and for exploratory studies looking toward ways to meet emerging problems and developing opportunities within the area of the Department's responsibility.

*Changes for 1969*

| | |
|---|---|
| Mandatory changes amount to | $26,590 |
| Financing changes amount to | 8,330 |
| Program changes amount to | 2,650 |

Program changes reflect an increase of $15,900 to achieve full average employment of the 7 new positions allowed the Office of Policy Planning and Research for part year in 1968 offset by maangement improvement reductions of $4,400 in travel; $3,600 in printing costs; and a $5,250 reduction for non-recurring equipment costs for new positions in 1968.

*Office of Legislative Liaison*

| | |
|---|---|
| 1968 (positions, 5) | $99,720 |
| 1969 (positions, 5) | 102,700 |

This Office coordinates, analyzes, and supervises all legislative activities of the Department and is charged with maintaining an amicable working relationship with the Congress. Each year as assessment is made of the factors that will affect the scheduling and passage of the Department's part of the Administration's legislative program. This involves consulting with interested citizen's groups, ascertaining the situation in Congress, and coordinating the Department's program with the White House and other Departments. The Office assists in the preparation of the legislative program and is responsible for its presentation to Congress and continuing work for its successful enactment.

*In 1967*, accomplishments included making approximately 10,000 advance notifications to Members of Congress of projects such as Manpower Development and Training Act, Neighborhood Youth Corps, Nelson-Scheuer, Kennedy-Javits. Handling an average of 1,000 telephone inquiries a week from Members of Congress, committees and staff. Handling approximately 3,850 written inquiries for information from Congress. Arranging for Congressional appearances by the Secretary and other officials of the Department of Labor. Handling the Department's legislative responsibilities with regard to following major pieces of legislation: The Social Security Act of 1967 (the work-incentive program), the Economic Opportunity Act of 1967 (youth and adult work programs), proposed Employment Service Act, the Age Discrimination Act of 1967, and many minor legislative problems.

*In 1968*, it is planned to continue the above activities, at an increasing level.

Continue to discharge the legislative responsibility in connection with legislation proposed in the President's Budget Message, the State of the Union message and others.

*In 1969*, it is planned to continue the 1968 type of activities.

*Changes for 1969*

| | |
|---|---|
| Mandatory changes amount to | $2,650 |
| Financing changes amount to | 830 |
| Program changes amount to | −500 |

Program changes reflect management improvement cost reduction of $200 in travel and $300 in printing cost.

*Office of Policy Planning and Research*

| | |
|---|---|
| 1968 (positions, 15) | $258,270 |
| 1969 (positions, 15) | 278,000 |

The basic responsibilities of the Office of Policy Planning and Research are (a) to assure that the Department's policies and programs are adequate to solve the emerging social and economic problems that are within the responsibility of the Secretary of Labor and (b) to assure that a research program is conducted in a manner which will provide the knowledge necessary for identifying the problems, understanding their causes, and finding solutions. Policy planning and research are linked together because of the dependence of policy development on the results of research and the dependence of research on knowledge of what policy officials consider significant in the array of social and economic relationships.

*In 1967*, the Office of Policy Planning and Research completed a major study of employment conditions in the slums of major cities which pointed to the need for more concentration of manpower and other programs in such areas. It provided staff support to the Secretary in developing policy with respect to questions of military draft and deferment, urban and rural population and economic balance, the relationship between urban tension and employment conditions, the relationship of housing and transportation conditions to employment problems. The Office participated with the Bureau of Labor Statistics in the development of new research methods to investigate slum employment conditions.

*In 1968*, it is planned to conduct studies of the seasonality in employment in the construction industry, the transition of youth from school to work, the provision of more adequate employment opportunities for handicapped persons, the employment and related problems of migrant farm workers.

*In 1969*, it is planned to conduct or initiate studies in the following areas: additional methods to involve private industry in the employment and training of disadvantaged workers, the quality of work and job satisfaction, the policies and practices of business and industry related to the employment of youth, methods of assisting low-wage industries.

*Changes for 1969*

| | |
|---|---|
| Mandatory changes amount to | $8,295 |
| Financing changes amount to | 2,585 |
| Program changes amount to | 8,850 |

Program changes reflect an increase of $15,900 to achieve full average employment of the 7 new positions allowed this office for part year in 1968 offset by management improvement cost reductions of $600 in travel; $1,200 in printing; and $5,250 non-recurring equipment costs for new positions in 1968.

*Activity 2. Office of Information*

| | |
|---|---|
| 1968 (positions, 22) | $326,100 |
| 1969 (positions, 22) | 336,800 |

NARRATIVE DESCRIPTION OF PROGRAM

This program provides information services for the Department and has the responsibility for coordinating all work in this area. Because the Department's programs are of particular interest to the business, labor and academic communities, as well as the great majority of the working population, there is a constant need for presenting information on these activities in a clear and useful manner. In this respect, this office is the principal link between the Department and the public, and it keeps the public informed on the facts gathered, the laws administered, and the services performed by the Department, by preparing and issuing

news releases, coordinating department relations with public information media, answering inquiries, and compiling publications of Department-wide significance.

*In 1967*, accomplishments were to:

1. Help enlist a greater public understanding of manpower problems and programs. News of national economic developments was delivered and explained to the public. Information of weekly and monthly price indices and employment figures were explained through news releases that averaged nearly two a day.

2. Explain the many programs of the Department at major union conventions, numerous smaller state and local conventions for educators, counselors, economists and special groups, trade shows and meetings through exhibits and other visual aids.

3. Conduct National promotional activities for the President's Youth Opportunity Campaign which (1) provided over a million summer jobs for young people—an increase over the previous year and (2) encouraged a countless number of youngsters to go back to school.

4. Assist in explaining manpower programs directed at ensuring employment and training for the unemployed with special emphasis on the hard core unemployed in the major slum areas.

5. Develop and promote the National Campaign for the President's Veterans Employment Program through literature, visual aids and recorded announcements so that each returning Armed Forces veteran would be provided with maximum assistance in obtaining useful, rewarding employment.

Produced and distributed a special film for television use throughout the nation and another for the Armed Forces overseas television networks informing servicemen of the job assistance available to them with a special track reproduction sent to all Armed Forces overseas radio networks.

Special recordings by nationally known celebrities were made and distributed to all major radio networks and special television spots were produced for network distribution to urge employers to hire returning veterans.

6. Working in concert with the Advertising Council, produced promotional materials which included nationally distributed television films and public service advertising material of a calibre to be acclaimed in the public service field.

*In 1968*, it is planned to:

1. Establish a unit in this office to facilitate the availability of data for the Secretary's speaking engagements, press conferences, and other public appearances. This to include re-grouping of current files on unions and programs of the Department of Labor and other government agencies according to geographical area, and organizing important historical, legislative and biographical material for immediate use.

2. Increase promotional work in the President's Veterans Employment Program using both written and visual material.

3. Continuance of the promotional activities in the President's Youth Opportunity Campaign with greater effort made to encourage prospective employers to give summer jobs to young people in major slum areas.

*In 1969*, it is planned to continue informational activities at about the 1968 level.

*Changes for 1969*

| | |
|---|---|
| Mandatory changes amount to | $10,450 |
| Financing changes amount to | 3,750 |
| Program changes amount to | 3,500 |

Program changes reflect management improvement cost reductions of $600 in travel and $2,900 in printing costs.

*Activity 3. Office of the Assistant Secretary for Administration*

| | |
|---|---|
| 1968 (positions, 249) | $3,408,645 |
| 1969 (positions, 296) | 4,306,200 |

NARRATIVE DESCRIPTION OF PROGRAM

This activity embraces top level Departmental planning, evaluation and coordination of all program operations and management activities. The components are these:

(*a*) *Immediate Office*

| | |
|---|---|
| 1968 (positions, 5) | $127,545 |
| 1969 (positions, 5) | 131,400 |

The Assistant Secretary for Administration is the principal administrative official of the Department, responsible for providing the full range of administrative support for departmental activities and for creating the capability to effectively and economically administer the Department's increasingly expanding programs. In this capacity he directs the activities of budgetary and financial management, personnel management, program analysis and evaluation, organization and administrative management, administrative services and the Department of Labor Library. All major relationships outside the Department on administrative and management matters are developed and maintained by this office, which also coordinates contacts with the Bureau of the Budget and the Congress, except for those involving substantive legislation.

*Changes for 1969*

| | |
|---|---|
| Mandatory changes amount to | $3,185 |
| Financing changes amount to | 830 |
| Program changes amount to | 160 |

Program changes reflect Management Improvement cost reductions of $60 in travel and $100 in printing costs.

*(b) Office of Management Services*

| | |
|---|---|
| 1968 (positions 6) | $82,500 |
| 1969 (positions 6) | 86,900 |

The Office of Management Services serves all organizational units financed by the appropriations for the Office of the Secretary, the Working Capital Fund, and the Office of Federal Contract Compliance (Equal Employment Opportunity). This includes: the Immediate Offices of the Secretary; Under Secretary; and Assistant Secretaries for Labor-Management Relations and Manpower; Assistant Secretary for Administration; Policy Planning and Research; Legislative Liaison; Mobilization Policy and Coordination; Information, Publications and Reports; and Federal Contract Compliance (Equal Employment Opportunity). The Office assists the units in the Office of the Secretary to (1) plan, (2) determine major courses of action to achieve goals, (3) determine budgets, (4) execute program activities, and (5) review and appraise accomplishments. The Office also provides certain general administrative support services.

*In 1967* accomplishments included the preparation and issuance of operating budgets, including staffing patterns and quarterly targets for all organizational units of the Office of the Secretary, including the Working Capital Fund.

*In 1968* it is planned to prepare and issue operating budgets, including staffing patterns and quarterly targets for all organizational units of the Office of the Secretary, including the Working Capital Fund.

*In 1969* it is planned to prepare and issue operating budgets, including staffing patterns and quarterly targets for all organizational units of the Office of the Secretary including the Working Capital Fund.

*Changes for 1969*

| | |
|---|---|
| Mandatory changes amount to | $3,505 |
| Financing changes amount to | 995 |
| Program changes amount to | −100 |

Program changes reflect management improvement cost reductions of $100 in printing costs.

*(c) Office of financial management and audit*

| | |
|---|---|
| 1968 (positions, 67) | $966,200 |
| 1969 (positions, 114) | 1,767,400 |

*Division of audit*

| | |
|---|---|
| 1968 (positions, 59) | $859,100 |
| 1969 (positions, 99) | 1,535,400 |

The Secretary of Labor is responsible for assuring the proper utilization and control of funds for all Department of Labor programs. To provide such assurance, staff capability had been available within several components of the Department for the auditing of individual or closely related programs. However, for some programs there had been no provision for auditing at any level of the Department. Recognizing this situation, the Secretary took action to establish an impartial centralized contract and financial audit function within the Office of the Assistant Secretary for Administration. This transfer and consolidation took place early in fiscal year 1967 and resulted in the establishment of the Division of Audit with specific responsibility for the conduct of the Department's financial and contract audit program.

*In 1967*, accomplishments involved the Reporting of the operational deficiencies concerning the conduct of manpower training programs by contractors. Typical findings are these:

Contractor's performance substantially less than required by the contract.

Contractor's staff did not meet the minimum experience or educational qualifications specified in the contract.

Unauthorized salary increases were paid to the contractor's staff.

Trainees did not receive the prescribed personal counseling.

Ineligible trainees were enrolled and continued in training after ineligibility identified.

Contractor failed to deduct withholding tax and FICA or remit the same to the Internal Revenue Service.

Contractor did not maintain adequate pay records or send Withholding Statements to trainees.

Contracts were extended without adequate consideration of the added cost.

Contractors did not maintain an accounting system that classified costs by either the individual contracts, programs, or contract cost category.

Also identified was the need for strengthened financial management in State employment security agencies.

The finding and recommendations regarding the above items were reported to the Manpower Administrator and provided him the basis for initiating corrective action on the specific contracts or activities involved and preventive procedures for future actions.

The following statistics compare actual dollars audited to dollars of audit exceptions reported during fiscal year 1967:

| | Amount audited | Audit [1] exceptions | Percent exceptions represent percent of total amount audited |
|---|---|---|---|
| Audits performed by Division of Audit: | | | |
| Neighborhood Youth Corps | $36,744,698 | $2,056,923 | 5.6 |
| On-the-job training | 2,312,087 | 485,467 | 21.0 |
| Experimental and demonstration projects | 7,813,701 | 319,238 | 4.1 |
| State employment security agencies | 423,948,868 | 1,391,498 | .3 |
| Audits performed by others (which required review and evaluation): | | | |
| Audits by other Government agencies | 810,534 | 7,635 | .9 |
| Audits by public accountants | 12,446,215 | 264,388 | 2.1 |
| Total | 484,076,103 | 4,525,149 | .9 |

[1] Audit exceptions shown are as reported by auditors and do not reflect subsequent actions by contracting officers.

*In 1968*, it is planned to modify and test audit objectives. An Audit Guide for Bureau of Work and Training Programs Agreements has been published. This guide is for the use of licensed accountants and State auditors engaged in the examination of Neighborhood Youth Corps projects. A companion guide applicable to other manpower training programs is being prepared. The expanding use of licensed accountants and State auditors, as well as the increasing use of the audit capability of other federal agencies, will permit the Division to concentrate a significant portion of its staff on the examination of manpower training activities in the major metropolitan areas. The new audit concepts are presently being tested in Washington, D.C. and New York City.

Concurrently the Division has been performing examinations of specific contracts as heretofore, and has continued its audits of State employment security agencies.

Federal funds reflected in reports and findings of examinations and audits covering the period July 1–December 31, 1967, were as follows:

| | Amount audited | Audit[1] exceptions | Percent exceptions represent percent total amount audited |
|---|---|---|---|
| Audits performed by Division of Audit: | | | |
| Manpower training contracts | $25,640,796 | $1,585,883 | 6.3 |
| State employment security agencies | 205,500,000 | 403,919 | .2 |
| Audits performed by others (which require review and and evaluation): | | | |
| Audits by other Government agencies | 635,984 | 5,849 | .1 |
| Audits by public accountants | 28,336,252 | 782,738 | 2.8 |
| Total | 260,113,032 | 2,778,389 | 1.0 |

[1] Audit exceptions shown are as reported by auditors and do not reflect subsequent actions by contracting officers.

*Changes for 1969*

| | |
|---|---|
| Mandatory changes amount to | $24,610 |
| Financing changes amount to | $10,090 |
| Program changes amount to | $641,600 |
| Positions | 40 |

Program changes reflect an increase of 40 positions and $655,000 partially offset by management improvement reductions of $11,500 in travel and $1,900 in printing costs.

*Proposal:* To conduct audits on a more comprehensive basis than heretofore and to audit an additional 90 manpower training contracts in approximately 20 metropolitan areas; to review about 20% of the 4,800 audits expected to be performed primarily by licensed public accountants, but also by other Federal or State agencies; and to increase the emphasis given to internal audit activities of the Department.

*The Need:* The number of contracts audited in previous years is not a measure of the extent manpower training programs have been examined; the majority of these audits were of smaller sponsors and contractors. The audits of sponsors and contractors in the largest metropolitan areas have been limited to a review of the prime contractor's financial system and audit of its accounts. Because of staff limitations subsidiary contractors usually were not audited, nor were field reviews made to determine that funds were expended as contemplated in the agreement. Since the majority of sponsors and contractors are non-profit organizations almost wholly financed by Federal appropriations, cost disallowances resulting from administrative error cannot usually be recovered. In addition, significant administrative deficiences have usually been found to exist in successive contracts. As of this date, because of lack of sufficient staff it has not been possible to audit sponsors and contractors in these metropolitan areas in sufficient depth or in timely manner to permit Department of Labor management to initiate remedial action and minimize the unauthorized use of funds. Therefore, it is imperative that sufficient staff be made available to allow auditing to be performed during the course of contracts in order to facilitate timely improvements and other necessary actions.

Thus far, only very limited examinations have been conducted of Department of Labor operations, principally acounting operations. Internal audits of the Department's programs have not been made. Recent General Accounting Office audit findings on several Department of Labor activities have highlighted the need for the Department to substantially increase its capability for internal audit.

*The Program:* The audit needs of the Department of Labor can be most effectively met by: (1) utilizing licensed public accountants and State and Federal audit agencies for the examination of smaller sponsors and contractors; (2) assigning the Department of Labor audit staff to a comprehensive examination of the sponsors and contractors located in approximately 20 of the largest metropolitan areas, and the review of audits performed by licensed public account-

ants and State and Federal audit agencies. This will permit an intensive financial review of those sponsors and contractors responsible for manpower training in the ghettos. Audit will be made of related operations while contracts or agreements are in force. Administrative deficiencies can then be identified and corrective action initiated before such deficiencies become habitual. This preventative audit should improve the financial administration of the sponsors and contracts and substantially reduce the improper expenditure of Federal funds.

Beginning with fiscal year 1969 greater emphasis will be given to internal audit activities in order to provide managers with timely independent and objective internal appraisals of Department policies, management controls, procedures and practices. We feel that as a minimum an internal audit should be made of all Department of Labor activities at least once every three years. In critical areas, audits must be performed more frequently.

| | |
|---|---|
| Base: | |
| Positions | 59 |
| Man-years | 53.1 |
| Estimated cost | $859,100 |
| Additional cost: | |
| Positions | 40 |
| Man-years | 38.6 |
| Estimated cost | $655,000 |

*Division of Financial Systems and Procedures*

| | |
|---|---|
| 1968 (positions 8) | $107,100 |
| 1969 (positions 15) | 232,000 |

Under the provisions of the Budget and Accounting Procedures Act of 1950, Federal departments and agencies are required to institute accounting systems for all their programs. These systems must be in accord with standards and criteria issued by the General Accounting Office, and must be approved by the General Accounting Office. Although this legislation has been in effect for 18 years, the Department of Labor does not have all the requisite accounting systems either instituted or approved. The Department has been severely criticized for its slow rate of progress by both the General Accounting Office and the Congress through the House Government Operations Committee.

Until recent years various components of the Department maintained separate accounting systems and records for all funds. This is still the case for most program funds, although provision has been made for reporting on the status of all funds to the centralized accounting organization in the Office of the Assistant Secretary for Administration. Progress towards development and implementation of an integrated accounting system has been too long delayed.

*In 1967* accomplishments were: the payroll and appropriation accounting systems were revised to improve computer processing and accounting controls. Design work was started to computerize the Working Capital Fund and the property accounting systems.

The general ledger accounting system was established and integrated with the appropriation accounting system by utilizing automatic data processing equipment and procedures. New and revised changes were published in the Department's Manual of Administration and accounting instructions were also prepared for use in operations.

Voucher audit and related fiscal functions were decentralized to seven Regional Administrative Offices and a voucher audit handbook was prepared for use in reviewing and processing payments.

Work was started to review and redesign the accounting systems which support major programs within the Department. One of these, the Wage and Hour and Public Contracts Divisions' Restitution fund accounting system, was completed and submitted to the General Accounting Office for informal review.

*In 1968*, it is planned to: The property accounting system will be installed and the general ledger accounting system will be revised to integrate data from the property and cost accounting systems. The Working Capital Fund accounting system will be converted to a computer system and work will continue on the redesign and revisions of the program accounting systems.

Additional chapters and revisions will be completed for the Departmental Administration and Accounting Manuals to accommodate the new or revised accounting system procedures. Accounting manuals for contractor use will be

published for the Bureau of Work Training Program and the Manpower Development and Training Act Programs.

A contract was awarded to develop a Departmental cost accounting system and an accounting system for the Bureau of Employment Security Federal-State Employment Security Agencies.

The Statement of Accounting, Policies, Principles, and Standards has been completed and submitted to the General Accounting Office for review and approval.

*Changes for 1969*

| | |
|---|---|
| Mandatory changes amount to | $3,370 |
| Financing changes amount to | $1,330 |
| Program changes amount to | $120,200 |
| Positions | 7 |

Program changes reflect an increase of 7 positions and $121,000 offset by management improvement reductions of $300 in travel and $500 in printing costs.

*Proposal:* To complete the design, documentation and implementation of a Department-wide financial accounting and reporting system, including cost accounting, that will meet the standards, principles and criteria required by law and the General Accounting Office and that will satisfy the needs of internal management within the Department. This will require (1) monitoring the work of management/accounting firms in designing and installing accounting systems, and (2) developing additional capability within the Department to design, document, and install new accounting systems.

*The Need:* As part of its Financial Management Improvement Program the Department of Labor for the past few years had limited staff capability to accomplish, in the accounting systems area, what has turned out to be a significantly larger task than was initially envisioned. It is now imperative that our efforts be accelerated so the requisite accounting systems may be installed and operating at the earliest possible date, if we are to satisfy essential needs of management for meaningful financial information at all levels of the Department within any reasonable period of time.

In view of the general slow rate of progress, the President, Bureau of the Budget, General Accounting Office and Congressional committees are taking intense interest in what is being done throughout the Federal Government to satisfy both statutory and regulatory requirements for accounting systems at the earliest possible date. Consequently, all departments and agencies are facing the problem of competing for and retaining an already scarce supply of qualified systems accountants to perform the necessary work.

The Department has made commitments to the Bureau of the Budget, General Accounting Office and the interested Congressional committees that accounting systems for all its programs will be developed and in effect by December 31, 1968. Prior target dates have not been met for various reasons, including the fact that the extent of systems work involved was grossly underestimated and insufficient staff was available to perform the required activities. We have now reevaluated our needs and have determined that with presently authorized staff it would take at least three additional years to complete the necessary work.

| | |
|---|---|
| Base: | |
| Positions | 8 |
| Man-years | 7.2 |
| Estimated cost | $107,100 |
| Positions: | |
| Additional cost | 7 |
| Man-years | 6.7 |
| Estimated cost | $121,000 |

*(d) Personnel Operations*

| | |
|---|---|
| 1968 (positions 78) | $1,111,500 |
| 1969 (positions 78) | 1,154,500 |

The role of the departmental personnel organization is to assist in the effective management of the Department by aiding in proper staffing of its program activities and by providing services that will result in improved employee performance. This includes responsibility for overall guidance, review and evaluations of bureau personnel operations to insure their personnel program in continu-

ing to effectively support the Department's substantive programs. The constant demand for high-quality job candidates to man the Department's expanding activities is met by an intensive recruiting program for professional and clerical positions. Increased employee productivity is attained through job-related training designed to enhance individual capabilities and through a systematic program of employee utilization emphasizing improved placement and evaluation procedures. Assistance in the over-all management of the Department is provided through advisory services to supervisors, the maintenance of written performance requirements for all positions, and the establishment of personnel policies and standards which reflect the changing requirements of the Department's programs. This activity also covers a central personnel services function that provides Department-wide investigation services and furnishes the full range of personnel services to those organizations that are not large enough to efficiently maintain a personnel office of their own.

*In 1967*, accomplishments were:

*Departmental Personnel*

367 employees attended office practices training.
28 financial planning advisers were designated and trained in the bureaus.
120 employees received psychological counseling.
136 policies, standards and guides were issued.
20 reviews and evaluations of personnel management were made throughout the Department including personnel inspections, merit staffing reviews and others.
425 summer employees were hired, including 175 in connection with the President's Youth Opportunity Campaign.
35 management interns were recruited.
59 positions were evaluated and recommended to the CSC for grades 16, 17, and 18.
28 safety inspections were conducted.
2274 personnel actions were processed.
271 merit staffing actions were processed.
2503 interviews and staff assistance contacts were conducted.
1569 classification actions processed.
118 full field investigations closed.
144 national agency checks and inquiries closed.
982 name checks closed.

Principal activities of significance in FY 1967 included:

Negotiation of an agreement between the Department and the National Council of Field Labor Lodges.
Revisions in the personnel issuance system.
The inauguration of a mental health program.
The undertaking of a program of financial assistance to employees.
Implementation of various recommendations resulting from contracts or recommended changes in personnel processing and practices.
Completion of personnel management training program for managers and supervisors in Central Personnel Services.
Completed comprehensive retirement and turnover studies for International Labor Affairs, Bureau of Labor Standards and Women's Bureau.
Coordinated the Department's participation in Washington's first job fair under the concentrated Employment Program.
Completed the annual classification maintenance review of 1500 positions.

*In 1968*, it is planned to continue on-going activities. In addition the following are considered important:

Implementation of the new executive assignment system.
The program of planned personnel assistance to managers and supervisors.
A revision in the merit staffing plan for field positions.
Pilot studies relating to organizational development and performance evaluation.
Emphasis on employment opportunities for persons from disadvantaged backgrounds.
Improvements will be made in personnel processing.
A Supervisor's Handbook will be prepared.
Improvement of staffing services to bureaus and offices.

Develop and maintain a system of self-evaluation of organizational performance of CPS.

The training of managers and supervisors in their personnel management responsibilities.

Improvement of communications between Central Personnel Services and its client organizations and between their managers and supervisors and employees.

The processing of approximately 2200 personnel actions and 1700 classification actions, the conducting of 2900 interviews and planned personnel assistance contacts, the processing of 125 full field investigations and 1200 name checks, the training and counseling of 570 employees, and the conducting of 300 National agency checks and inquiries.

*In 1969*, it is planned to: In addition to on-going programs, the following activities are anticipated:

A substantial increase in the number of grievances which will require many more man-hours than in the past.

The installation of the integrated management form.

The further use of organizational development techniques.

The negotiation with Lodge 12 of the revised merit staffing plan for Washington, D.C. employees.

The development of a manpower planning system.

*Central personnel*

Will continue to provide comprehensive personnel management services to its client organizations. New emphasis will be placed on streamlining all aspects of processing papers; planned staff assistance to both headquarters and field establishments; employee management relations; orienting managers and supervisors in merit staffing and the most effective use of manpower resources through improved development of employees and career plan for each.

*Changes for 1969*

| | |
|---|---|
| Mandatory changes amount to | $32,978 |
| Financing changes amount to | 13,340 |
| Program changes amount to | —3,218 |

Program changes reflect management improvement reductions of $1,516 in travel and $1,702 in printing costs.

(*e*) *Library*

| | |
|---|---|
| 1968 (positions 36) | $367,600 |
| 1969 (positions 36) | 380,800 |

The Department's centralized library service maintains and makes available a specialized collection of research material in labor and related fields for use by the Department's staff and the public. This covers the full range of research library services; acquiring and cataloging new volumes; providing information and material in answer to requests; and issuing supplements and annotated bibliographies. The Library also approves all purchases of books, periodicals, newspapers and other publications for the Department.

*In 1967*, accomplishments were to answer 35,997 requests for information and material, circulate 87,836 books and periodicals, place 6,068 orders and requests for new material and catalogue 13,248 volumes. Fifty-two weekly accessions lists, and four subject bibliographies were issued.

*In 1968*, it is planned to answer 36,000 requests for information and material and circulate 88,100 books and periodicals, place 6,600 orders and requests and catalog 15,200 volumes. Fifty-two weekly accessions lists and three new subject bibliographies are to be issued plus updating of two other lists. A new service of recording and reporting research sponsored by the Department of Labor will be inaugurated in FY 1968.

*In 1969*, it is planned that 40,000 requests for information and material will be answered, 90,000 items circulated, 8,000 orders and requests will be placed, fifty-two weekly accessions lists and six subject bibliographies will be issued. The research reporting service will be maintained.

*Changes for 1969*

| | |
|---|---|
| Mandatory changes amount to | $11,175 |
| Financing changes amount to | 6,075 |
| Program changes amount to | —4,050 |

Program changes reflect management improvement cost reductions of $50 in travel and $4,000 in printing costs.

*(f) Office of Organization and Management*

| | |
|---|---|
| 1968 (positions 16) | $240,400 |
| 1969 (positions 16) | $246,900 |

This office is responsible for the review and improvement of the organization, management and cost reduction procedures of the Department. This involves the implementation of a management system which is designed to improve operational control in the Department by forecasting workloads and resource requirements against which the effectiveness of program activities can be measured. Further control is being achieved through the development and operation of a unified Department-wide automatic data processing program for use in the administrative processes. Improved utilization of manpower, funds and other resources is accomplished by special management surveys which pinpoint areas where better procedures can be used or which identify low priority programs whose resources can be diverted to workloads of higher priority. This Office is also responsible for coordinating activities in the areas of reports, forms, and records control, and for the development of cross-problem information and data systems.

*In 1967*, accomplishments were:

(*a*) Worked toward establishing a Department policy on management information and data systems.

(*b*) Assisted administrations and offices in conducting organization studies and developing and installing organization improvements.

(*c*) Participated in the extension of Department's management systems concepts to three State Employment Security agencies.

(*d*) Refined delegations of authority and assignments of responsibilities for operating manpower, labor-management relations, wage and labor standards, and research and statistics programs.

(*e*) Provided staff support and assistance in the establishment and continued operations of the Department's Management Committee which is responsible for guiding program planning, execution, evaluation, and coordination processes at Federal, State and local levels and among other Federal agencies.

*In 1968*, it is planned to: Place increased emphasis upon improvement of organizational structures and alignments; establishing systems and methods for identifying social and economic needs in the Department's area of responsibility that should be met; establishing management information systems that will apprise managers at all levels within the Department and participating State Employment Security Agencies of progress towards achieving goals and objectives; the identification of critical problems requiring prompt solution; and the identification of opportunities for increasing effectiveness and efficiency of program operation.

*In 1969*, it is planned to place emphasis upon establishment of a uniform data classification system; refining and extending the concepts of the Department's management system to field offices and State Employment Security Agencies; coordination of manpower programs both inter-department and inter-agency with particular attention to local office plans of service, the concentrated employment program, the cooperative area manpower planning system, and other planning activities; and providing organization and management guidance to operations at the Regional Office level with particular attention to the work and work context of the Regional Manpower Administration.

*Changes for 1969*

| | |
|---|---|
| Mandatory changes amount to | $8,459 |
| Financing changing amount to | 2,755 |
| Program changes amount to | —4,714 |

Program changes reflect management improvement reductions of $250 in travel and $4,464 in printing costs.

*(g) Office of Program and Budget Review*

| | |
|---|---|
| 1968 (positions, 22) | $321,700 |
| 1969 (positions, 22) | 338,400 |

To assure that plans, requests and performance are in accord with existing policy (or to recommend changes in policy where apparently needed) and represent an acceptable Departmental balance, this office conducts an integrated, continuing review and analysis of all budgets and programs for the Department. Arising from these efforts is a flow of comprehensive information for the use of top staff concerning progress, accomplishments and problems of Departmental programs in meeting goals and budgeted objectives.

The information provided is necessary for top management to have an adequate basis for determining whether programs are dealing effectively with social, economic and administrative problems. This requires that internal program reviews be conducted and that detailed analyses be made. As a result of these analyses, recommendations are made for improvements in programs and, as the Department undertakes additional program responsibilities, advice is given in establishing goals that will assist these new activities in effectively fulfilling their mission.

To insure that the budget function is operating effectively throughout the Department, this Office provides written instructions, technical assistance and training courses for the bureau budget staffs and other Department officials. It also effects the integration of budgetary procedures and objectives with the Department's management system to insure that they actively contribute to the Department's efforts in the areas of improved management effectiveness and cost reduction.

*In 1967*, accomplishments were to continue improvements in the effectiveness of the budget function throughout the Department by providing written instructions for all facets of budget preparation and execution, both formally and on *ad-hoc* basis necessitated by frequent changes in external policies and directives. Technical assistance was provided to budget staffs and other Department officials on a continuing basis, and a formal training course in budget preparation was conducted. In cooperation with the Office of Administrative Services, a course was conducted for clerical staff in proper preparation of budget material for printing. Principal efforts in the program review function were directed to the development of a responsive quarterly review and analysis reporting procedure to provide top management with an adequate basis for determining whether programs are dealing effectively with social, economic and administrative problems. This was the initial year for these reports and by the end of the year all administrations and offices were providing regular reports of their activities.

*In 1968*, it is planned to continue improvements in the quality of budgetary presentations and to adequately train and assist the staffs in their contributions to the Departmental budget. Emphasis will be placed on fully integrating budgeting and program evaluation. Two budget training courses will be conducted, and the Office will utilize trainees from the administrations and offices on the job for the purpose of benefitting the individuals and their employing organizations with knowledge of the responsibilities and operations of the office. Continued emphasis will be placed on (1) improving management effectiveness and cost reduction, (2) improving the quarterly review and analysis reports to increase their usefulness to top management, and (3) developing additional evaluation techniques and reporting procedures for program review.

*In 1969*, it is planned to continue the sort of efforts anticipated in 1968. In addition, the refinement of evaluation reporting in 1968 will lead to the development and installation of a continuous review and analysis system in 1969. The Secretary and top management will receive reports evaluating program operations and effectiveness on a continuing systematic basis instead of by quarterly reports.

*Changes for 1969*

| | |
|---|---|
| Mandatory changes amount to | $10,350 |
| Financing changes amount to | 3,750 |
| Program changes amount to | 2,600 |

Program changes reflect an increase of $7,100 to achieve full average employment of the 4 new positions allowed this office for part year in 1968, partially offset by management improvement reductions of $300 in travel; $1,200 in printing costs; and $3,000 non-recurring equipment costs for new positions in 1968.

(*h*) *Field administration*

| | |
|---|---|
| 1968 (positions, 19) | $191,200 |
| 1969 (positions, 19) | 199,900 |

The Field Administration provides administrative services to Regional Directors of all Bureaus in their respective regions.

Personnel functions involved include: recruitment for staffing of bureau positions; general orientation and training; advisors service on classification matters; employee counseling on improvement of skills and career development; maintenance of official personnel records and various other functions in the area of personnel administration.

These offices also audit and process travel and other vouchers; approve and process local procurement in accordance with internal bureau policies and procedures; maintain a comprehensive space procurement and management program; and provide centralized general services.

*In 1967* accomplishments were to further decentralized personnel administration functions to the Atlanta and Boston Regional Administrative Offices making a total of seven regional administrative offices performing personnel services for all field employees up to the journeyman level. The seven regional offices are located in Atlanta, Boston, Chicago, Dallas, Kansas City, New York and San Francisco. At the close of the fiscal year the seven regional administrative offices were maintaining personnel records and processing the actions for approximately 2,900 field employees at and below the journeyman level and were assisting managers in the administration of approximately 4,200 field personnel. The seven offices completed 5,912 personnel actions in Fiscal Year 1967 with a staff of 18 employees.

Quarterly orientation sessions for new employees were begun in all regional administrative office cities. Periodic training for all employees were scheduled in such areas as safe driving, first aid, better service to the public and improving oral and written communications. College recruitment was also significantly expanded particularly in the San Francisco, Dallas and Atlanta regions.

*In 1968*, it is planned to support a total field force of approximately 4,500 personnel and process some 6,500 personnel actions. These offices will continue to provide support to managers in the established personnel administrative functions, placing specific emphasis upon providing planned staff assistance to field managers and supervisors in order to improve personnel administration throughout the field. Special efforts will be required to handle contemplated field expansions of selected programs.

*In 1969*, it is expected that the Departmental field force will grow to some 4,800 positions requiring the processing of some 7,200 personnel actions in the field. In addition, classification and training responsibilities will be decentralized from the national headquarters offices to the field.

*Changes for 1969*

| | |
|---|---|
| Mandatory changes amount to | $6,145 |
| Financing changes amount to | 3,155 |
| Program changes amount to | —600 |

Program changes reflect management improvement reductions of $600 in travel.

DISTRIBUTION OF FIELD STAFF

| Supervising offices | 1968 | | | 1969 | | |
|---|---|---|---|---|---|---|
| | Professional | Clerical | Total | Professional | Clerical | Total |
| Albany, N.Y. | 1 | | 1 | 1 | | 1 |
| Atlanta, Ga. | 5 | 2 | 7 | 7 | 3 | 10 |
| Boston, Mass. | 3 | 1 | 4 | 3 | 1 | 4 |
| Chambersburg, Pa. | | 1 | 1 | | 1 | 1 |
| Chicago, Ill. | 4 | 3 | 7 | 5 | 4 | 9 |
| Cleveland, Ohio | 1 | | 1 | 3 | | 3 |
| Columbus, Ohio | 1 | | 1 | 1 | | 1 |
| Dallas, Tex. | 1 | 2 | 3 | 1 | 2 | 3 |
| Denver, Colo. | 1 | | 1 | 1 | | 1 |
| Des Moines, Iowa | 1 | | 1 | 1 | | 1 |
| Detroit, Mich. | | | | 2 | | 2 |
| Harrisburg, Pa. | 1 | | 1 | 1 | | 1 |
| Kansas City, Mo. | 1 | 1 | 2 | 1 | 1 | 2 |
| Los Angeles, Calif. | 1 | | 1 | 3 | | 3 |
| Little Rock, Ark. | 1 | | 1 | 2 | | 2 |
| Nashville, Tenn. | 1 | | 1 | 1 | | 1 |
| New York City, N.Y. | 4 | 3 | 7 | 5 | 4 | 9 |
| Oklahoma City, Okla. | 1 | | 1 | 1 | | 1 |
| Olympia, Wash. | 1 | | 1 | 1 | | 1 |
| Philadelphia, Pa. | | | | 3 | | 3 |
| Richmond, Va. | 1 | | 1 | 1 | | 1 |
| Sacramento, Calif. | 2 | | 2 | 2 | | 2 |
| San Francisco, Calif. | 3 | 3 | 6 | 4 | 4 | 8 |
| St. Louis, Mo. | | | | 2 | | 2 |
| Tallahassee, Fla. | 1 | | 1 | 1 | | 1 |
| Trenton, N.J. | 1 | | 1 | 1 | | 1 |
| Total field staff | 37 | 16 | 53 | 54 | 20 | 74 |

EXPLANATION OF ESTIMATE BY OBJECT

*Personnel compensation, $4,149,000*

The estimate will provide 367 full-time positions and 340 man-years of employment with 7 man-years of full-time equivalent intermittent employment for consultants and experts. Included is an increase of 47 full-time positions and $513,305 related to program expansion: $8,415 net mandatory costs for within-grade promotions on current staff; $98,960 pay increase costs; and $13,675 for an extra day of pay in 1969 on current staff.

*Personnel benefits, $306,487*

This estimate is based upon personnel compensation and includes $38,600 for new positions; $1,600 for full year cost of new positions financed for part year in 1968; $590 net mandatory costs on within-grade promotions for current year staff; $7,252 pay increase costs; and $1,025 for extra day of pay. The estimate will provide for the following:

| | |
|---|---|
| Civil Service Commission Retirement Fund | $266,644 |
| Health benefits | 19,341 |
| Life insurance | 16,762 |
| Federal Insurance Compensation Act | 3,740 |
| | 306,487 |

*Travel and transportation of persons, $246,200*

The estimate will provide the following per diem and transportation cost for 165 travelers, and an increase of $50,420 over the 1968 revised estimate.

| | 1968 | 1969 | Change |
|---|---|---|---|
| Number of travelers | 125 | 165 | +40 |
| Number of days traveled | 4,000 | 4,900 | +900 |
| Estimated cost | $195,780 | $246,200 | +$50,420 |

*Transportation of things, $26,700*

The estimate includes an increase of $17,000 over fiscal year 1968 and will provide for increased allowances for relocation expenses of transferred employees. (P.L. 89–516)

*Rent, communications, and utilities, $196,215*

The estimate includes an increase of $49,354 and will provide the following:

| | 1968 | 1969 | Change |
|---|---|---|---|
| Paid official mail | $8,125 | $9,300 | +$1,175 |
| Telegrams and long-distance calls | 19,700 | 22,520 | +2,820 |
| Telephone rental and service | 27,525 | 31,285 | +3,760 |
| Telecommunications services | 14,940 | 16,290 | +1,350 |
| Rental of space | 41,580 | 69,780 | +28,200 |
| Working capital fund | 34,991 | 47,040 | +12,049 |
| Total | 146,861 | 196,215 | +49,354 |

*Printing and reproduction, $236,808*

The estimate includes an increase of $33,344 and will provide the following:

| | 1968 | 1969 | Change |
|---|---|---|---|
| Secretary's annual report | $5,000 | $5,000 | ---------- |
| Binding | 2,800 | 2,500 | −$300 |
| Letterheads, forms, etc | 14,100 | 10,218 | −3,882 |
| Special-purpose publications | 30,000 | 18,000 | −12,000 |
| Working capital fund | 151,564 | 201,090 | +49,526 |
| Total | 203,464 | 236,808 | +33,344 |

*Other services, $358,640*

The estimate includes an increase of $53,716 over 1968 and will provide the following:

| | 1968 | 1969 | Change |
|---|---|---|---|
| Health room services | $113,700 | $113,700 | ---------- |
| Official entertainment | 7,500 | 7,500 | ---------- |
| Security investigations | 6,000 | 11,600 | +$5,600 |
| Press clippings | 3,500 | 3,500 | ---------- |
| Miscellaneous repairs and services | 7,890 | 7,890 | ---------- |
| Training programs | 10,000 | 10,000 | ---------- |
| Defense Contracts Audit Agency | 10,000 | 10,000 | ---------- |
| Working capital fund | 146,334 | 194,450 | +48,116 |
| Total | 304,924 | 358,640 | +53,716 |

*Supplies and materials, $64,390*

The estimate includes an increase of $9,559 and will provide for the following:

| | 1968 | 1969 | Change |
|---|---|---|---|
| Desk-top supplies | $14,850 | $17,200 | +$2,350 |
| Subscriptions | 14,200 | 14,200 | ---------- |
| Equipment maintenance | 4,500 | 4,500 | ---------- |
| Working capital fund | 21,281 | 28,490 | +7,209 |
| Total | 54,831 | 64,390 | +9,559 |

*Equipment, $81,560*

The estimate includes an increase of $35,660 for 47 new positions at a rate of approximately $750 per position for program expansion offset by a decrease of $8,250 non-recurring 1968 equipment purchases and will provide the following:

| | 1968 | 1969 | Change |
|---|---|---|---|
| Books and periodicals | $13,000 | $13,000 | |
| Office equipment | 18,850 | 37,715 | +$18,865 |
| Office furnishings | 22,300 | 30,845 | +8,545 |
| Total | 54,150 | 81,560 | +27,410 |

SUMMARY OF NEW POSITIONS

ACTIVITY 3.—OFFICE OF THE ASSISTANT SECRETARY FOR ADMINISTRATION

| | Number | Grade | Amount |
|---|---|---|---|
| OFFICE OF FINANCIAL MANAGEMENT AND AUDIT | | | |
| Departmental staff: | | | |
| Division of Financial Systems and Procedures: | | | |
| Systems accountant | 2 | GS–14 | $31,682 |
| Do | 4 | GS–13 | 54,028 |
| Secretary-stenographer | 1 | GS–5 | 5,565 |
| Total | 7 | | 91,275 |
| Division of Audit: | | | |
| Departmental: | | | |
| Deputy Chief of Division | 1 | GS–14 | 15,841 |
| Auditor (supervisory) | 1 | GS–14 | 15,841 |
| Auditor | 5 | GS–13 | 67,535 |
| Do | 5 | GS–12 | 57,305 |
| Do | 2 | GS–11 | 19,314 |
| Administrative assistant | 1 | GS–7 | 6,734 |
| Secretary-stenographer | 1 | GS–5 | 5,565 |
| Do | 3 | GS–4 | 14,985 |
| Total | 19 | | 203,120 |
| Total, departmental | 26 | | 294,395 |
| Field: | | | |
| Auditor | 4 | GS–14 | 63,364 |
| Do | 4 | GS–13 | 54,028 |
| Do | 7 | GS–12 | 80,227 |
| Do | 2 | GS–11 | 19,314 |
| Secretary | 2 | GS–5 | 11,130 |
| Clerk-typist | 2 | GS–4 | 9,990 |
| Total, field | 21 | | 238,053 |
| Grand total | 47 | | 532,448 |

PREPARED STATEMENT

Senator HILL. Now Mr. Werts, Assistant Secretary for Administration.

Mr. WERTS. Mr. Chairman, if I may introduce Mr. Tom Kouzes, Director of the Office of Financial Management and Audit, who has the major item of increase referred to in the budget request, and Mr. Charles Carlson, who is the Director of Office of Management Services in the Secretary's offices.

I have a statement which I would like to put in the record.

Senator HILL. We will have that appear in full in the record.

(The statement follows:)

Mr. Chairman, and Members of the Committee, the requested appropriation for 1969 for the Office of the Secretary is $5,666,000, an increase of $945,825

over the comparable amount available in 1968. Forty (40) auditors and $655,000 are requested to speed up and increase the audits of contracts under the Manpower Development and Training Act and the Work Training Programs.

Seven positions and $121,000 are requested to provide for the establishment of required accounting systems, including cost accounting systems at all levels throughout the Department and its constituent organizations, in accordance with the Budget and Accounting Procedures Act of 1950, as amended.

There is also requested $195,117 for mandatory and financing change costs and $23,000 to provide full year costs of new positions financed for part of 1968. The 1968 estimate for the new positions assumed that the positions would be filled for only about nine months. These increases are offset to some extent by non-recurring equipment costs and management improvement and cost reductions amounting to $48,292. Travel has been reduced by $19,600, printing by $20,400 and equipment by about $8,250.

Except for mandatory items and services to be secured thru the units supported by the Working Capital Fund, no increases are requested for the executive staff, the information, publications and reports unit, the personnel office, the library, management services, organization and management and field administration. The $23,000 to provide full year costs of new positions financed for part of the year in 1968 is divided between the Office of Policy Planning and Research and the Office of Program and Budget Review.

*The need for auditors*

To effectively assure proper utilization and control of funds appropriated to the Department for the administration of its various programs, our audit capability must be strengthened considerably. This need is especially critical concerning the auditing of the Department's training and work-training programs. These programs are becoming more numerous and more complex as increased emphasis is being given to the improvement of the employment opportunities for those people who are unemployed or underemployed. 4,000 to 5,000 new contracts are made each year. Most of these contracts should be audited. A backlog of several thousand unaudited contracts must be dealt with. The attached tables show the accumulation of unaudited contracts.

The auditing function was centralized in 1967. It was at this point that the serious lack of sufficient capability in this area became very apparent. At that time, funds for Manpower Program contracts amounted to over $600,000, and we had 17 auditors and 6 clerks. In 1968 we have about $1 billion in contracts with the same audit staff. The 1969 appropriation request will add up to over $1 billion for contracts and we are asking for 48 auditors and 15 clerks, which includes an increase of 40 positions (31 auditors and 9 clerks) for the auditing of contracts.

A serious disadvantage of not having sufficient auditors has been that audits have usually been made considerably after projects were completed. It would be desirable, although not feasible because of the limited number of auditors, to perform pre-agreement surveys and frequent examinations while contracts are in progress to identify problems before they mature. Many cost disallowances cannot be recovered since most poverty organizations are private nonprofit organizations wholly Federally financed.

By far the greatest number of such Labor Department manpower training programs, from the standpoint of their dollar and program significance, are those situated in the major metropolitan areas. Test audits on a comprehensive basis were started on contractors administering such programs in two of the major metropolitan areas in fiscal year 1968. With the requested increase in audit staff, the Department intends to provide comprehensive coverage of all manpower training activities being administered by contractors located in 20 such areas.

Typical findings in recent audits are these:

Contractor's performance was substantially less than required by the contract; i.e., number of persons trained, counseled, or put to work.

Unauthorized salary increases were paid to the Contractor's staff.

Trainees did not receive the prescribed personal counseling.

Ineligible trainees were enrolled.

Contractor failed to deduct withholding tax and FICA or remit the same to the Internal Revenue Service.

Contractor did not maintain adequate pay records or send withholding statements to trainees.

Contractor did not maintain an accounting system that classified costs by either the individual contracts, programs, or contract cost category.

The findings and recommendations of audits are reported to the Manpower Administrator and provide him the basis for initiating corrective action on the specific contracts or activities as well as providing a means for avoiding occurrence of similar conditions in future contracts.

To achieve an effective audit capability responsive to the growing audit demand within the Department forty (40) additional audit personnel are requested for 1969.

*The need for systems accountants*

The request for 7 systems accountants is a renewal of a request which was not approved by the Committee last year. The urgency is caused by the need for information required to better manage the Department's programs and to meet continued criticism directed at the Department by the General Accounting Office and others for its failure to install approved accounting system.

In support of this request I refer to the 1967 report of the Subcommittee on Government Operations, House of Representatives, and quote an excerpt from a statement by Comptroller General Staats:

"We must maintain or accelerate the pace if we are to approach realization of the full potential of benefits which can be provided through enlightened financial management. Adequate systems of accounting for costs appropriately related to organizational responsibilities and work performance standards are essential to cost consciousness in management.

"The growth of Federal programs has added materially to the responsibility of Federal managers. They need as one of their tools the best financial management systems that can be devised to help them carry out their duties effectively and economically and in accord with the intent of the Congress."

Under the provisions of the Budget and Accounting Procedures Act of 1950, Federal departments and agencies are required to institute for all their programs, accounting system which are in accord with standards and criteria issued by the General Accounting Office. In addition, all such systems must be approved by the General Accounting Office. Although this legislation has been in effect for over 16 years, the Department of Labor does not have all the requisite accounting systems implemented or approved. The Department has been severely criticized for its slow rate of progress by both the General Accounting Office and the House Government Operations Committee.

Until recent years various components of the Department maintained separate accounting systems and records for all funds. This is still the case for most program funds, although provision has been made for reporting on the status of all funds to the centralized accounting organization in the Office of the Secretary. Progress towards development and implementation of an integrated accounting system, particularly as regards program funds, has been too long delayed.

The Labor Department does not have any General Accounting Office approved accounting systems as required by the Budget and Accounting Procedures Act of 1950, as amended. As of this past March 1, we received the Comptroller General's approval of our Statement of Accounting Policies, Principles and Standards, which is the first step. We have promised the House Committee on Government Operations, the Bureau of the Budget, and the General Accounting Office that we would accelerate our accounting systems efforts and would have Departmental accounting systems developed and in effect by December 31, 1968.

The 7 additional positions are required to accelerate our accounting systems development program in the Department. We urgently need both accounting and financial information to improve the management of new programs as well as older programs that have been modified to meet new and social economic problems.

Mr. Chairman, and Members of the Committee, I have covered the major items and will try to answer any questions you may have.

SUMMARY OF AUDIT EXCEPTIONS ON MANPOWER ADMINISTRATION CONTRACTS EXECUTED IN FISCAL YEARS 1963 THROUGH 1ST HALF OF 1968

| Period of audit coverage | Number of contracts | Amount | Amount of recovery recommended by auditors | Amount of recovery sustained by contracting officer[1] |
|---|---|---|---|---|
| Fiscal years 1964–66, audits performed by DOL audit staff | 261 | $71,846,000 | $3,367,000 | $625,000 |
| Fiscal year 1967, audits performed by: | | | | |
| Public accountants | 151 | 12,446,215 | 264,000 | 53,000 |
| DOL audit staff | 177 | 47,681,020 | 2,235,000 | 415,000 |
| Fiscal year 1968 through Dec. 31, 1967, audits performed by: | | | | |
| Public accountants | 291 | 27,414,262 | 783,000 | 157,000 |
| DOL audit staff | 49 | 26,276,680 | 1,232,000 | 229,000 |

[1] Dollar value of recovery does not reflect total benefits derived, since audit findings during course of contract performance provide for correcting improper conditions and precluding recurrence of inappropriate use of funds.

DEPARTMENT OF LABOR SUMMARY OF AUDIT EXCEPTIONS TAKEN ON STATEMENT OF EMPLOYMENT SERVICE ADMINISTRATION GRANTS AS OF DEC. 31, 1967

| By fiscal year | Audit of State Employment security (ES) agencies | | Audit exceptions taken | | Audit exceptions[1] | |
|---|---|---|---|---|---|---|
| | Grant years audited | Dollars audited | Number of grant years | Dollar amount | Restored and deleted | Outstanding |
| 1963 | 54 | $464,370,000 | 35 | $540,745 | $524,900 | $15,845 |
| 1964 | 62 | 375,080,000 | 33 | 1,713,978 | 144,586 | 1,569,392 |
| 1965 | 58 | 419,080,000 | 12 | 777,349 | 540,650 | 236,699 |
| 1966 | 41 | 386,000,000 | 14 | 935,204 | 154,415 | 780,789 |
| 1967 | 51 | 517,830,000 | 16 | 1,293,289 | 22,960 | 1,270,329 |
| 1968 | 35 | 215,936,171 | 10 | 403,162 | | 403,162 |
| Total | | 2,378,296,171 | | 5,663,727 | 1,387,511 | 4,276,216 |

[1] Differences between the totals shown for audit exceptions taken and audit exceptions outstanding result from restorations by State employment security agencies and deletions by the BES Administrator.

SUMMARY OF ACTUAL AND PROJECTED AUDIT COVERAGE OF MANPOWER ADMINISTRATION CONTRACTS, FISCAL YEARS 1964 THROUGH 1969

| | Contracts executed | | Audits performed | | Cumulative potential audit backlog [1] | |
|---|---|---|---|---|---|---|
| | Number | Amount | Number of contracts | Amount | Number of contracts | Amount |
| **FISCAL YEARS 1964–66** | | | | | | |
| Contracts executed (fiscal years 1963–66): Audits by DOL audit staff | 6,001 | $531,974,383 | 261 | $71,846,000 | 5,740 | $460,128,838 |
| **FISCAL YEAR 1967** | | | | | | |
| Contracts executed | 3,938 | 617,519,785 | | | | |
| Audits by public accountants | | | 151 | 12,446,215 | | |
| Audits by DOL audit staff | | | 177 | 47,681,020 | | |
| Total | | | 328 | 60,127,235 | 9,350 | 1,017,521,388 |
| **FISCAL YEAR 1968** | | | | | | |
| Contracts executed through Dec. 31, 1967 | 1,576 | 239,316,372 | | | | |
| Audits by public accountants | | | 291 | 27,414,262 | | |
| Audits by DOL audit staff | | | 49 | 26,276,680 | | |
| Subtotal | | | 340 | 53,690,942 | 10,586 | 1,203,146,818 |
| Contracts to be executed, Dec. 31, 1967 through June 30, 1968 (fiscal year) (projected) | 2,824 | 760,683,628 | | | | |
| Audits by public accountants | | | 109 | 25,585,738 | | |
| Audits by DOL audit staff | | | 51 | 26,723,320 | | |
| Subtotal | | | 160 | 52,309,058 | | |
| Total | 4,400 | 1,000,000,000 | 500 | 106,000,000 | 13,250 | 1,911,521,388 |
| **FISCAL YEAR 1969 (PROJECTED)** | | | | | | |
| Contracts to be executed | 4,400 | 1,000,000,000 | | | | |
| Audits by public accountants | | | 6,150 | 1,015,000,000 | | |
| Audits by present DOL audit staff | | | 100 | 53,000,000 | | |
| Audits by proposed additional DOL audit staff | | | 250 | 132,000,000 | | |
| Total | | | 6,500 | 1,200,000,000 | 11,150 | 1,711,521,388 |

[1] These figures reflect actual contracts remaining unaudited. However, it is not practical to audit all contracts, particularly the older ones; a determination remains to be made as to their disposition, i.e., whether or not audit is warranted.

RESPECTS TO SENATOR HILL

Mr. WERTS. I will refer to certain sections of the statement.

Senator HILL. All right, sir.

Mr. WERTS. Before I do that, Mr. Chairman, I would like to pay my respects to you and indicate to you that I am very deeply indebted, as much as the other folks who have been working directly with you for 20 or more years. I have been sitting on the sidelines. I had the great pleasure of meeting with you as long ago as when Secretary Tobin was with the Department. Our friend Jim Hudson carried the burdens of appropriations and, when he died this threw a great burden on Dick Miller and myself. I appreciate a great deal the fine help you have given us over the years I have been associated with you.

Senator HILL. It has been a pleasure to work with you, sir. Mr. Hudson left us about last July.

Mr. WERTS. That is right.

Senator HILL. He has been here so many times it is hard to realize he is not with us today.

Mr. WERTS. He is with us in spirit.

Senator HILL. I am sure he is.

BUDGET REQUEST

Mr. WERTS. Mr. Chairman, the requested appropriation for 1969 for the Office of the Secretary is $5,666,000, an increase of $948,825 over a comparable amount in 1968.

Forty auditors and $655,000 are requested to speed up and increase the audit of contracts under the Manpower Development and Training Act and the various work training programs.

Seven positions and $121,000 are requested to provide for the establishment of required accounting systems, including cost accounting systems at all levels throughout the Department and its constituent organizations in accordance with the Budget and Accounting Procedures Act of 1950, as amended.

There is also requested $195,117 for mandatory and financing changes and $23,000 to provide full-year costs of new positions financed for part of 1968.

Except for those amounts requested here there are no other increases in the units or activities of the Office of the Secretary.

Senator HILL. No other changes?

Mr. WERTS: No other changes, no increase in the executive staff, the information staff, personnel, library, management services, organization management, and field administration.

WORK TRAINING PROGRAMS

There are about 4,000 to 5,000 new contracts let each year for training and work training programs. Most of these contracts should be audited.

However, because of lack of staff we have developed a backlog of several thousand unaudited contracts.

To effectively assure utilization and control of funds appropriated to the Department for the administration of its various programs our audit capability must be strengthened considerably.

By far the greatest number of the Labor Department manpower programs from the standpoint of their dollar program significance are those situated in the major metropolitan areas.

With the requested increase in audit staff, the Department intends to provide comprehensive audit coverage of all manpower training activities being administered by contractors located in 20 such areas.

### Systems Accountants Needed

Now turning to the other major increase, the need for systems accountants, I would like to read in support of this request for seven system accountants a statement made by Comptroller General Staats before the Subcommittee on Government Operations of the House. He said this:

> We must maintain or accelerate the pace if we are to approach realization of the full potential of benefits which can be provided through enlightened financial management. Adequate systems of accounting for costs appropriately related to organizational responsibilities and work performance standards are essential to cost consciousness in management. . . . . .
>
> The growth of Federal programs has added materially to the responsibility of Federal managers. They need as one of their tools the best financial management systems that can be devised to help them carry out their duties effectively and economically and in accord with the intent of the Congress.

Under the provisions of the budget accounting procedures of 1950, Federal departments and agencies are required to institute—for all their programs—accounting systems which are in accordance with the standards and criteria issued by the General Accounting Office.

In addition, all such systems must be approved by the General Accounting Office.

The Department of Labor has been delinquent, we have made some improvement in the last few years but we have a great deal further to go.

Senator Hill. How far will this present amount permit you to go?

Mr. Werts. The seven systems accountants will help us introduce these new systems. Mr. Goodwin, I think, referred to the fact that the Department had engaged a responsible, well-known contractor to develop and introduce a system.

The seven systems accountants are the people who will work with the contractor to see that he is doing his job and then help carry on after the systems have been designed and installed.

### Delays in Installing Departmental Accounting System

I have just one final point. We have indicated to the Government Operations Committee of the House, the Bureau of the Budget, and to Mr. Staats of the General Accounting Office, that we would accelerate our accounting systems efforts and we would have the departmental accounting system developed and effective by December 31, 1968.

Senator Hill. That is the end of this year?

Mr. Werts. That is right. If the committee sees fit to provide these funds we will be able to go forward and achieve this goal.

Senator Hill. Do you think you can achieve the goal with these funds?

Mr. Werts. We are somewhat delayed. I will have to ask Mr. Kouzes whether our promise was based upon having the systems accountants all of the 1968 fiscal year.

As you know, this committee and the House did not allow this request last year so I think we have been somewhat delayed.

Senator Hill. What about it, Mr. Kouzes?

Mr. Kouzes. We will probably be able to institute initially the accounting systems that we need but we won't have them as completely installed as we had hoped had we had the staff earlier. We are certainly still striving.

Senator Hill. You will be well on the way?

Mr. Kouzes. That is right. We have to develop an accounting manual which must be submitted to the General Accounting Office for approval. That is one part of the job which may be delayed.

Senator Hill. But this will give you a good start, won't it?

Mr. Kouzes. Yes, I would say so.

Senator Hill. Is there anything you would like to add, sir?

Mr. Carlson. No, thank you, sir.

Senator Hill. I want to thank you gentlemen very much.

Mr. Werts. Thank you.

## Office of the Secretary

## Office of Federal Contract Compliance

**STATEMENT OF EDWARD C. SYLVESTER, DIRECTOR**
**ACCOMPANIED BY:**
**HAROLD R. WHITE, BUDGET ANALYST**
**RICHARD E. MILLER, DIRECTOR, OFFICE OF PROGRAM AND BUDGET REVIEW**

### Appropriation Estimate

"Federal Contract Compliance and Civil Rights Program

"For expenses necessary to carry out the functions of the Department of Labor under Executive Order 11246 of September 24, 1965, as amended, and title VI of the Civil Rights Act of 1964, [$1,103,000] *$1,456,000 together with not to exceed $762,000 to be derived from the Employment Security Administration account, Unemployment Trust Fund.*"

### EXPLANATION OF LANGUAGE CHANGES

Additional language is required for financing a portion of Civil Rights Compliance (Title VI) activities with funds to be derived from the Employment Security Administration account, Unemployment Trust Fund.

### AMOUNTS AVAILABLE FOR OBLIGATION

| | 1968 | 1969 |
|---|---|---|
| Appropriation or estimate | $1,103,000 | [1] $2,218,000 |
| Amount reserved under H.J. Res. 888 (Public Law 90-218) | —26,000 | ---------- |
| Amount of reserve applied to increased pay costs | 26,000 | ---------- |
| Proposed transfer from "Office of Manpower Administrator, salaries and expenses" for pay increases (Public Law 90-206 effective Oct. 8, 1967) | 3,000 | ---------- |
| Appropriation or estimate, revised | 1,106,000 | 2,218,000 |

[1] Includes $762,000 to be derived from the Employment Security Administration account, unemployment trust fund.



92-753—68—pt. 1——28

OBLIGATIONS BY ACTIVITY

| Description | Appropriation revised, 1968 | | Estimate, 1969 | | 1969 change | |
|---|---|---|---|---|---|---|
| | Positions | Amount | Positions | Amount | Positions | Amount |
| 1. Office of the Director of Federal Contract Compliance | 29 | $463,000 | 47 | $750,000 | +18 | +$287,000 |
| 2. Plans for progress | 12 | 188,000 | 12 | 232,000 | | +44,000 |
| 3. Civil rights compliance (title VI) | 28 | 455,000 | 80 | 1,236,000 | +52 | +781,000 |
| Total obligations | 69 | 1,106,000 | 139 | 2,218,000 | +70 | +1,112,000 |

OBLIGATIONS BY OBJECT

| | Appropriation revised, 1968 | 1969 estimate | 1969 change |
|---|---|---|---|
| Total number of permanent positions | 69 | 139 | +70 |
| Positions other than permanent | 1 | 3 | +2 |
| Average number of all employees | 64 | 132 | +68 |
| 11 Personnel compensation | $794,578 | $1,531,448 | +$736,870 |
| 12 Personnel benefits | 57,278 | 112,108 | +54,830 |
| 21 Travel and transportation of persons | 106,100 | 229,300 | +123,200 |
| 22 Transportation of things | 2,200 | 5,200 | +3,000 |
| 23 Rent, communications, and utilities | 58,744 | 118,644 | +59,900 |
| 24 Printing and reproduction | 30,300 | 59,100 | +28,800 |
| 25 Other services | 35,100 | 96,200 | +61,100 |
| 26 Supplies and materials | 17,700 | 33,600 | +15,900 |
| 31 Equipment | 4,000 | 32,400 | +28,400 |
| Total obligations | 1,106,000 | 2,218,000 | +1,112,000 |
| Working capital fund items included above | (59,800) | (124,000) | (+64,200) |

SUMMARY OF CHANGES

| | Direct appropriation | | Trust fund | | Total available | |
|---|---|---|---|---|---|---|
| | Positions | Amount | Positions | Amount | Positions | Amount |
| 1968 Enacted appropriation | 69 | $1,103,000 | | | 69 | $1,103,000 |
| Amount reserved under H. J. Res. 888 (Public Law 90-218) | | −26,000 | | | | −26,000 |
| Amount of reserve applied to increased pay costs | | 26,000 | | | | 26,000 |
| Proposed transfer from "Office of Manpower Administrator, salaries and expenses," for pay increases (Public Law 90-205 effective Oct. 8, 1967) | | 3,000 | | | | 3,000 |
| 1968 appropriation, revised | 69 | 1,106,000 | | | 69 | 1,106,000 |
| 1969 estimate | 87 | 1,456,000 | 52 | $762,000 | 139 | 2,218,000 |
| Total change | +18 | +350,000 | +52 | +762,000 | +70 | +1,112,000 |

| | Positions | Amount |
|---|---|---|
| Mandatory items: | | |
| Increases: | | |
| Net additional pay increase costs not completely funded in 1968 | | +30,200 |
| Net additional cost of within-grade promotions effective for part year in 1968 | | +5,400 |
| Net cost of within-grade promotions becoming effective in 1969 | | +7,200 |
| To provide for 1 extra day of pay in 1969 for current year staff | | +3,000 |
| Subtotal, increases | | +45,800 |
| Decreases: | | |
| Decrease in Federal telecommunications costs | | −1,900 |
| Total, mandatory items | | +43,900 |
| Financing items to provide for proper cost of centralized services purchased from the working capital fund | | −1,200 |
| Program items | | |
| Increases: | | |
| To provide for increased compliance, negotiating and conciliating functions in the Office of Federal Contract Compliance ($97,300 personal services; $16,800 nonlabor costs) | +7 | +114,100 |
| To provide resources in the Office of the Director of Federal Contract Compliance to effectuate the provisions of Executive Order No. 11375, approved Oct. 13, 1967, amending Executive Order 11246 (equal employment opportunity) to expressly embrace discrimination on account of sex ($135,600 personal services; $20,300 nonlabor costs) | +11 | +155,900 |
| To provide additional resources to more effectively carry out ongoing Plans for Progress programs (promotion and implementation of equal employment opportunity by private, industrial, and commercial corporations) ($15,500 personal services; $14,700 nonlabor costs) | | +30,200 |
| To provide for increased personnel compensation in the Plans for Progress program by adjustment of lapse rate based on average employment experience | | +8,100 |
| To provide for adequate coverage of onsite compliance reviews and complaint investigations under title VI of the Civil Rights Act of 1964 (Public Law 88-352) ($490,600 personal services; $271,400 nonlabor costs) | +52 | +762,000 |
| Subtotal, increases | +70 | +1,070,300 |
| Decreases: Nonrecurring equipment costs for new positions in 1968 | | −1,000 |
| Total, program items | +70 | +1,069,300 |
| Total change | +70 | +1,112,900 |

## MANDATORY AND FINANCING CHANGES BY ACTIVITY

| Type of change | Activity 1 | | Activity 2 | | Activity 3 | | Total | |
|---|---|---|---|---|---|---|---|---|
| | Positions | Amount | Positions | Amount | Positions | Amount | Positions | Amount |
| Mandatory items: | | | | | | | | |
| Net additional pay increase costs | | +$13,600 | | +$3,800 | | +$12,800 | | +$30,200 |
| Net additional cost of within-grade promotions effective for part year in 1968 | | +2,100 | | +600 | | +2,700 | | +5,400 |
| Net within-grade promotion costs initially effective in 1969 | | +3,500 | | +900 | | +2,800 | | +7,200 |
| Net costs for 1 extra day of pay in 1969 for current year staff | | +1,400 | | +400 | | +1,200 | | +3,000 |
| Decrease in Federal telecommunications costs | | −1,900 | | | | | | −1,900 |
| Subtotal, mandatory items | | +18,700 | | +5,700 | | +19,500 | | +43,900 |
| Financing items: Cost of centralized services | | −1,200 | | | | | | −1,200 |
| Total | | +17,500 | | +5,700 | | +19,500 | | +42,700 |

*Mandatory and financing changes for 1969*

MANDATORY ITEMS

| | |
|---|---|
| Increases: | |
| To provide for full-year cost of pay increases effective October 8, 1967, and to provide full funding of part-year costs | +$30,200 |
| To provide for 1 extra day of pay in 1969 for current year staff | +3,000 |
| Within-grade promotion costs: | |
| 1969 net additional cost of within-grade promotions effective for part-year in 1968 | +5,400 |
| Personnel compensation | 5,236 |
| Deduct lapse | 236 |
| Personnel benefits | 400 |
| Net cost | 5,400 |
| Net cost of within-grade promotions becoming effective during 1969 | +7,200 |
| Personnel compensation | 6,892 |
| Deduct lapse | −192 |
| Personnel benefits | 500 |
| Net cost | 7,200 |
| Decreases: Decrease in Federal telecommunications costs | −1,900 |
| Total, mandatory items | +43,900 |

FINANCING ITEMS

| | |
|---|---|
| Amount originally in base budget | 59,800 |
| Amount currently required in base budget | 58,600 |
| Changed financing required | −1,200 |

Changes in fees charged for centralized services (such as visual exhibits or reproduction) and changes in anticipated services rendered by the working capital fund require adjustments to the funds provided in the base budget.

PROGRAM CHANGES BY ACTIVITY

| | Object classification | Activity 1 | | Activity 2 | | Activity 3 | | Total | |
|---|---|---|---|---|---|---|---|---|---|
| | | Positions | Amount | Positions | Amount | Positions | Amount | Positions | Amount |
| 11 | Personnel compensation | 18 | +$215,700 | | +$22,300 | 52 | +$455,400 | 70 | +$693,400 |
| 12 | Personnel benefits | | +17,200 | | +1,300 | | +35,200 | | +53,700 |
| 21 | Travel and transportation of persons | | +10,900 | | +1,200 | | +111,100 | | +123,200 |
| 22 | Transportation of things | | | | | | +3,000 | | +3,000 |
| 23 | Rent, communications, and utilities | | +8,400 | | +4,000 | | +49,400 | | +61,800 |
| 24 | Printing and reproduction | | +700 | | +8,000 | | +20,100 | | +28,800 |
| 25 | Other services | | +8,200 | | +1,500 | | +51,400 | | +61,100 |
| 26 | Supplies and materials | | +2,900 | | | | +13,000 | | +15,900 |
| 31 | Equipment | | +5,500 | | | | +22,900 | | +28,400 |
| | Total | 18 | +269,500 | | +38,300 | 52 | +761,500 | 70 | +1,069,300 |

*Activity 1. Office of the Director of Federal Contract Compliance*

| | |
|---|---|
| 1968 (positions, 29) | $463,000 |
| 1969 (positions, 47) | 750,000 |

NARRATIVE DESCRIPTION OF PROGRAM

The Office of Federal Contract Compliance administers a Government-wide enforcement program authorized by Executive Order 11246 which requires equal employment opportunity of Government contractors and subcontractors. The program is based on the following:

a. "Affirmative action" by contractors to ensure that minorities (of race, color, creed, and national origin) have job and promotional opportunities commensurate with their abilities;

b. The systematic review of contractors' employment policies and practices to ensure compliance and to assist and guide contractors as appropriate;

c. Servicing complaints of noncompliance;

d. Ensuring that Government policies and practices are objective and consistent among contracting agencies and contractors;

e. Coordinating with other interested Federal agencies to minimize duplication and maintain the optimum uniformity; and

f. Consulting with the labor movement, the business community, community and civil rights groups, and other parties regarding programs and policies.

During the past two years, the Contract Compliance activity throughout the Government has moved from an essentially voluntary and educational program to one of enforcing Government contracts on a broad scale. The emphasis has been placed on the resolution of equal employment opportunity problems or assurances of compliance before contracts are awarded.

It is clear that there is need for more Federal activity in employment discrimination problems. The primary focus in the past has been on hiring; however, upgrading of employees has become a greater problem. It should be noted that under-employment is a significant factor in the cause of unrest in urban centers. There is also a bonus in upgrading employees since lower vacated skilled jobs then become available to those with limited skills and/or work experience. Although progress is being made in increasing opportunities for American minorities, the opportunity gap, relative to whites, is still widening.

The President recently amended Executive Order 11246 to add discrimination because of sex. The amendment becomes effective in October 1968. It will thereafter be required that complaints of sex discrimination be investigated, conciliated and resolved. Policies and procedure will have to be developed for handling this additional responsibility.

The Office of the Solicitor provides the wide range of essential legal services related to this program. It assists in drafting regulations for publication in the Federal Register and provides legal technical services related to the publication; prepares orders for issuance by the Secretary of Labor and the Director of the Office of Federal Contract Compliance to contracting agencies; assures the legal adequacy of compliance procedures in enforcement manuals, internal directives and pre-award guidelines; reviews compliance case files to determine the appropriateness of the institutions of procedures leading to sanctions.

The Solicitor's Office also provides legal assistance and representation for informal and formal hearings, including the preparation and presentation of the entire Government case and all other legal services necessary to administrative litigation; participates with the Department of Justice in the preparation of the presentation of the Government's case in judicial litigation arising under the program; and provides legal advice and interpretations of the Executive Order and the implementing Regulations to Departmental officials of contracting agencies, Government contractors and subcontractors and the general public.

Numerous success stories during Fiscal Year 1967 make clear the effectiveness of this program and undoubtedly signify a multiplier effect that has not yet been measured. An ordinary example is that of a building materials manufacturer, having analyzed the skills of his Negro employees following an informal hearing, promoted in a year's time 275 who had been passed over; or the Negro seamstress in a bag plant who was fired because she properly complained of discrimination and was offered reinstatement and given back pay of $600 including vacation pay; or Contractor's commitments to employ 112 minorities out of a total of 475 highly paid building tradesmen in Northeast Ohio. These kinds of successes also extend to the problems of Mexican-Americans of the Southwest.

*In 1967*, coverage of the Executive Order expanded very significantly, almost doubling, as a result of broader interpretations of the Rules and Regulations and more systematic identification of contractors by the contracting agencies.

*Non-Construction Program.*—The re-orientation of the entire program to pre-award compliance on a broad scale demands greater review of contracting agency activity as well as increases the number of contractors and facilities requiring review. Additionally, since 1967, the number of non-construction facilities subject to the Order has increased from 105,600 to 170,000, and the number of contractors identified has increased from 15,000 to 57,000.

*In 1968*, new policies and procedures will be implemented to meet the growing demands on the Office of Federal Contract Compliance to effectively monitor agency programs and compliance reviews to ensure fair and equal treatment of employees and employers alike.

This Office also coordinates programs with the Equal Employment Opportunity Commission to provide a unified and consistent Government approach to certain industrial or regional problems. Typical of this kind of activity is one now under way in the textile industry of North and South Carolina which employs about 383,000, including less than 8% Negroes. Although total employment is expected to decline slightly, the annual turnover of about 38,000 jobs ought to provide opportunity for employment equality. Negroes comprise 22% of all employed workers in North Carolina, and 39% in South Carolina. Programs of this kind involve penetrating studies of the specific problems, in-depth compliance reviews by one or more contracting agencies, and constant communication and review to ensure that consistency of standards are enforced.

*Construction Program.*—The credibility of Federal efforts in equal employment opportunity, particularly in the urban centers, suffers as much from the limited participation of minorities in the better-paying construction trades as from any other single factor. The problem, which is less a matter of discrimination than lack of affirmative action, can be partially met by more effective and wider compliance in the construction industry.

Closely coordinated multi-agency area-wide compliance activity is essential to produce meaningful results in the construction industry. This is due to the prevalence of the hiring hall referral system and the frequent and irregular changes in contractors' and subcontractors' work forces.

*In 1967*, successful programs in Cleveland, St. Louis, and San Francisco Bay Area have clearly demonstrated the validity of this technique. In all these areas, there have been substantial increases in minority employment in the better-paying crafts.

*In 1968*, this approach will be modified by developing programs which include assigning certain area compliance responsibilities to a single agency and then extending these programs to other cities having significant Federally-assisted construction. Every major urban center should have such a program.

*Changes for 1969*

| | |
|---|---|
| Mandatory changes amount to | +$18,700 |
| Financing changes amount to | —$1,200 |
| Program changes amount to | +$269,500 |
| Positions | +18 |

PROPOSAL

To provide for the continuation of an effective compliance program and for the institution of programs regarding sex discrimination, in accordance with Executive Order 11246.

THE NEED

Broader interpretation of the rules and regulations and more systematic identification of contractors by contracting agencies places greater demands on the Office of Federal Contract Compliance. The Executive Order was also recently amended by the President to add discrimination because of sex. The amendment becomes effective in October 1968, and thereafter it will be required that complaints of sex discrimination be investigated, conciliated, and resolved.

THE PROGRAM

As important as significant increases in numerical indicators of workload is the fact that providing equal employment opportunity is becoming more and more complex. Overt discrimination is rapidly declining, but many structural impediments to equal opportunity remain and are more damaging due to their broader impact. Problems involving seniority, transfer rights, testing and others, for which there is limited precedent and experience, will require substantial staff time to develop equitable solutions. These solutions will have considerable significance and will shape future policy.

New rules and regulations which will further increase the coverage of the Executive Order, as well as provide tighter procedures by contracting agencies,

are being issued. Also being developed are new policies to overcome the impediments of structural discrimination, archaic personnel systems, and testing. A prime objective in 1969 will be the successful implementation of these rules and policies which will benefit thousands of minority applicants and employees.

A body of new policies and procedures must also be developed in 1969 to meet the additional responsibilities placed upon this office with the recent sex discrimination amendment to the Executive Order. Inquiries have already been received from women's groups.

It is estimated that in 1969 the workload demands will be up about one-half over 1968, including contractor reporting on 100,000 facilities which will get varying degrees of review and surveillance by contracting agencies. The number of racial complaint investigations is expected to remain at about 375. One reason for the latter is the effectiveness of compliance reviews which eliminate the cause of complaints and afford broader relief. Although individual complaints of racial discrimination remain relatively low and stable, general group complaints are increasing and will continue to, as knowledge of our successes gets around.

BASE

Positions: 29. Estimated Cost: $463,000.

ADDITIONAL COST

Positions: 18. Man years: 16.2. Estimated Cost: $287,000.

BASIS FOR THE ESTIMATE

Based partly on the experience of the Equal Opportunity Commission, where sex discrimination complaints make up about one-third of the total number of 13,000 complaints received, it is estimated that the demands on the Office of Federal Contract Compliance will increase about one-third due to this added responsibility. Complaints are conservatively estimated to rise almost ten-fold over the present level of racial complaints. Sex discrimination problems require proportionally more legal support than racial discrimination due to the numerous State and local Government and Federal laws dealing with employment of women.

The following table shows significant numerical increases in identified *Government-wide workload* for 1968 and 1969. These increases alone do not reflect the total additional workload. The greater complexity of problems involved and greater public interest in solutions add considerably to the real total workload.

| Federal contract compliance | Fiscal year 1966 (actual) | Fiscal year 1967 (actual) | Fiscal year 1968 (estimated) | Fiscal year 1969 (estimated) |
|---|---|---|---|---|
| Compliance reviews performed (nonconstruction) | 9,132 | 15,000 | 16,000<br>(40,000) | 22,800<br>(57,000) |
| Number of corporate conciliation conferences held | 732 | 1,000 | 1,050<br>(1,400) | 1,700<br>(2,300) |
| Preaward reviews performed for supply contracts | 114 | 500 | 675<br>(900) | 1,050<br>(1,400) |
| Preaward conferences performed for construction contracts | 501 | 1,500 | 2,400<br>(3,200) | 3,150<br>(4,200) |
| Construction sites on which regular surveillance performed | (47,647) | (51,000) | 21,720<br>(54,300) | 21,720<br>(54,300) |
| Number of hearings held by the Office of Federal Contract Compliance | 32 | 50 | 60<br>(80) | 90<br>(120) |
| Number of compliants processed | 216 | 283 | 375 | 3,375 |
| Total number of facilities and sites subject to order | 99,367 | 156,600 | 219,500 | 225,000 |
| Significant cases having Office of Federal Contract Compliance involvement which affect development of policies and precedent | | 20 | 30 | 120 |
| Legal services: | | | | |
| Investigation files reviewed and screened | | 30 | 50 | 90 |
| Hearings (includes attorney investigations, preparation for formal and informal hearings) | | 20 | 25 | 60 |
| Conciliation conferences (preparation and participation) | | 6 | 12 | 30 |
| Litigation | | 1 | 2 | 5 |

Note.—Figures in parentheses represent totals for complete coverage of workload.

*Activity 2. Plans for progress unit*

| | |
|---|---|
| 1968 (positions, 12) | $188,000 |
| 1969 (positions, 12) | 232,000 |

NARRATIVE DESCRIPTION OF PROGRAM

Plans for Progress is a voluntary effort by the leadership of American business and industry to aggressively promote and implement equal employment opportunity. Plans for Progress supplements the Federal program applicable to government contractors.

Presently, 417 major corporations and financial and educational institutions, including companies not involved in government contracting are members of the program. They belong by virture of having drawn up, and of currently following through on, formal pledges to take affirmative action in providing equal job opportunities for all Americans based on merit alone. These members employ almost nine million people.

Plans for Progress members implement their plans individually, in their plants and in the communities where they operate, and in concert by joining their financial and manpower resources when feasible. They also prepare and submit to the unit annual employment statistics as one means of measuring progress in achieving equal employment and advancement opportunity.

The program has a 25-member business advisory council made up of top level executives from member companies; an executive staff of 8 individuals on loan from member companies for one year; and a small administrative support staff of 12 people. The Advisory Council works through a number of committees and the administrative staff to develop policies and activities which will achieve further progress. The staff also stimulates and executes a variety of projects aimed at furthering the program, and serves as a national communicator of the program's aims and accomplishments.

*In 1967*, in addition to sparking the internal action program of its members, the Plans for Progress Unit administered the following continuing programs on a national level:

*Local merit employment councils.*—A program sponsored by Plans for Progress companies to enlist non-Plans for Progress business and work with local employment groups. There are now 70 groups in cities with population over 50,000 (with minorities over 10%) and 42 cities are targeted for development. This work is done by Plans for Progress company executives, aided by the voluntary staff of eight, provided by member companies.

*Vocational guidance institutes.*—Designed to improve preparation of minority teenagers for jobs in business, by education and motivation of their teachers. Companies spent $325,000 to support 23 Vocational Guidance Institutes around the country.

Seminars were held in 17 cities and were attended by 1,000 high school guidance counselors and administrators who deal with Negro or Mexican-American youth.

*Task force on youth motivation.*—A nationwide program of visits by minority executives of Plans for Progress companies to junior high schools, high schools, and colleges with large minority enrollments to motivate more young people toward business and industrial careers. More than 220 minority-group executives talked with students of 70 predominantly Negro colleges. In the 1966–67 secondary school program the Task Force was supplemented by 500 or so high school graduates now employed in responsible jobs by Plans for Progress companies as "living witnesses" that opportunities exist in business. Campaigns were held in ghetto schools in Brooklyn, Cleveland, Detroit, Atlanta, Richmond, and many other cities.

*Manpower training and development seminars.*—Meetings held in over 25 cities where experts explained in businessmen's terms the manpower development programs of the Departments of Labor, Health Education and Welfare and the Office of Economic Opportunity and how businessmen can take advantage of these programs.

*Things are changing.*—An advertising campaign to tell minority youth jobs are available. Over $9 million in space, radio and TV countrywide exposure donated so far.

*College relations conference.*—Plans for Progress sponsored annual conferences between industry recruiters and administrative officials of predominantly Negro colleges to inform each group as to the needs and capabilities of the other. A total of 488 participants, representing 177 companies and 69 colleges, attended.

*Summer employment program.*—Provided 2,500 summer job opportunities for college students, in addition to furthering the Vice President's Youth Employment Campaign.

In administering these voluntary programs, the contributions made by private industry are quite significant in relationship to the federal funds appropriated for administrative support. The *costs borne by private industry* to carry out the various Plans for Progress programs are estimated to be as follows:

| | |
|---|---|
| (1) 8 executives loaned to the staff (including salaries, living costs and moving expenses etc.) | $180,000 |
| (2) Costs of Advisory Council members in time and travel for bimonthly meetings and regional and national conferences | 110,000 |
| (3) Costs to participating companies of annual conferences and various regional (including manpower development seminars) conferences | 350,000 |
| (4) Costs of Annual Negro College Relations Conference | 100,000 |
| (5) Costs of 23 vocational guidance institutes for counselors and administrators of Negro high schools | 325,000 |
| (6) Costs of 200-man Vice President's Task Force on Youth Motivation which visit Negro colleges and high schools as "living witnesses" to equal employment opportunity | 100,000 |
| Total costs borne by private industry | 1,165,000 |
| Federal funds, 1968 | 188,000 |

The contribution of private industry is six times greater than the funds provided by the Federal Government towards a program designed to help the domestic situation as it relates to minority groups.

*In 1968*, Plans for Progress will continue to administer and expand these programs which are dedicated to direct action on a broad front to make job opportunities available to all Americans regardless of race, color, creed or national origin.

*Changes for 1969*

| | |
|---|---|
| Mandatory changes amount to | +$5,700 |
| Program changes amount to | +$38,300 |

PROPOSAL

Additional resources are requested to provide for temporary employment in peak periods of activity; to adjust the lapse rate based on employment experience; to establish an Administrative Officer position in lieu of a Management Assistant position; and to provide for increased nonlabor costs in conjunction with on-going programs.

THE NEED

Plans for Progress will continue to administer established programs in 1969 which implement equal employment opportunity on a voluntary basis. The additional funds requested will provide for a more effective support function; no additional full-time budgeted positions are requested.

THE PROGRAM

For program continuity and efficient operation, it is considered essential to establish an Administrative Officer position in this activity. The 8 industry representatives who give direction to the established programs are "on loan" from their companies for a period of one year. Thus, there is a constant turnover of the key personnel. To remedy this situation, it is proposed to create a higher level administrative position in lieu of a present existing management assistant position.

In carrying out the Plans for Progress programs, additional clerical help is essential in peak periods of activity, which can be met with temporary employment. Additionally, an adjustment in the lapse rate, based on employment experience, is essential to efficient operation. Adjustments in nonlabor costs—travel, printing, communications, etc.—are reflected for adequate program support.

BASE

Positions: 12. Estimated Cost: $188,000.

ADDITIONAL COST

Positions: none. Estimated cost: $44,000.

BASIS FOR ESTIMATES

The resources identified with this activity provide the support function for a program voluntarily carried on by the leadership of American business and industry to aggressively promote and implement equal employment opportunity. (The contribution of private industry is in excess of $1 million annually.) The support function provided by federal funds is mainly in the area of clerical assistance, and in the payment of nonlabor costs such as travel, printing, communications, etc.

*Activity 3. Civil rights compliance (title VI)*

| | |
|---|---|
| 1968 (positions, 28) | $455,000 |
| 1969 (positions, 80) | 1,236,000 |

NARRATIVE DESCRIPTION OF PROGRAM

Title VI of the Civil Rights Act of 1964 (Public Law 88–352) provides in Section 601 that "no person in the United States shall, on the ground of race, color, or national origin, be excluded from participation in, be denied the benefits of, or be subjected to discrimination under any program or activity receiving Federal financial assistance." Section 602 of the Act authorizes and directs each Federal department or agency which is empowered to extend Federal financial assistance to any program or activity to "issue rules, regulations, or orders" that will effectuate the provisions of Section 601.

The language contained in Title VI clearly acknowledges that the mere publication of regulations banning discrimination would not be sufficient to end discrimination. The Act not only states that discrimination in Federally financed programs shall be prohibited and that rules and regulations so stating shall be issued, but, more importantly, directs that steps shall be taken by the Federal departments and agencies concerned to see that these rules and regulations are in fact complied with.

To this end a unit was established in the Office of the Assistant Secretary for Manpower by the Secretary of Labor to direct a program to investigate complaints of discrimination received by any component of the Department of Labor. The unit was also directed to insure that each operating bureau requires all recipients of Federal funds issued through the Department of Labor to file complete and accurate assurance and compliance reports; to supply information and technical assistance in implementation of Department of Labor guidelines and regulations regarding the Act; and to direct and operate a program of planned on-site program investigation to assure that recipients of Federal funds through the Department of Labor are in fact in compliance with the Act.

The Office of the Solicitor provides the necessary legal services related to this program. Counsel is provided for conciliation conferences with state officials regarding compliance with Title VI; compliance case files are reviewed to determine the appropriateness of the institution of procedures leading to sanctions; and legal assistance and representation are provided for administrative hearings, including the preparation and presentation of the entire Government case and all other legal services necessary to administrative litigation.

The Office of the Solicitor participates with the Department of Justice in the preparation of the presentation of the Government's case in judicial litigation arising under the program. The Office of the Solicitor provides legal advice and interpretations of Title VI, the implementing Regulations and other directives to Offices and Bureaus of the Department, recipients and beneficiaries of Federal financial assistance and the general public. It assists in drafting regulations for publication in the Federal Register and provides legal technical services related to the publication. Assistance is provided in assuring the legal adequacy of compliance procedures reflected in enforcement manuals and internal directives.

*In 1967* the essential direction of the program was toward complaint investigations and compliance reviews.

With a staff of 27 (including 8 legal service employees), a total of 113 complaints were processed: 76 of these were with State and Federal agencies; 37 with contractors. 192 compliance reviews were conducted: 122 of these were with State and Federal agencies; 70 were with contractors. A total of 614 violations were identified during this period: 470 of these were with State and Federal agencies; 144 were with contractors. Corrective action was achieved in all 614 cases in which violations were discovered.

Compliance reviews and complaint investigations revealed a wide variety of discriminatory practices. Among these were discriminatory referrals to employers by Employment Security agencies, inadequate and discriminatory training procedures and facilities, segregated facilities, undercoding and misclassifications, inadequate training of staff on Civil Rights and Departmental regulations, discrimination due to organization of offices, acceptance of discriminatory orders, discrimination in regard to unemployment insurance, discriminatory service to high schools and colleges, discriminatory counseling, misuse of tests and test scores, discourteous treatment of minority members, improper handling of discriminatory job orders, discriminatory advertising, and lack of Negro staff.

While the extent of discriminatory practices in manpower programs should in no way be minimized it is only fair to state that State and local officials more often than not are indicating sensitivity to the problem and are moving toward compliance with the Civil Rights Act of 1964.

Negotiations between the Equal Opportunity Office and State and local administrators have produced a great variety of far reaching changes in many of the manpower programs. Some typical agreements to effect these changes are listed below:

Steps would be taken to make certain that appropriate classifications are assigned to persons classified in service occupations and all application cards in the domestic and service fields in the active files would be reviewed with the objective of expanding the exposure of applicants to other jobs for which they are qualified through assignment of different and additional classifications.

Steps would be taken to improve the image of State employment security agencies by establishing local Manpower Development and Training committees made up of all segments of the community. Local managers' contacts with the nonwhite communities would be extended to include nonwhite community leaders.

State employment security agencies would exert more efforts to recruit nonwhite staff through the State Merit Systems. This is to include continuing visits to colleges and universities, including predominantly Negro schools.

Periodic checks would be made of classification practices in each local office and the results of such checks would be reported through the respective lines to the State offices.

Local offices would review the results of job referrals to detect possible racial discrimination and to follow up with employers who appear to discriminate.

Agencies would undertake a broad program of training on Civil Rights to assure that all staff members are thoroughly familiar with laws, policies, regulations and procedures established to assure nondiscrimination in services.

Intensified efforts would be made to place nonwhite graduates of Manpower Development and Training white collar courses.

The terms of 1294 would be carried out in all offices with respect to employers who do not give discriminatory job orders, but apparently reject qualified applicants of a particular group because of their race, color or national origin.

The provision of separate facilities for whites and nonwhites would be discontinued.

Civil Rights posters would be displayed in all State employment security offices including itinerant points.

*During 1968* some specific accomplishments have been noted. Recoding has resulted in an expansion of employment opportunities for minorities in other than traditional jobs. Enforcement of the Departmental policy forbidding service to employers who discriminate has enabled minorities to obtain jobs in the private sector that historically have been denied to them. Segregated facilities have been eliminated. The quality of counseling services to minorities has improved. Testing instruments for minorities have been called into question and

their use as exclusionary devices is now being challenged. Increasingly, through the efforts of this office minority youth are making breakthroughs in the apprenticeship programs.

The percent distribution of trainees enrolled under the Manpower Development and Training Act Institutional program has shown a steady increase since 1963. Nonwhite participation has increased as shown below:

1963: 27.2
1964: 30.6
1965: 36.0
1966: 40.2

Three Negroes are now in the position of Regional Administrator: one in the Bureau of Apprenticeship and Training and two in the Bureau of Employment Security.

The Workers Defense League Program and other organizations working in conjunction with the building and construction industry has set up a program using Manpower Administration monies for a remedial education program to bring minority group youth to the employable level in the apprenticeable trades.

The concept which Negroes have of the employment service has improved and higher quality minority applicants are utilizing clerical and professional offices not previously used.

Personal relationships between recipients and beneficiaries of services have improved.

State agencies have been provided with guidelines pertaining to Title VI responsibilties to withhold all services from employers with discriminatory hiring practices.

The Bureau of Work Programs has instituted a ruling stating that the staff of all Neighborhood Youth Corps programs must be integrated in proportion to enrollee composition.

Stepped up activities since 1962 have resulted in small increases in the numbers of minorities in State Employment Security agencies across the nation in areas having a large proportion of minorities. These increases are evident in management-professional and clerical categories. New Jersey for example, had a total minority staffing in 1962 of 257. The figure had increased to 359 in 1967. The management and professional category jumped from 171 to 234; Mississippi and South Carolina showed an increase in management and professional occupations from 0 in 1962 to 9 and 5 respectively in 1967; Arizona had 17 minorities in 1962 in professional and management categories and 54 in 1967.

This office participated in the preparation and evaluation of guidelines pertaining to Title VI responsibilities in withholding all services from employers with discriminatory practices. This has increased the penetration rate of Negroes into other than traditional jobs. This office also participated in the development and evaluation of procedures for the recording of race, color and national origin of applicants to make realistic evaluations of services to different groups, and to help prevent discrimination.

*The Government Recruitment, Education and Training Program.* A report on "Minority Group Staffing in Employment Security Agencies" issued in February, 1967 indicates vast inequities in minority group recruitment and placement.

Basing its percentage of new staff on the 1960 population census which showed Negroes as 10.5 percent of the population the following patterns emerged:

| | |
|---|---|
| Percentage of Negroes in employment service agencies, 1967 | 9.4 |
| Managerial, supervisory | 3.5 |
| Professional, technical | 7.3 |
| Clerical office | 12.1 |
| Custodial service | 56.0 |

Since a 1966 census population survey indicates that Negroes constitute 14.1 percent of the population of the United States, the percentage of Negro staff in Employment Security offices is obviously below that indicated by the report on "Minority Group Staffing in Employment Security Agencies."

These patterns indicate essentially that Negroes still are recuited for and placed in traditional jobs. Additional efforts are needed to increase minority staff in Managerial-Supervisory, Professional-Technical and clerical positions.

In 1968 it is anticipated that levels of output will remain as they were in 1967 despite evidence of widespread discrimination.

*Changes for 1969*

| | |
|---|---|
| *Mandatory changes* amount to | +$19,500 |
| *Program changes* amount to | +$761,500 |
| Positions | +52 |

PROPOSAL

To operate more thoroughly in securing compliance with Title VI of the 1964 Civil Rights Act.

NEED

Three-fourths of all reviews to date of equal opportunity procedures in manpower programs reveal discriminatory practices. (These reviews covered 6 percent of all State recipients of Department of Labor funds.)

PROGRAM

In FY 1969, the objectives of this office will continue to be directed toward the 53 State Employment Security agencies operating through about 2,000 local offices and about 2,000 itinerant stations, 3,000 On-the-Job Manpower Development and Training programs, 300 research and demonstration projects, 46,000 apprenticeship programs and a varying number of other manpower programs. While there have been considerable gains in achieving the objectives of Title VI and Departmental Regulations, a significant number of programs receiving Federal funds are in undiscovered noncompliance with the Civil Rights Act and the Departmental Regulations, based upon reviews made.

In addition to the Negro minority, the Equal Opportunity office has responsibilities to other minority groups. However, due to limited resources, very little attention has been given to persons with Spanish-speaking surnames located essentially in the southwestern United States; 546,000 Indians located mainly on reservations, and 885,700 Puerto Ricans located essentially in New York, Pennsylvania, Ohio, Michigan and New Jersey according to the 1960 census.

These minorities have a special stake in our compliance activities under Title VI of the Civil Rights Act of 1964. There have been justifiable complaints by these groups that their employment rights have not been adequately recognized and appropriately protected. Additional manpower in FY '69 will enable this office to cope with this problem.

The Manpower Administration's responsibilities to the 63 model cities under the Model Cities Program will require intensified efforts by the Equal Opportunity Office to expand and insure equality of opportunity in manpower programs to nonwhites who reside in these cities.

While all complaints will be investigated and there will be an expansion of review activities, these pursuits are not sufficient to significantly reduce the widespread discriminatory practices that exist in manpower programs. Consequently, to reduce the probability of non-compliance, the program component of the Equal Opportunity Program will be greatly strengthened.

The program component will develop technical materials and other publications to be used for training sessions; provide on-site assistance to recipients and local communities to bring diverse groups together to further Title VI objectives; work with public schools, colleges and universities across the country to develop a greater awareness of the expanding opportunities for minorities; and research the program for effectiveness and additional program ideas.

The program is to be built around three functions which are 1) investigations 2) negotiations and conciliations and 3) technical assistance. These are envisioned as three distinct branches. The initial phase of the program will include complaint investigations and compliance reviews. The second phase envisions a staff devoted exclusively to negotiations and conciliation. Subsequent to complaint investigations and compliance reviews this staff will analyze findings and seek to bring about voluntary compliance on the part of local recipients. Phase three envisions a technical assistance staff whose functions will be providing assistance at the local level to recipients to enable them to come into compliance with Title VI and Departmental rules and regulations. Some of the functions of the technical assistance staff will be tied to a vigorous follow-up program pursuant to negotiations and conciliations designed to assist local recipients to achieve remedies to violations. In addition to the follow-up activities this

component will also develop technical materials and other publications to be used to train and educate recipients at the local level to the requirements of the Civil Rights program. It will develop and implement a broad educational program designed to reduce complaints and to develop the capability at the local level to carry on manpower programs free from discriminatory practices.

The increased staff will enable the office to conduct 780 complaint investigations and compliance reviews, identify 1538 violations and achieve necessary remedies to these violations.

It will enable program staff to conduct follow-up activities to the 780 investigations and compliance reviews and to perform other duties as described for the program component of Equal Opportunity.

BASE

Postions: 28. Estimated Cost: $455,000.

ADDITIONAL COST

Postions: 52. Man Years: 46. Estimated Cost: $781,000.

BASIS FOR THE ESTIMATE

Based on the 1967 experience, approximately 80 man hours are required to complete an investigation. Thus 30 Compliance Officers are required to complete a projected workload of 780 complaint investigations and compliance reviews or 16 new positions for this aspect of the program. In addition, 14 professional positions are proposed for program review and technical assistance; 6 attorney positions for increased legal support; and 16 clerical support positions.

WORKLOAD STATISTICS

| | Fiscal year 1967, actual | Fiscal year 1968, estimate | Fiscal year 1969, estimate |
|---|---|---|---|
| CIVIL RIGHTS COMPLIANCE | | | |
| State and Federal agencies: | | | |
| Complaints processed | 76 | 76 | 190 |
| Violations identified | 470 | 470 | 1175 |
| Corrective actions achieved | 470 | 470 | 1175 |
| Compliance reviews | 122 | 122 | 330 |
| Contractors: | | | |
| Complaints processed (BAT–BWP–OMPER) | 37 | 37 | 80 |
| Violations identified | 144 | 144 | 363 |
| Corrective actions achieved | 144 | 144 | 363 |
| Compliance reviews | 70 | 70 | 180 |
| LEGAL SERVICES | | | |
| Investigation files reviewed and screened | 250 | 250 | 600 |
| Hearings (includes attorney investigations, preparation for formal and informal hearings) | 1 | 1 | 5 |
| Conciliation conferences (preparation and participation) | 10 | 10 | 25 |
| Litigation | | | 3 |

EXPLANATION OF ESTIMATE BY OBJECT

*Personnel compensation, $1,531,448*

The estimate will provide for 139 full-time positions for the three activities or 132 man-years of employment. Included is $27,500 for consultants, experts, and temporary employment (approximately the equivalent of 3 man-years of employment) and $31,000 for $16 per diem in lieu of subsistence for 8 without compensation full-time industry representatives assigned by their respective corporations to the Plans for Progress Program.

*Personnel benefits, $112,108*

This estimate, which reflects an increase of $54,830 over 1968, is based on personnel compensation, exclusive of per diem allowances, and will provide for the Government's share of the costs of employee benefits as follows:

| | |
|---|---|
| Civil Service Commission retirement fund | $95,108 |
| Life insurance | 5,600 |
| Health benefits | 8,400 |
| Federal Insurance Compensation Act | 3,000 |

*Travel and transportation of persons, $229,300*

The estimate will provide for the following travel costs:

| | 1968 | 1969 | Change |
|---|---|---|---|
| Number of travelers | 50 | 99 | +49 |
| Number of days traveled | 4,000 | 8,600 | +4,600 |
| Estimated cost | $106,100 | $229,300 | +$123,200 |

*Transportation of things, $5,200*

The estimate will provide for shipment of informational material to business and industry as well as contracting agency representatives in the field.

| | 1968 | 1969 | Change |
|---|---|---|---|
| Shipping costs | $2,200 | $5,200 | +$3,000 |

*Rent, communications, and utilities, $118,644*

The estimate is comprised of the following items:

| | 1968 | 1969 | Change |
|---|---|---|---|
| Reimbursement to Post Office | $4,500 | $7,000 | +$2,500 |
| Telegrams and toll charges | 6,660 | 11,160 | +4,500 |
| Telephone rental and service | 7,000 | 15,100 | +8,100 |
| Rental of space | 16,600 | 47,800 | +31,200 |
| Telecommunication charges | 5,859 | 9,859 | +4,000 |
| Working capital fund | 18,125 | 27,725 | +9,600 |
| Total | 58,744 | 118,644 | +59,900 |

The increase of $59,900 for this object class is necessitated by the new positions requested for FY 1969.

*Printing and reproduction, $59,100*

The estimate is composed of the following items and reflects increased program requirements for FY 1969.

| | 1968 | 1969 | Change |
|---|---|---|---|
| Forms, letterheads, and schedules | $4,575 | $8,075 | +$3,500 |
| Publications | 10,000 | 20,900 | +10,900 |
| Working capital fund | 15,725 | 30,125 | +14,400 |
| Total | 30,300 | 59,100 | +28,800 |

*Other services, $96,200*

The estimate provides for the following services:

| | 1968 | 1969 | Change |
|---|---|---|---|
| Miscellaneous contractual services | $17,600 | $48,100 | +$30,500 |
| Working capital fund | 17,500 | 48,100 | +30,600 |
| Total | 35,100 | 96,200 | +61,100 |

*Supplies and Materials, $33,600*

The estimate will provide for necessary desk-top supplies for 139 full-time positions, 8 without compensation industry representatives, and consultants, experts, and temporary employees.

| | 1968 | 1969 | Change |
|---|---|---|---|
| Supplies obtained from open market | $9,250 | $15,550 | +$6,300 |
| Working capital fund | 8,450 | 18,050 | +9,600 |
| Total | 17,700 | 33,600 | +15,900 |

*Equipment, $32,400*

This estimate will provide for necessary equipment and furnishings for the 70 new positions requested in 1969, as well as for replacements not available from surplus stock.

| | 1968 | 1969 | Change |
|---|---|---|---|
| Equipment replacement | $3,000 | $3,000 | |
| Equipment for new positions | 1,000 | 29,400 | +$28,400 |
| Total | 4,000 | 32,400 | +28,400 |

SUMMARY OF NEW POSITIONS

| | Number | Grade | Amount |
|---|---|---|---|
| Activity 1—Office of Federal Contract Compliance: | | | |
| Assistant Director of Compliance | 1 | GS–15 | $18,404 |
| Associate solicitor | 1 | GS–15 | 18,404 |
| Deputy associate solicitor | 1 | GS–15 | 18,404 |
| Senior compliance officer | 2 | GS–15 | 36,808 |
| Senior compliance officer | 2 | GS–14 | 31,682 |
| Assistant compliance officer | 4 | GS–13 | 54,028 |
| Attorney | 1 | GS–13 | 13,507 |
| Assistant compliance officer | 1 | GS–12 | 11,461 |
| Secretary | 2 | GS–6 | 12,274 |
| Secretary | 3 | GS–5 | 16,695 |
| Total | 18 | | 231,667 |
| Activity 3—Civil Rights Compliance (title VI): | | | |
| Director of Program Development and Review | 1 | GS–15 | 18,404 |
| Director of Compliance | 1 | GS–15 | 18,404 |
| Assistant Director of Program Development and Review | 1 | GS–14 | 15,841 |
| Assistant Director of Compliance | 1 | GS–14 | 15,841 |
| Compliance officer | 5 | GS–13 | 67,535 |
| Attorney | 2 | GS–12 | 22,922 |
| Compliance officer | 10 | GS–12 | 114,610 |
| Attorney | 1 | GS–11 | 9,657 |
| Compliance officer | 10 | GS–11 | 96,570 |
| Attorney | 3 | GS–9 | 24,162 |
| Administrative assistant | 1 | GS–9 | 8,054 |
| Secretary | 3 | GS–6 | 18,411 |
| Secretary | 4 | GS–5 | 22,260 |
| Clerk-stenographer | 3 | GS–4 | 14,985 |
| Clerk-typist | 4 | GS–4 | 19,980 |
| Clerk-typist | 2 | GS–3 | 8,932 |
| Total | 52 | | 496,568 |
| Grand total | 70 | | 728,235 |

PREPARED STATEMENT

Senator HILL. Mr. Sylvester, we are glad to have you. Proceed in your way.

Mr. SYLVESTER. Thank you very much.

As last year, this request is divided into three activities. Activity 1 is enforcement of the Executive order requiring equal employment opportunity by Government contractors and subcontractors. Activity 2 is the Plans for Progress program which is a voluntary effort by business executives to carry out the objectives of the Executive order.

I am prepared to testify for these two activities.

Senator HILL. Go ahead, sir.

Mr. SYLVESTER. Before proceeding, I'd say that activity 3 has to do with title VI enforcement in the Department.

Mr. Arthur Chapin is prepared to testify on that. Mr. Harold White is our Budget Officer.

Senator HILL. Your statement will appear in full in the record.

(The statement follows:)

Mr. Chairman, Members of the Committee, I am pleased to present the budget request of the Office of Federal Contract Compliance which administers Executive Order 11246, Parts II and III, and also the budget request for administrative support for the Plans for Progress program, authorized by Part IV of that same Executive Order. Government contractors and subcontractors, including those for Federally-assisted construction projects, are required by the Order not to discriminate on the basis of race, creed, color or national origin and must take "affirmative action" to ensure equal employment opportunity.

The amount requested for the Federal Contract Compliance program is $750,000 and 47 full-time positions, which is an increase of $287,000 and 18 positions over Fiscal Year 1968. The President has amended the Executive Order to include sex discrimination effective October 13, 1968. Most of the requested increase is to implement this new and important requirement.

As you know, the Office of Federal Contract Compliance provides Federal policy; assists and guides Federal contracting agencies and contractors; develops procedures for the optimum overall use of agency resources; monitors contracting agency compliance programs for adequacy and consistency; and coordinates with the Equal Employment Opportunity Commission and other related Governmental and private agencies and interested parties to carry out the objectives of the Executive Order with fair and uniform treatment of contractors and their employees.

This Office also provides certain essential services for the contracting agencies to carry out their responsibilities. These services include: development of compliance officer training programs in cooperation with the Civil Service Commission; coordination of regional compliance programs involving many agencies; assignment of contractors to agencies for compliance responsibility (frequently, several agencies have contracts with the same contractor); management of the statistical reporting system; establishment of Government-wide priorities; and, holding hearings to determine compliance and/or sanctions.

During the past two years this program has moved steadily from an educational and voluntary compliance activity to one of the enforcement of Federal contracts. This principle has taken hold within the contracting agencies and among Federal contractors, and the results in providing equal employment opportunity are impressive.

The coverage continues to increase from 156,600 facilities and sites in Fiscal Year 1967 to 219,500 in Fiscal Year 1968 and estimated at 225,000 in Fiscal Year 1969. These increases are the result of more systematic identification of contractors and broader interpretations of the regulations. However, as significant as these increases are to workload, the inclusion of "sex discrimination" and the greater complexity of racial discrimination problems as we now find them are more meaningful. Overt discrimination is declining but structural impediments to equal employment opportunity remain and are more damaging due to their broader impact. Problems involving seniority, transfer rights, upgrading and testing require substantal staff time to develop equitable solutions. It should be pointed out that under-employment is a significant factor in urban unrest.

The increase in funds and positions requested in this budget will permit the continuation of a broad effective program but will meet only between one-third and one-half of our identified workload.

The amount requested for administrative support of the Plans for Progress program is $232,000 and 12 full-time positions, which is an increase of $44,000 from Fiscal Year 1968. This increase is to provide for greater program continuity through upgrading staff and some greater program activity.

The Plans for Progress is a growing voluntary program including 417 leading employers (up 70 from last year) covering over 9,000,000 employees. This program provides a cooperative means for leadership in the promotion and implementation of equal employment opportunity and complements the Federal Compliance activity. During Fiscal Year 1968, the employer-members of Plans for Progress will contribute over a million dollars to carry out the various activities.

These activities include the sponsorship of: Local Merit Employment Councils; Vocational Guidance Institutes; manpower training and development seminars; youth motivation programs; and, college conferences to communicate needs between industry and colleges.

I thank the Committee for this opportunity and will be pleased to respond to questions.

BUDGET REQUEST FOR ENFORCEMENT OF EXECUTIVE OFFICE REQUIREMENT

Mr. SYLVESTER. The request is for $750,000 and 47 full-time positions, which is an increase of $287,000 and 18 positions over fiscal year 1968 for the Activity 1.

The bulk of this request for 18 positions is for the new responsibility that we have been assigned by amendment to the Executive Order which includes sex discrimination. It is effective October of this year.

Of the 18 positions, 13 are professionals and five are clerical. Five will be assigned to the Solicitor's Office for the necessary legal support required by these activities.

The increase in the Compliance positions is required by the general increased coverage of the Executive Order due to broader interpretations of current rules and regulations, the fact that we now have new rules and regulations which are being prepared for promulgation and the fact that the kind of discrimination problems we are uncovering will require much more detailed analysis than had been the case in the past.

BUDGET REQUEST FOR PLANS FOR PROGRESS

On the Plans for Progress which is Activity 2, the request is for $232,000 and 12 full-time positions, which is the same number of positions as the past fiscal year but is an increase of $44,000 over fiscal year 1968.

This increase is to provide summer clerical help and a rather modest program increase. I might say that that program has grown considerably. It is now up to 417 employers which is up 70 from last year and covers altogether about 9 million employees.

Senator HILL. That much increase?

Mr. SYLVESTER. That much increase. We estimate, perhaps rather conservatively, that the business participants who are involved contribute about a million dollars to carry out the actual programs.

The Government financing is simply to supply the clerical help and administrative support for that program. I think this concludes whatever I have to say at this time.

I will be delighted to respond to questions.

Senator HILL. I think you have made the situation clear.

## Office of the Secretary

## Title VI, Civil Rights

**STATEMENT OF ARTHUR A. CHAPIN, SPECIAL ASSISTANT TO THE SECRETARY**

**ACCOMPANIED BY:**

**HAROLD R. WHITE, BUDGET ANALYST**

**RICHARD E. MILLER, DIRECTOR, OFFICE OF PROGRAM AND BUDGET REVIEW**

Senator Hill. Mr. Chapin.

Mr. Chapin. Yes, Mr. Chairman.

(The statement follows:)

I am pleased to appear here today to discuss the Department of Labor's 1969 appropriation request to carry out the Department's responsibilities under the Civil Rights Act of 1964.

As you know, Title VI of that Act forbids discrimination in Federally financed programs. It also directs each Federal agency to develop affirmative action programs to insure that Federally financed programs are in compliance with the law. The Department is requesting 80 positions and $1,236,000. This is an increase of 52 positions (14 of which will be assigned to the Solicitor's Office) and $781,000 over the 1968 appropriation.

There has been some headway made thus far, which is described in the justification. State and local officials more often than not are sensitive to the problems of discrimination and are moving toward compliance with Title VI.

However, numerous and various problems of discrimination still remain. Among the violations and problems we find in State employment security agencies are the following:

Acceptance of discriminatory orders;
Improper handling of discriminatory job orders;
Discriminatory referrals to employers;
Inadequate training of staff on Civil Rights and Departmental regulations;
Discrimination in regard to unemployment insurance;
Discriminatory service to high schools and colleges;
Discriminatory counseling;
Misuse of tests and test scores;
Discourteous treatment of minority members;
Discriminatory advertising;
Lack of minority staff.

In apprenticeship programs that are still patterns of discrimination practiced in some crafts in some localities.

Nonwhites often do not have equal access to information on current or future apprenticeship programs.

Standards for selection often are not uniform for whites and nonwhites.

Nonwhites often are judged more rigidly than whites.

When nonwhites are admitted to apprenticeship programs, they are sometimes mistreated or provoked into withdrawing.

There is often unequal application of selection processes and tests in selecting candidates for apprenticeship programs.

In 1967, our basic program direction was toward investigating complaints and conducting in-depth compliance evaluations of manpower programs to determine, if any, the kind and extent of discriminatory practices.

During 1968 we are expanding both of these activities, and in addition are placing emphasis upon staff training and other program activities which will reduce the number of violations and complaints.

However, we feel that the Equal Employment Opportunity program must be greatly strengthened if we are to make more than token headway. To date we have conducted reviews of only 6 percent of all recipients of Department of Labor funds. Three-fourths of all reviews in manpower programs to date reveal discriminatory practices. It would be reasonable to assume that the incidence of discrimination in the 94 percent still to be reviewed would be of similar magnitude.

In 1969 we plan to develop the necessary technical material for adequate staff training of the personnel administering manpower programs. We plan to train recipients at the local level to develop, implement and monitor effective civil rights programs; we plan to provide on-site assistance to recipients, to bring diverse groups together to further Title VI objectives. We plan to work with public schools, colleges, and universities across the country to develop a greater awareness of the expanding opportunities for minorities. And we plan to participate in research to insure effectiveness and to insure a source of additional program ideas.

The Equal Employment Opportunity office has responsibilities to 22 million Negroes, 546,000 Indians, 885,700 Puerto Ricans and 5 million Mexican-Americans. Each has a special stake in our compliance activities under Title VI of the Civil Rights Act of 1964. Additional funds in FY 1969 will enable this office to more adequately cope with the problems faced by those neglected citizens.

You will note that we are proposing that $762,000 of the amount needed for this activity be funded from the Unemployment Insurance Trust fund. The fact that a substantial portion of the program's workload will be with the Employment Security Program makes this financing arrangement most appropriate.

I appreciate the opportunity to appear before this Committee and will be pleased to answer any questions.

REQUEST FOR INCREASED POSITIONS

Mr. CHAPIN. Under title VI of the Civil Rights Act, we are requesting an increase of 52 positions, 14 of these positions would be assigned to the solicitor's office for the increased responsibilities that the solicitor will have under this office.

The increase we are asking for and positions will deal primarily with the area of technical assistance which we have found necessary in providing information and assistance through cooperation with the States and also with employers in handling and resolving matters of discrimination affirmatively without enforcement through court procedures.

The standards which we have outlined for States as well as for employers have been most successful in that the in-depth compliance reviews that are necessary in identifying the extent of discrimination has been handled by a very small staff as requested last year.

Senator HILL. You had 28 last year?

Mr. CHAPIN. That is right. The added responsibilities is why we are requesting additional staff.

To give you some idea of this—we have been able to disseminate information to the minority community as well as to the over 2,000 employment offices of the United States. It has been this type of assistance, both to the community as well as to public agencies which has made this program as successful as it has been.

There is the need for extending better service to schools, colleges, as well as to the local employment offices.

Senator HILL. Is there anything you would like to add, sir?

Mr. WHITE. No, sir.

Senator HILL. You, sir?

Mr. SYLVESTER. No, sir.

Senator HILL. Thank you very much.

Mr. SYLVESTER. Thank you.

## Office of the Secretary

## Preventing Age Discrimination in Employment

**STATEMENT OF THOMAS DONAHUE, ASSISTANT SECRETARY**

**ACCOMPANIED BY:**
**CLARENCE T. LUNDQUIST, ADMINISTRATOR**
**IRVING LEVINE, ASSISTANT ADMINISTRATOR**
**WILLIAM R. REISE, CHIEF, DIVISION OF PROGRAM PLANNING AND EVALUATION**
**RICHARD E. MILLER, DIRECTOR, OFFICE OF PROGRAM AND BUDGET REVIEW**

### Appropriation Estimate

"Preventing Age Discrimination in Employment

*For expenses necessary for the administration of the Age Discrimination in Employment Act of 1967 (Public Law 90–202), $1,000,000.*"

AMOUNTS AVAILABLE FOR OBLIGATION

| | 1968 | 1969 |
|---|---|---|
| Appropriation or estimate | | $1,000,000 |
| Appropriation or estimate, revised | | 1,000,000 |

OBLIGATIONS BY ACTIVITY

| Description | Appropriation 1968 | | Estimate, 1969 | | 1969 change | |
|---|---|---|---|---|---|---|
| | Position | Amount | Position | Amount | Position | Amount |
| 1. Preventing age discrimination in employment | | | 91 | $1,000,000 | +91 | +$1,000,000 |

OBLIGATIONS BY OBJECT

| | Appropriation, 1968 | Estimate, 1969 | 1969 Change |
|---|---|---|---|
| Total number of permanent positions | ---------- | 91 | +91 |
| Average number of all employees | ---------- | 82 | +82 |
| 11 Personnel compensation | ---------- | $675,000 | +675,000 |
| 12 Personnel benefits | ---------- | 52,700 | +52,700 |
| 21 Travel and transportation of persons | ---------- | 82,000 | +82,000 |
| 22 Transportation of things | ---------- | 1,000 | +1,000 |
| 23 Rent, communications, and utilities | ---------- | 67,300 | +67,300 |
| 24 Printing and reproduction | ---------- | 31,500 | +31,500 |
| 25 Other services | ---------- | 5,000 | +5,000 |
| Services of other agencies | ---------- | 35,000 | +35,000 |
| 26 Supplies and materials | ---------- | 5,000 | +5,000 |
| 31 Equipment | ---------- | 45,500 | +45,500 |
| Total obligations | ---------- | 1,000,000 | +1,000,000 |
| Working capital fund items included above | (----------) | (35,000) | (+35,000) |

SUMMARY OF CHANGES

| | Position | Amount |
|---|---|---|
| 1968 enacted appropriation | | |
| 1968 appropriation, revised | | |
| 1969 estimate | 91 | $1,000,000 |
| Total change | +91 | +1,000,000 |
| Program items, Increases: To provide for administration of the provisions of the Age Discrimination in Employment Act of 1967, Public Law 90-202 ($727,700 personal services; $272,300 nonlabor) | +91 | +1,000,000 |
| Total change | +91 | +1,000,000 |

*Activity 1. Preventing age discrimination in employment*

| | |
|---|---|
| 1968 | 0 |
| 1969 (positions 91) | $1,000,000 |

NARRATIVE DESCRIPTION OF PROGRAM

This program provides for the administration of the Age Discrimination in Employment Act of 1967 (Public Law 90–202), which was enacted December 15, 1967, and becomes effective June 12, 1968. The basic purposes of this Act are to outlaw discrimination in employment based upon age, and to promote the employment of older workers based on their ability.

*Enforcement*

| | |
|---|---|
| 1968 | 0 |
| 1969 (positions, 73) | $750,000 |

The powers and procedures granted to the Secretary for enforcement, including the making of investigations and the bringing of legal proceedings under the Act, essentially follow those provided by the Fair Labor Standards Act. Legal proceedings include the seeking of court judgments compelling employment, reinstatement or promotion. Amounts found to be owing an individual as a result of violations of the Act may be recovered as unpaid minimum wages or unpaid overtime compensation in accordance with the provisions of the Fair Labor Standards Act, except that liquidated damages may be sought only in cases of willful violation. Before instituting such actions, however, the Secretary is directed to attempt to effect voluntary compliance through informal methods of conciliation, conference, and persuasion. During 1969, the Act will be generally applicable to any employer in an industry affecting interstate commerce who has twenty-five or more employees, to public and private employment agencies, and to labor organizations with twenty-five or more members. The act itself becomes effective June 12, 1968, and provides that the employment and membership tests will be fifty or more until June 30, 1968.

*Changes for 1969*

| | |
|---|---|
| Program changes amount to | +$750,000 |
| Positions | +73 |

*Proposal.*—During 1969, the first effective year of the Age Discrimination in Employment Act, to assign priority to investigating complaints alleging violations of the Act, and to provide for additional enforcement effectiveness under the Act by means of expanded investigations in other establishments investigated by the Department's Wage and Hour Division where the employer is found to meet the coverage criteria of the Age Discrimination in Employment Act.

*The Need.*—It is estimated that 350,000 employers are covered by the Act, with a total employment of 37 million persons. Although there are over 52 million Americans between the ages of 40 and 64, half of all jobs surveyed in 1965 were found to be closed to workers over 55, and one-fourth of all jobs were closed to workers over 45. The Department's study of age discrimination and employment practices, and employment problems of older workers, showed further that workers 45 years of age or older make up half of the long-term unemployed, and over one-fourth of all the unemployed. These figures showed the need to give persons between 40 and 65 a better chance to go on working productively and gainfully.

*The Program.*—In enforcing the Act and conducting investigations, every reasonable effort will be made to effect voluntary compliance through informal methods of conciliation, conference and persuasion. Where this fails, actions will be initiated as appropriate to obtain legal or equitable relief through the Federal courts, including employment, reinstatement or promotion, and the recovery of compensation owing to individuals as a result of violations of this Act. In adition to making investigations, continuing intensive efforts will be made in support of the enforcement program to obtain voluntary compliance through publicity concerning the requirements of the Act, the publication of interpretative and explanatory materials, and counseling and advice. The field staff of the Wage and Hour Division will disseminate information concerning the Act to a broad sector of the public in the course of its regular informational and compliance responsibilities under the other acts enforced.

In coordination with the Department's Manpower Administration and the Office of Labor-Management and Welfare-Pension Reports, arrangements will be undertaken for effecting compliance with the provisions of the Act which are applicable to State Employment Service offices and to labor organizations with 25 or more members. The Office of the Solicitor will provide necessary legal services in connection with the administration of the Act, including the provision of legal advice and assistance in the issuance of rules and regulations authorized by the Act and interpretations thereunder. In view of the extensive coverage of this Act and the lack of prior Federal regulation in this area, it is estimated that a very substantial volume of inquiries and requests for legal opinions on fact questions will continue through 1969 and for an extended period thereafter. Guidelines will be developed in coordination with the research and education program concerning occupations in which age is determined to be a necessary qualification of employment or differentiation is based on reasonable factors other than age, e.g., bona fide seniority and employee benefit systems. Informational needs will be coordinated as required for the administration of the Act, for the annual report of the Secretary required by Section 13 of this Act, and in support of the enforcement program.

BASE

Positions: 0. Estimated cost: 0.

ADDITIONAL COST

Positions: 73. Man-years: 66. Estimated cost: $750,000.

BASIS FOR THE ESTIMATE

As a result of publicity concerning the provisions of the Age Discrimination in Employment Act, it is estimated that a minimum of 1,000 investigations will be made by the Wage and Hour Division in response to complaints received from the public. In addition, it is anticipated that 30% of the investigations made by the Division pursuant to its other enforcement responsibilities will be of establishments meeting the coverage criteria of the Age Discrimination in Employment Act. Where improper age discrimination is disclosed by these investigations, additional investigator time will be expended attempting to effect voluntary compliance through informal methods of conciliation, conference and persuasion. When informal methods fail, it is anticipated that extensive expenditures of time may be necessary in some instances to document or develop evidence of discrimination. It is estimated that concurrent investigations under this Act will require on the average at least 10% more investigator time to complete than would otherwise be required.

The estimate of 1,000 complaint investigations during 1969 is a minimum figure based in part upon the experience of States with anti-age discrimination laws. This experience indicates that the number of complaints received alleging violations will increase as the public becomes more fully aware of the protections provided to them and the availability of assistance in obtaining these protections. It should be noted also that the estimate for 1969 relates to numbers of establishments against which complaints may be received, rather than the number of individuals filing complaints which might include multiple complaints against a single establishment. In addition to investigations initiated on the basis of complaints, it is estimated that approximately 22,500 (30%) of the investigations performed by the Wage and Hour Division under other acts will

disclose concurrent coverage under the Age Discrimination in Employment Act. To the extent that smaller establishments are parts of multi-unit activities with a total employment of 25 or more persons, these establishments would also be covered.

In addition, inquiries and questions concerning the application of the Act to specific fact situations will generate a very substantial workload of interpretations, opinions, and legal advice. Experience in the enforcement of similar types of new legislation indicates that the workload of legal and administrative interpretations will grow rather than subside as additional new fact situations are encountered and refinements of earlier positions are found necessary.

Of the 73 positions requested, 48 investigator and 10 field support positions are needed to investigate complaints received under the Act, and to perform the additional investigation activity associated with concurrent investigations. Fifteen departmental positions are for administrative and enforcement support, including 6 attorney positions to provide necessary legal services, 5 analyst and specialist positions, and 4 clerical positions.

*Research and Education*

| | |
|---|---|
| 1968 | 0 |
| 1969 (Positions 18) | $250,000 |

Section 3(a) of the Age Discrimination in Employment Act directs the Secretary to undertake studies to provide information to labor unions, management, and the general public concerning the needs and abilities of older workers, and their potential for continued employment and contribution to the economy. In order to achieve the purposes of the Act, the Secretary is directed to carry on a continuing program of education and information, under which among other things he may—

(1) undertake and promote research to reduce barriers in the employment of older persons,

(2) publish and otherwise make available the findings of studies and other materials for the promotion of employment of older persons,

(3) foster the development of facilities of public and private agencies for expanding the opportunities and potentials of older workers, and

(4) sponsor and assist State and community information and educational programs in this area.

This activity also provides for the special studies, recommendations and reporting directed by the Act. Section 5 directs the Secretary to study institutional and other arrangements giving rise to involuntary retirement and report his findings with appropriate legislative recommendations to the President and the Congress. Section 13 directs the Secretary to make an annual report to the Congress regarding the activities carried on in the administration of the Act, including an evaluation of the minimum and maximum ages established by the Act, with his recommendations to the Congress.

*Changes for 1969*

| | |
|---|---|
| Program changes amount to | +$250,000 |
| Positions | +18 |

*Proposal.*—To direct and perform the research, educational and information activities which will be required in the administration of the Age Discrimination in Employment Act.

*The Need.*—This is a substantially new activity resulting from the enactment of new legislation. To achieve the purposes of the Age Discrimination in Employment Act, and particularly Section 3, it will be necessary to increase the research and educational capabilities of the Department relevant to the promotion of employment opportunities for older persons. To carry out the mandate of Section 3 concerning the problems of older workers it will be necessary to build on existing research within the Department. This includes studies of the special problems of retirees, labor force participation, productivity, job redesign for older workers, employee benefit plans and pensions, and participation in volunteer work. Under this new authorization, research and informational activities concerned with the problems of older workers will be strengthened and a coordinated approach will be undertaken centered around the general problem of age discrimination experienced by older workers in seeking to retain or regain employment. As stated by Senate Report No. 723 in relation to the education and information program

under Section 3 of the Act, "These functions can do much to correct age discriminatory employment practices and are therefore vital to the overall effectiveness of the bill. They are means of affecting salutary changes in attitude which will induce compliance with the simple justice the proposal espouses, thereby making enforcement measures unneccessary".

*The Program.*—Broad areas of focus for the research and education activity will include the following: (a) study and define, test and promote solutions to institutional arrangements which may work to the disadvantage of older workers in such matters as pensions, and other private annuity coverage, workmen's compensation and disability income, seniority and collective bargaining; (b) explore and evaluate proposals related to retirement and to planning, preparation for and adjustment to retirement; (c) explore proposals for systems of continuing educational and training opportunities to prepare workers while still employed for job changes, and to reduce their vulnerability to displacement; (d) develop principles and guides for job redesign and effective methods for training older persons.

A program will be conducted for promoting the employment of older workers similar to that conducted by the President's Committee on Employment of the Handicapped. Technical support will be given to State agencies of the U.S. Employment Service, and also to State agencies administering age discrimination statutes whose resources for research and education are extremely limited. The Department will also utilize and cooperate with the Veterans Administration, whose resources for public information activities may be increasingly directed towards meeting the needs of the great numbers of veterans aged 40 to 65.

During 1969, it will be necessary to develop informational leaflets and brochures; audio visual materials including films and film strips for T.V., and other media of communication; training materials for the staff of State Employment Services; seminars and conferences for employers, personnel workers and community organizations; the evaluation of compliance and employment promotion activities of local employment offices; sponsorship of State and community informational education programs; the collection, analysis and interpretation of materials relevant to the employment problems of the older worker—including training opportunities, full-time and part-time job opportunities, job finding techniques and other information for the guidance of older job applicants. It will also be necessary to develop fact sheets pointing out the advantages of employing middle aged and older men and women.

Studies will be conducted and information will be gathered which will indicate the effects of the legislation on the position of the older worker in the labor force. These will be presented in the annual report to be made to the Congress in 1969, which will also include activities under the Act and recommendations for further legislation, and an evaluation and appraisal of the effect of the maximum and minimum ages established in the Act. Information will be developed on the age distribution of employees in various industries. In coordination with the enforcement program to be conducted under this Act, information will be developed for the issuance of guidelines and interpretative materials to aid employers in complying with the Act, particularly in the application of the exceptions provided by the Act where age is a bona fide occupational qualification or differentiation is based on reasonable factors other than age.

BASE

Positions: 0. Estimated cost: 0.

ADDITIONAL COST

Positions: 18. Man-years: 16. Estimated cost: $250,000.

BASIS FOR THE ESTIMATE

Staff and financial resources for this activity are based on past experience of the Department in conducting research and technical manpower information programs. Approximately 20 studies and projects will be initiated, including the research studies needed to prepare the basis for the Secretary's appraisal and legislative recommendations on the effect of the maximum and minimum ages established in the Act. In order to carry out these statutorily mandated activities, 18 positions and $250,000 are required, including twelve development and research positions, 3 information officer positions, and 3 clerical support

positions. Of the amount requested, it is estimated that $200,000 will be required for research and the balance for education.

DISTRIBUTION OF FIELD STAFF

| Supervising Offices | 1968 | | | 1969 | | |
|---|---|---|---|---|---|---|
| | Professional | Clerical | Total | Professional | Clerical | Total |
| Atlanta, Ga | | | | 6 | 1 | 7 |
| Birmingham, Ala | | | | 3 | 1 | 4 |
| Boston, Mass | | | | 2 | 1 | 3 |
| Chicago, Ill | | | | 9 | 1 | 10 |
| Dallas, Tex | | | | 5 | 1 | 6 |
| Kansas City, Mo | | | | 4 | 1 | 5 |
| Nashville, Tenn | | | | 4 | 1 | 5 |
| New York City, N.Y | | | | 5 | 1 | 6 |
| Philadelphia, Pa | | | | 4 | 1 | 5 |
| San Francisco, Calif | | | | 5 | 1 | 6 |
| Santurce, P.R | | | | 1 | | 1 |
| Total, field staff | | | | 48 | 10 | 58 |

## Explanation of Estimate by Object

*Personnel compensation, $675,000*

This estimate provides for 91 full-time positions or 82 net man-years.

*Personnel benefits, $52,700*

This estimate is based upon levels of personnel compensation for 1969 and provides the following benefits:

| | |
|---|---|
| Contribution to the C.S.C. Retirement Fund | $43,900 |
| Employees' group life insurance | 3,400 |
| Employees' health benefits | 5,400 |
| | 52,700 |

*Travel and transportation of persons, $82,000*

This estimate provides for per diem, mileage, parking fees, and transportation costs for investigators and administrative personnel.

*Transportation of things, $1,000*

This estimate provides for the shipment of supplies, equipment, and printed matter to field installations.

*Rent, communications, and utilities, $67,300*

This estimate provides for the following:

| | 1968 | 1969 | Net change |
|---|---|---|---|
| Paid official mail | | $8,200 | +$8,200 |
| Telephone services | | 9,800 | +9,800 |
| Rent and utility services | | 41,400 | +41,400 |
| Working capital fund | | 3,400 | +3,400 |
| Federal telecommunications system | | 4,500 | +4,500 |
| Total | | 67,300 | +67,300 |

*Printing and reproduction, $31,500*

This estimate provides $26,100 for publication and $5,400 for working capital fund services.

*Other services, $40,000*

This estimate provides $12,500 for statistical tabulations, $5,000 for other miscellaneous services and $22,500 for working capital fund services.

*Supplies and materials, $5,000*

This estimate provides $1,300 for desk top supplies and $3,700 for working capital fund services.

*Equipment, $45,500*

This estimate provides equipment for 91 positions.

SUMMARY OF NEW POSITIONS

ACTIVITY 1

| | Number | Grade | Amount |
|---|---|---|---|
| Field offices: | | | |
| Investigators | 10 | GS–12 | $114,610 |
| Investigators | 38 | GS–7 | 255,892 |
| Clerk-stenographers | 10 | GS–4 | 49,950 |
| Departmental: | | | |
| Law enforcement specialist | 1 | GS–12 | 11,461 |
| Exemptions specialist | 2 | GS–12 | 22,922 |
| Personnel specialist | 1 | GS–12 | 11,461 |
| Budget analyst | 1 | GS–12 | 11,461 |
| Attorneys | 3 | GS–11 | 28,971 |
| Attorneys | 3 | GS–9 | 24,162 |
| Clerk-stenographers | 4 | GS–4 | 19,980 |
| Total | 73 | | 550,870 |

ACTIVITY 2

| | | | |
|---|---|---|---|
| Departmental: | | | |
| Research analyst | 1 | GS–14 | $15,841 |
| Research analysts | 2 | GS–13 | 27,014 |
| Research analysts | 9 | GS–12 | 103,149 |
| Information officers | 3 | GS–12 | 34,383 |
| Secretary | 1 | GS–5 | 5,565 |
| Clerk-stenographers | 2 | GS–4 | 9,990 |
| Total | 18 | | 195,942 |
| Grand total | 91 | | 746,812 |

PREPARED STATEMENT

Senator HILL. Mr. Thomas Donahue, Assistant Secretary.

Mr. DONAHUE. Mr. Chairman, we have a complete statement which details the budget proposal and the level of activity which we would hope to achieve during fiscal year 1969 in administering the Age Discrimination in Employment Act.

With your permission, I would submit it for the record.

Senator HILL. It may appear in the record.

(The statement follows:)

Mr. Chairman and Members of the Committee, the Department of Labor's estimate for fiscal year 1969 for administration and enforcement of the Age Discrimination in Employment Act of 1967 (Public Law 90–202) is $1,000,000, which represents the first-year costs for carrying-out the Secretary's responsibilities under the Act. This request is in addition to the regular appropriations requests of the Department of Labor for 1969 which do not reflect any funds or positions for activities required by this newly enacted legislation. The request includes $750,000 and 73 positions for administration and enforcement of the Act, and $250,000 and 18 positions for research and educational activities required by the Act.

NEWLY ENACTED LEGISLATION

The Age Discrimination in Employment Act (Public Law 90–202) was enacted December 15, 1967, and becomes effective June 12, 1968. The basic purposes of this Act are to outlaw discrimination in employment based upon age, and to promote the employment of older workers based on their ability. This is to be accomplished through educational and informational activities to help employers and workers in meeting problems arising from the impact of age on employment, and through the use of informal and formal enforcement procedures where the education program has failed to achieve a voluntary end to age discrimination. The prohibitions against age discrimination in employment apply to persons 40 to 65 years of age, the lower limit being the age at which Congressional testimony indicated discrimination usually becomes evident. During 1969 the Act will

be generally applicable to any employer in an industry affecting interstate commerce who has twenty-five or more employees, to public and private employment agencies, and to labor organizations with twenty-five or more members.

It is estimated that 350,000 employers will be subject to the Act, with a total employment of 37 million persons. The Department's study of the problems of age discrimination in employment, issued in June 1965, reported that half of all job openings were closed to workers over 55, and one-fourth were closed to workers over 45. The study showed that older workers 45 years of age and over experienced more long-term unemployment than younger groups, and that on the average this unemployment lasted 8 weeks longer. A substantial portion of the unemployment insurance payments of $1 billion a year to workers 45 and over can be attributed to unemployment resulting in one way or another from the fact of the employee's age. In his report, the Secretary recommended action to eliminate arbitrary age discrimination in employment and said: "The possibility of new nonstatutory means of dealing with such arbitrary discrimination has been explored. That area is barren . . . A clean-cut and implemented Federal policy . . . would provide a foundation for a much-needed vigorous, nationwide campaign to promote hiring without discrimination on the basis of age."

The Act authorizes an appropriation not to exceed $3 million in any fiscal year. For 1969 only $1 million is being requested, which represents the minimum amount required to perform the Department's responsibilities. An analysis of the effects of State age discrimination laws has shown that the volume of complaints received is more closely related to public awareness of the law than to the effect of discrimination. The amount being requested for 1969 therefore reflects the initial emphasis which will be given to informational activities and efforts to gain voluntary compliance. No massive program of investigations is planned during 1969. However, investigations under the Act will be made as necessary on the basis of complaints or in combination with other Wage-Hour investigations whenever concurrent coverage is disclosed.

ENFORCEMENT PROGRAM

The powers and procedures granted to the Secretary for enforcement, including the making of investigations and the bringing of legal proceedings, essentially follow those provided by the Fair Labor Standards Act. Legal relief to acts of discrimination may be obtained through the courts compelling employment, reinstatement or promotion as appropriate. In addition, amounts found to be owing an individual as a result of violations of the Act may be recovered as unpaid compensation in accordance with the provisions of the Fair Labor Standards Act, except that liquidated damages can be claimed only in cases of willful violation. Before instituting such actions, however, the Secretary is directed to attempt to effect voluntary compliance through informal methods of conciliation, conference and persuasion.

As a result of publicity concerning the provisions of the Age Discrimination in Employment Act, it is estimated that a minimum of 1,000 investigations will be made in 1969 by the Department's Wage and Hour Division in response to complaints received from the public. In addition, it is estimated that somewhat more than 20,000 of the investigations performed by the Wage and Hour Division under other acts will disclose concurrent coverage under the Age Discrimination in Employment Act. Every reasonable effort will be made to effect voluntary compliance through the informal methods cited. In addition to making investigations, intensive efforts will be made to obtain voluntary compliance through publicity about the Act, speaking engagements, and the publication of interpretative and explanatory materials. Guidelines will be developed concerning the allowances provided by the Act where age is a bona fide occupational qualification reasonably necessary to the normal operation of a particular business or differentiation is based on reasonable factors other than age, particularly bona fide seniority and employee benefits systems.

Forty-eight investigator positions and 10 Field support positions are requested to investigate complaints received under the Act, and to perform the additional investigation activity associated with concurrent investigations. In addition, 15 Departmental positions are requested for administrative and enforcement support, including 6 attorney positions to provide necessary legal services, 5 analyst and specialist positions, and 4 clerical positions.

RESEARCH AND EDUCATION PROGRAM

In addition to prohibiting discrimination on the basis of age in the employment of persons 40 to 65, the Act directs the Secretary to conduct studies and undertake research and educational activities to promote the employment of older workers based on their ability. Section 5 directs the Secretary to study institutional and other arrangements giving rise to involuntary retirement and report his findings with appropriate legislative recommendations to the President and the Congress. Section 13 directs the Secretary to make an annual report in January to the Congress regarding the activities carried on in the administration of the Act, including an evaluation of the minimum and maximum ages established by the Act, with his recommendations to the Congress. In addition, Section 3 directs the Secretary to carry on a continuing program of education and information under which among other things he may:

(1) undertake and promote research to reduce barriers in the employment of older persons,

(2) publish and otherwise make available the findings of studies and other materials for the promotion of employment of older persons,

(3) foster the development of facilities of public and private agencies for expanding the opportunities and potentials of older workers,

(4) sponsor and assist State and community information and educational programs in this area.

As stated by Senate Report No. 723: "These functions can do much to correct age discriminatory employment practices and are therefore vital to the overall effectiveness of the bill. They are means of affecting salutary changes in attitude which will induce compliance with the simple justice the proposal espouses. thereby making enforcement measures unnecessary."

During the current year, legislative recommendations will be developed as directed by Section 3(b) concerning desirable changes in the lower or upper age limits established by the Act, with special reference to the situation of airline stewardesses. In 1969, broad areas of focus for the research and education activity will include the following:

(1) solutions to institutional arrangements which may work to the disadvantage of older workers in such matters as pensions and other private annuity coverage, workmen's compensation and disability income, and seniority and collective bargaining;

(2) proposals relating to retirement, to preparation for retirement, and adjustment to retirement;

(3) proposals for continuing educational and training opportunities to prepare workers for job changes, and to reduce their vulnerability to displacement; and

(4) guidelines for job redesign and training for older persons.

A program will be conducted for promoting the employment of older workers which will include providing technical support to state agencies of the U.S. Employment Service, and also to State agencies administering age discrimination statutes. The Department will also utilize and cooperate with the Veterans Administration in public information activities directed to the needs of veterans ages 40 to 65. Studies will be conducted and information will be gathered which will indicate the effects of the legislation on the position of the older worker in the labor force. These will be included in the annual report to be made to the Congress.

Staff and financial resources for the research and education activity are based on past experience of the Department in conducting research and manpower information programs. In order to carry out these statutory requirements 18 positions and $250,000 will be needed. including 12 development and research positions, 3 Information Officer positions, and 3 clerical support positions

SUMMARY

The President in his remarks after signing the Age Discrimination in Employment Act into law stated in part: "This Act does not compel employers and labor unions and employment agencies to choose a person aged 40 to 65 over another person. It does require that one simple question be answered fairly: *Who has the best qualifications for the job?* . . . The Age Discrimination in Employment Act of 1967 gives the vital part of our labor force between 40 and 65 a better chance to go on working productively and gainfully. The country will gain as well—from

making better use of their skills and experience. This is humane and practical legislation."

The Department accepts the challenge and will utilize its specialized capabilities in a coordinated effort to eliminate discrimination in employment based on age.

BUDGET REQUEST

Mr. DONAHUE. The Age Discrimination in Employment Act was enacted in December 1967 and becomes effective as of June 12, 1968.

The Department of Labor's estimates of first year's cost for fiscal year 1969 is just $1 million, of which $750,000 and 73 positions are for enforcement and administration of the act and $250,000 and 18 positions are for the performance of the Secretary's research and educational responsibilities under the act.

The basic purposes, as you well know, are to outlaw discrimination in employment based upon age and to promote employment of older workers based on their ability.

We hope to accomplish that through education, conciliation activity, to help employers and workers in overcoming some problems arising from impact of age on employment and to accomplish the purpose of the act through formal enforcement procedures where other efforts have failed.

STATISTICS ON AGE DISCRIMINATION IN EMPLOYMENT

The prohibitions against age discrimination in employment apply to persons 40 to 65 years of age.

During 1969 the act will be generally applicable to any employer in an industry affecting interstate commerce with 25 or more employees, to public and private employment agencies, and to labor organizations with 25 or more members.

It is our estimate, Mr. Chairman, that about 350,000 employers would be subject to the act with a total employment of 37 million persons.

The statistics which the Department has put together show that in a study which was made in June 1965, half of all the jobs in the United States were closed to workers over age 55.

Senator HILL. Half were closed, you say?

Mr. DONAHUE. Yes, sir; half of all the jobs. One-fourth of the jobs were closed to workers over 45.

The act, itself, authorized an appropriation not to exceed $3 million for 1969. The budget request here is for $1 million. That reflects our initial emphasis and initial requirements for informational activities, for the efforts to gain voluntary compliance, and for investigations under the act on the basis of complaints and/or in combination with other wage-hour investigations where there is concurrent coverage.

BUDGET ESTIMATE

Senator HILL. You are asking for only $1 million out of the $3 million authorization?

Mr. DONAHUE. That is right. We think the $1 million can perform the job for this year.

That estimate also provides for research and education activities required under the act for completion of certain reports to the Congress which are required by the act and for necessary legal services.

For the past few months we have tried to begin to gear up our work and we have tried to absorb some of the cost of the act.

We have prepared some information material, I understand the committee has been supplied with a copy of the basic pamphlet which has been prepared to inform the employers and employees about the act.

We find we can only do that at the expense of other operations and that creates an intolerable situation.

We hope with the approval of this budget of $1 million we will be able to do the job that the Congress wanted done when it passed the act.

We think that the funds requested for 1969 would enable us to utilize the various specialized capabilities of the Department in a coordinated effort to eliminate discrimination in employment based upon age.

That concludes our statement, Mr. Chairman.

Senator HILL. You think $1 million will be sufficient to do a pretty good job?

Mr. DONAHUE. I think it will enable us to do the job that can and should be done for the first year.

Senator HILL. It will take time to build it up, won't it?

Mr. DONAHUE. That is right.

Senator HILL. Is there anything you would like to add, sir?

Mr. LUNDQUIST. No, Mr. Chairman.

Senator HILL. I want to thank you gentlemen very much.

Mr. DONAHUE. Thank you, Mr. Chairman.

## President's Committee on Consumer Interests

### STATEMENT OF BETTY FURNESS, SPECIAL ASSISTANT TO THE PRESIDENT FOR CONSUMER AFFAIRS

### ACCOMPANIED BY:
### WILLIAM G. KAYE, EXECUTIVE DIRECTOR
### LESLIE V. DIX, DIRECTOR FOR LEGISLATIVE AFFAIRS

#### Appropriation Estimate

"President's Committee on Consumer Interests

"For necessary expenses of the President's Committee on Consumer Interests, established by Executive Order 11136 of January 3, 1964, *as amended by Executive Order 11349 of May 1, 1967,* [$337,000] *$700,000. (5 U.S.C. 3109; Department of Labor Appropriation Act, 1968.)*"

#### Advancing the Interests of Consumers

(1968 $337,000; 1969 $700,000)

The consumer goals and assigned objectives of the Administration have shifted and increased markedly. They follow the appointment of the first full-time White House Special Assistant for Consumer Affairs, the upgrading of the President's Committee on Consumer Interests to Cabinet and agency-head status and the reappointment of the Consumer Advisory Council. These changes of emphasis in the Executive Branch parallel a quickening of interest in consumer affairs in the Congress as well as in the State legislatures across the land. Increased demands on the staff organization to support these new consumer requirements have resulted in a request for a minimal enlargement of the operation, as more fully explained below.

The President's Committee on Consumer Interests constitutes the consumer voice in the Administration; makes recommendations to the President on Administration consumer policies, studies the plans and programs of Federal agencies affecting consumer interests, and assists all Federal agencies in accomplishing inter-agency coordination of such programs; plans, develops and proposes legislation necessary to implement the President's consumer policies and objectives, including coordination of all consumer legislation proposed by, or referred for comment to the Executive Branch, and, in a consultative capacity, when requested by the States, local governments, or private groups, supplies comments or assistance concerning prospective legislation and ordinances; promotes cooperation and communication on consumer affairs between the Federal Government, the States and their local subdivisions, consumers, business, private organizations and individual consumers; participates in the dissemination of consumer education and information; cooperates with business and industry in the improvement of the marketplace; provides staff support and assistance to the President's Consumer Advisory Council.

The Special Assistant to the President for Consumer Affairs serves as Chairman of the President's Committee. The membership of the President's Committee and the Consumer Advisory Council are listed in Tables A and B.

#### BUDGET AND POSITIONS

The President's Committee on Consumer Interests is requesting a Fiscal Year 1969 budget of $700,000. This is an increase over the $337,000 which the Congress appropriated for Fiscal Year 1968. This $700,000 budget will make possible 46 permanent positions on the staff, compared with 19 permanent positions in our present 1968 budget.



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Table C shows how the present and proposed positions of the President's Committee are allocated by office within the Committee.

LEGISLATIVE ACTIVITIES

The President has given this Committee heavy responsibility in his legislative program—research into consumer needs and recommendations to the President on priority legislation and administrative policies; drafting legislation; coordinating and evaluating plans and programs of Federal agencies affecting consumer interest; assisting all Federal agencies in accomplishing inter-agency coordination for such programs; analysis of legislative proposals by members of Congress; testimony before Congressional committees; general liaison with the States in developing expanded consumer legislation and administrative programs.

The President proposed twelve consumer bills in his 1967 Consumer Message, more than double the number proposed the year before. Four of these measures have already been signed into law (as of January 15, 1968); eight are pending. The President has now proposed at least seven additional measures in his 1968 Consumer Program.

Since May 1, 1967, the Special Assistant to the President has testified five times before the Congress. A heavier schedule of testimony is anticipated for the next year.

The legislative affairs office also works with the National Conference of Commissioners on Uniform State Laws, and currently is serving in an advisory capacity to the National Conference in the drafting of a Uniform Consumer Credit Code.

The office is represented on the newly established American Bar Association Committee on Consumer Affairs, and maintains membership on the American Bar Association Consumer Bankruptcy Committee.

The increased attention to the problems of consumers is paralled in activity at the State level. (Table D)

Eight States now have formal consumer representation at the executive level via consumer councils or consumer departments including three formed in calendar 1967 (Florida, Michigan, and New Jersey). Twenty-six States have consumer fraud or protection agencies; ten of these are new since January 1, 1967. In addition, Nassau County, New York, established a consumer protection bureau in 1967.

Requests from Governors, members of the State legislatures, States' Attorneys General, and State voluntary consumer groups for consultation and recommendations concerning State legislation and administrative programs have increased significantly in the present Fiscal Year. This increased demand is expected to accelerate in the next Fiscal Year.

We are requesting two profesionals and two clericals for the legislative affairs area. One of these professionals will also serve as a permanent staff liaison to the Consumer Advisory Council, which functions under the aegis of the President's Committee on Consumer Interests.

CONSUMER EDUCATION

Legislation must go hand-in-hand with a positive program of consumer education. There is strong evidence that States and localities recognize this and are increasing their consumer education activities. New York State has recently made consumer education a statewide elective course. Illinois' legislature has just made consumer education a mandatory subject in that State. Other States and localities are following this trend.

We are often called upon by local school groups to counsel them in the preparation of curricula in the consumer education field and to provide assistance in terms of in-service teacher training. We are also asked by business and consumer groups to assist or advise them in the preparation of consumer information materials.

The Committee's responsibilities in the consumer education and information field require that we provide staff to service these activities. We do not presently have budget and permanent staff to assign to consumer education and regard this as a serious omission. A part-time consultant is not a sufficient commitment to meet the problem. We therefore request five professionals and two clerical staff to assist us in carrying out our responsibilities in the areas of consumer education and consumer information.

PUBLIC AFFAIRS ACTIVITIES

The increased public and press interest in consumer affairs as well as the establishment of the Special Assistant as a full-time position have materially added to the demands on the public affairs staff. Since May 1, 1967, the Special Assistant has made 42 speeches and 26 appearances on television or radio. There were numerous participations by the Special Assistant and staff members on panel discussions and in meetings of business, consumer, labor, or educational groups. In addition to speeches and statements, there are press releases to be prepared, press arrangements to make, and substantial correspondence to be handled.

Other duties include maintaining liaison with public information offices of departments and agencies, and preparing and issuing public information booklets and brochures. The President's Committee published two major consumer information booklets in 1967, and has plans to add other publications in the future.

Throughout this period, the public affairs office has been understaffed and the Committee has had to request public affairs assistance from the Cabinet departments and agencies that are members of the President's Committee.

We therefore request additional public affairs staff consisting of four professionals and four clericals.

PRODUCER/MARKETING RELATIONS

The Committee has a regular program of meeting with business groups on consumer-related matters. These meetings will undoubtedly increase in frequency as the amount of consumer legislation grows and as the Committee continues to focus attention on the unmet consumer needs in the marketplace.

To encourage voluntary improvements in the marketplace, the Committee will increase its efforts to create additional industry advisory groups to aid in the work of the Committee. The pattern for these new advisory groups will be along the lines of the already established Textile Advisory Committee, which voluntarily agreed to undertake a campaign for improved labeling of clothing and other consumer textile products and which has published a *Guide* on permanent care labeling at the instigation of the Committee. We anticipate that additional business advisory groups will be formed in Fiscal Year 1969.

These business relations activities will require the additional staff support of two professionals and two clericals.

FIELD OPERATIONS

There has been a marked increase in consumer affairs activities by existing national, State, and local civic, labor, church, fraternal, and women's organizations. In 1967, the President's Committee organized or had a primary role in organizing a number of consumer conferences and meetings in Washington and elsewhere.

The number of national, State, local organizations, consumer organizations is also growing rapidly. Three national consumer organizations are active, the newest of which—The Consumer Federation—was formed in 1967. A committee of 37 of these national organizations active in consumer affairs meets regularly with the President's Committee.

Twenty-four States, 1 county, and 11 cities now have voluntary consumer organizations (Table E). Fourteen were formed in 1967. These groups testify in support of consumer bills before the local, State and national legislatures. They initiate and support new and more effective consumer legislation; they encourage consumer representation at the various levels of government; they promote more effective consumer education.

These voluntary groups encourage improvements in such areas as product pricing, quality of goods, servicing and guarantees, credit and insurance, home improvements, cost of food, drugs and medical care, safety, and other areas determined by their respective board of directors.

To carry out the Committee's work in this area, we are requesting one professional and two clericals for our Field Operations staff.

ADMINISTRATION

We also request one additional professional as a special technical staff assistant to the Executive Director of the President's Committee on Consumer Interests. This person will assist in the administrative duties of the Committee including maintenance of our contacts with the various Federal agencies with consumer-related activities. This person will also help to organize the formal agenda for meetings of the President's Committee on Consumer Interests.

WORKLOAD STATISTICS

| | 1967 | 1968 (estimated) | 1969 (estimated) |
|---|---|---|---|
| Conferences serviced, organized | 6 | 6 | 12 |
| Information materials: | | | |
| Prepared | 5 | 6 | 6 |
| Distributed | 1,000,000 | 500,000 | 500,000 |
| Promotional contacts: | | | |
| Business | 120 | 240 | 300 |
| Federal Government | 350 | 450 | 600 |
| State government | 50 | 100 | 200 |
| Education | 50 | 50 | 100 |
| Voluntary organizations | 200 | 200 | 300 |

TABLE A.—PRESIDENT'S COMMITTEE ON CONSUMER INTERESTS

Honorable Betty Furness, Chairman, President's Committee on Consumer Interests, Washington, D.C.
Honorable Arthur Okun,[1] Chairman, Council of Economic Advisers, Washington, D.C.
Honorable Sargent Shriver, Director, Officer of Economic Opportunity, Washington, D.C.
Honorable Ramsey Clark, Attorney General, Washington, D.C.
Honorable Lawrence F. O'Brien, Postmaster General, Washington, D.C.
Honorable Stewart L. Udall, Secretary of the Interior, Washington, D.C.
Honorable Orville L. Freeman, Secretary of Agriculture, Washington, D.C.
Honorable Alexander B. Trowbridge, Secretary of Commerce, Washington, D.C
Honorable W. Willard Wirtz, Secretary of Labor, Washington, D.C.
Honorable John W. Gardner, Secretary of Health, Education, and Welfare, Washington, D.C.
Honorable Robert C. Weaver, Secretary of Housing and Urban Development, Washington, D.C.
Honorable Paul Rand Dixon, Chairman, Federal Trade Commission, Washington, D.C.
Honorable William J. Driver, Veterans' Administration, Washington, D.C.
And such other Government officials as the President may designate.
Executive Order 11349, May 1, 1967.

TABLE B.—CONSUMER ADVISORY COUNCIL

The Council members appointed by the President on August 11, 1967 are:
Bronson C. LaFollette, of Madison, Wisconsin—Chairman (Attorney General of Wisconsin)
Robert J. McEwen, of Boston, Massachusetts (Associate Professor and Chairman of the Department of Economics, Boston College)
William J. Pierce, of Ann Arbor, Michigan (Professor of Law and Director of the Legislative Research Center, University of Michigan)
Corwin D. Edwards, of Eugene, Oregon (Professor of Economics, University of Oregon)
Richard H. Grant, of Portsmouth, New Hampshire (General Manager, Pease Air Force Base Federal Credit Union)
Gerald A. Lamb, of Waterbury, Connecticut (State Treasurer, State of Connecticut)

[1] Nominated by the President to be Chairman, Council of Economic Advisers.

Louis Stulberg, of New York City, New York (President, International Ladies Garment Workers Union)
William L. Lanier, of Meter, Georgia (State Executive Director, Agricultural Stabilization and Conservation Service)
Mary L. Bailey (Mrs. Charles W.), of Austin, Texas (Housewife)
Maurine B. Neuberger, of Portland, Oregon (currently residing in Washington, D.C.) (Chairman, Citizens Advisory Council on the Status of Women)
Mrs. Otrie Taylor, of Los Angeles, California (Neighborhood Aid Participant for Neighborhood Aid projects in Watts, Los Angeles)
Louise Gentry, of State College, Pennsylvania (Assistant Dean for Resident Education, Pennsylvania State University)

The President's Special Assistant for Consumer Affairs, serves as Executive Secretary of this new Council.

TABLE C.—FISCAL YEAR 1969 BUDGET

| | Fiscal year 1968 | | | Fiscal year 1969 | | |
|---|---|---|---|---|---|---|
| | Professional | Clerical | Total | Professional | Clerical | Total |
| Office of: | | | | | | |
| Executive Director | 2 | 1 | 3 | 3 | 1 | 4 |
| Legislative Affairs | 2 | 2 | 4 | 4 | 4 | 8 |
| Producer-Marketing Relations | 2 | 1 | 3 | 4 | 3 | 7 |
| Consumer Education | 0 | 0 | 0 | 5 | 2 | 7 |
| Public Affairs | 3 | 3 | 6 | 7 | 7 | 14 |
| Field Operations | 2 | 1 | 3 | 3 | 3 | 6 |
| Total | 11 | 8 | 19 | 26 | 20 | 46 |

## TABLE D

### CONSUMER REPRESENTATION IN STATE GOVERNMENTS

| | |
|---|---|
| California | Michigan [1] |
| Connecticut | New Hampshire |
| Florida [1] | New Jersey [1] |
| Massachusetts | Rhode Island |

### CONSUMER FRAUD BUREAUS OR PROTECTION AGENCIES

| | | |
|---|---|---|
| Alaska | Kansas [1] | New Mexico [1] |
| Arizona [1] | Kentucky [1] | New York |
| California | Maine | North Dakota |
| Connecticut | Maryland [1] | Ohio |
| Delaware | Massachusetts [1] | Pennsylvania |
| Florida [1] | Michigan | Texas [1] |
| Hawaii | Minnesota | Vermont [1] |
| Illinois | Missouri | Washington |
| Iowa | New Jersey [1] | |

*Counties* having consumer protection agencies: Nassau County,[1] New York, Department of Consumer Affairs.

*Cities* with special "Councils" appointed by the mayor to deal with consumer problems: New York City Consumer Council.[1]

[1] Formed since January 1, 1967.

TABLE E.—CONSUMER ORGANIZATIONS

STATE

Alaska Consumers Council [1]
Arizona Consumers Council
Association of California Consumers
Colorado Consumers Association, Inc.
Connecticut Consumers Association, Inc.
Georgia Consumer Council
Illinois Federation of Consumers [1]
Indiana Consumers Association [1]
Consumer Association of Kentucky, Inc.[1]
Maryland Consumers Association, Inc.
Massachusetts Consumer Association
Minnesota Consumers League
Missouri Association of Consumers
Consumers League of New Jersey
Albuquerque Consumers Association
Consumers League of Ohio
Ohio Consumers Association
Oregon Consumer League
Pennsylvania League of Consumers Protection
Rhode Island Consumers' League [1]
Texas Consumers Association
League of Utah Consumers [1]
Vermont Consumers' Association [1]
Virginia Citizens Consumer Council [1]
Wisconsin Consumers League
Dade County Consumers Council (Florida)

CITY

Consumer Conference of Greater Cincinnati
Consumer Research Advisory Council (Detroit)[1]
Consumer Association of the District of Columbia [1]
D.C. Citywide Consumer Council [1]
Kansas City Consumer Association [1]
Peninsula Consumer League, Inc. (Newport News, Virginia)[1]
Metropolitan New York Consumer Council
Automobile Consumers Protective Assoc., Inc. (Palo Alto)
Citizens for Consumer Action (Sacramento)[1]
St. Louis Consumer Federation

NATIONAL

Consumer Federation of America,[1] Washington, D.C.
Council on Consumer Information Columbia, Missouri
National Consumers League, Washington, D.C.

PRESIDENT'S COMMITTEE ON CONSUMER INTERESTS EXPLANATION OF ESTIMATE BY OBJECT

11. *Personnel Compensation, $500,000.* The estimate provides $477,000 for 46 permanent positions, or 43 man-years; $20,000 for intermittent employment; and $3,000 for overtime pay. The net increase of $261,000 for 1969 reflects, primarily, the addition of 27 positions required to accommodate the Committee's expanded work program and responsibilities. The increase also includes provision for mandatory items consisting of $5,000 for within-grade promotions for the current staff, and $22,000 for increased pay costs resulting from the Federal Salary Act of 1967.

12. *Personnel Benefits, $35,000.* Provides for contributions to the Civil Service Retirement Fund, group life insurance, health benefits and Social Security payments.

21. *Travel and Transportation of Persons, $40,000.* Includes funds for travel to and from meetings and conferences at various States and localities involving promotional and consultative contacts with various groups of government, business, education, labor, and consumer groups as well as Federal, State, and local governmental units. The estimate is based on an average of 15 travelers incurring 30 days of travel each for the year, or 450 man-days averaging $90 per trip.

23. *Rent, Communications and Utilities, $25,000.* Provides for comprehensive telephone services, including FTS; equipment rental; and other utilities as required. Also included are telegraph and penalty mail costs.

24. *Printing and Reproduction, $30,000.* Provides for printing of speeches, press releases, testimony, promotional materials, reports, studies and other publications as needed, as well as duplicating of material for administrative use.

[1] Formed since January 1, 1967.

The facilities of the Government Printing Office and/or the GSA Printing Plant are utilized, on a reimbursable basis; to the maximum extent possible for all printing requirements.

25.1 *Other Services, $20,000.* Provides for commercial contract services for graphics services, commercial news distribution services, and stenographic and reporting assistance at meetings and conferences, and other miscellaneous services not normally obtainable through Government facilities.

25.2 *Services of Other Agencies, $25,000.* Includes funds for reimbursement to General Services Administration for administrative and housekeeping services; personnel security checks; office machine and furniture repairs; and for miscellaneous services obtainable from other Federal agencies as required.

26. *Supplies and Materials, $15,000.* For necessary office and operating supplies (desk-top supplies, envelopes, letterheads, photocopy materials and other stationery as required), and work materials consisting of subscribed periodicals, reference publications and books.

31. *Equipment, $10,000.* For purchase of additional office furniture and equipment for increased staff (desk, chairs, typewriters, and dictating equipment). Also includes provision for replacement of furniture and equipment items, as required.

PRESIDENT'S COMMITTEE ON CONSUMER INTERESTS

| | 1967 actual | 1968 estimate | 1969 estimate |
|---|---|---|---|
| Program by activities: | | | |
| Advancing the interests of consumer (program costs, funded) | 299 | 345 | 700 |
| Change in selected resources [1] | 10 | | |
| 10 Total obligations | 309 | 345 | 700 |
| Financing: | | | |
| 25 Unobligated balance lapsing | 18 | | |
| 40 New obligational authority (appropriation) | 327 | 337 | 700 |
| 44 Proposed supplemental for civilian pay act increases | | 8 | |
| Relation of obliagtions to expenditures: | | | |
| 71 Total obligations (affecting expenditures) | 309 | 345 | 700 |
| 72 Obligated blaance, start of year | 44 | 29 | 50 |
| 74 Obligated balance, end of year | −29 | −50 | −82 |
| 77 Adjustment in expired accounts | 4 | | |
| 90 Expenditures excluding pay increase supplemental | 328 | 317 | 667 |
| 91 Expenditures from civilian pay act supplemental | | 7 | 1 |

[1] Selected resuorces as of June 30 are as follows: Unpaid undelivered orders 1966, $9,000; 1967, $19,000; 1968, $19,000; 1969, $19,000.

PRESIDENT'S COMMITTEE ON CONSUMER INTERESTS

OBJECT CLASSIFICATION (in thousands of dollars)

| Identification code 12-35-0175-0-1-652 | 1967 actual | 1968 estimate | 1969 estimate |
|---|---|---|---|
| Personnel compensation: | | | |
| 11.1 Permanent positions | 177 | 218 | 477 |
| 11.3 Positions other than permanent | 20 | 18 | 20 |
| 11.5 Other personnel compensation | 2 | 3 | 3 |
| Total personnel compensation | 199 | 239 | 500 |
| 12.0 Personnel benefits | 14 | 17 | 35 |
| 21.0 Travel and transportation of persons | 24 | 27 | 40 |
| 23.0 Rent, communications, and utilities | 10 | 10 | 25 |
| 24.0 Printing and reproduction | 21 | 19 | 30 |
| 25.1 Other services | 12 | 6 | 20 |
| 25.2 Services of other agencies | 19 | 19 | 25 |
| 26.0 Supplies and materials | 7 | 7 | 15 |
| 31.0 Equipment | 3 | 1 | 10 |
| 99.0 Total obligations | 309 | 345 | 700 |

DEPARTMENT OF LABOR

OFFICE OF THE SECRETARY

PRESIDENT'S COMMITTEE ON CONSUMER INTERESTS

| Identification code 12-35-0175-0-1-652 | 1967 actual | 1968 estimate | 1969 estimate |
|---|---|---|---|
| Total number of permanent positions | 19 | 19 | 46 |
| Full-time equivalent of other positions | 2 | 1 | 2 |
| Average number of all employees | 17 | 18 | 43 |
| Average GS grade | 10.6 | 10.6 | 10.2 |
| Average GS salary | $11,719 | $12,985 | $11,689 |

PRESIDENT'S COMMITTEE ON CONSUMER INTERESTS

DETAIL OF PERMANENT POSITIONS

| | 1967 actual number | 1968 estimate number | 1969 estimate number |
|---|---|---|---|
| GRADES AND RANGES | | | |
| GS-17, $23,788 to $26,960 | | | 1 |
| GS-16, $20,982 to $26,574 | | | 5 |
| GS-15, $18,404 to $23,921 | 7 | 7 | 1 |
| GS-14, $15,841 to $20,593 | | | 3 |
| GS-13, $13,507 to $17,557 | 1 | 2 | 9 |
| GS-12, $11,461 to $14,899 | | | 4 |
| GS-11, $9,657 to $12,555 | 1 | 1 | 1 |
| GS-10, $8,821 to $11,467 | | | 1 |
| GS-9, $8,054 to $10,475 | 1 | 1 | 2 |
| GS-7, $6,734 to $8,759 | 4 | 4 | 6 |
| GS-6, $6,137 to $7,982 | 3 | 3 | 8 |
| GS-5, $5,565 to $7,239 | 1 | 1 | 4 |
| GS-4, $4,995 to $6,489 | 1 | | 1 |
| Total | 19 | 19 | 46 |
| HIGHER LEVEL POSITIONS | | | |
| GS-17, $23,788 to $26,960: Executive director | | | 1 |
| GS-16, $20,982 to $26,574: | | | |
| Director, legislative affairs | | | 1 |
| Director, public affairs | | | 1 |
| Director, producer/marketing relations | | | 1 |
| Director, field operations | | | 1 |
| Director, consumer education | | | 1 |

BUDGET REQUEST

Senator HILL. Now Miss Betty Furness. We are glad to have you here, my dear lady.

Miss FURNESS. Thank you.

Senator HILL. We read a lot about you in the press.

Miss FURNESS. Well, I have been getting around.

Senator HILL. You have been pretty active.

Miss FURNESS. I have been that, indeed.

Mr. Chairman, I am pleased to appear before this subcommittee to discuss the budget of the President's Committee on Consumer Interests.

We are requesting a budget of $700,000 for fiscal year 1969. That seems like a large increase over the $337,000 which the Congress appropriated for the current year, but in these introductory remarks I will explain why I think we need this higher amount.

BROAD CONSUMER PROGRAM

The President has established the broadest and most comprehensive consumer program of any administration.

Last year, he urged the Congress to pass 12 consumer bills, five of which have now been signed into law.

Then, in February of this year, the President proposed six new consumer bills and recommended two other actions.

One of those actions, the appointment of a consumer counsel in the Department of Justice, was as you undoubtedly know, announced on March 20.

Together, all of these proposals give form to a consumer program designed to make a working reality of the consumer bill of rights which President Johnson has repeatedly advocated.

The right to be informed, the right to choose, the right to safety, the right to be heard—these are all rights the consumer can justly claim, both as a citizen and as the unmistakable cornerstone of the American economy.

CONSUMER'S MARKET

The consumer today buys two-thirds of this country's gross national product—that is over $520 billion worth of all we produce in goods and services.

His confidence in the marketplace or distrust in that marketplace directly affects whether our economy shall flourish of flounder.

And you know how much that marketplace has changed since the first consumer protection bill was signed by President Grant a century ago.

In that time, the consumer's confidence in the marketplace depended on whether a small handful of people were honest or not. And these were usually people he knew and knew well because they were his neighbors as well as his merchants.

There was a chance he could be defrauded through the mail, of course, and that is exactly what President Grant's bill was designed to avoid.

COMPLEX MARKET

Today, the marketplace is different.

Incredible technological changes, greater marketing sophistication, the increasingly complex industrial structure, the rapid increase in the number of products and services available—all of these things have created a massive marketplace so complex that even the most learned consumer could lose confidence.

The more complex marketplace also creates greater opportunities for the unscrupulous to cheat the public.

PRESIDENT'S EMPHASIS ON CONSUMER INTERESTS CREATES GREATER RESPONSIBILITIES

That is why the President is so completely committed to achieving his consumer goal "to assure every American consumer a fair and honest exchange for his hard earned dollar."

To do this, he is placing increasing emphasis on his Committee on Consumer Interests. This emphasis brings new responsibilities.

For instance, since our last budget request, he elevated the committee to Cabinet-level status so that the consumer will have personal representation in the highest councils of Government.

In addition, he made the Office of his Special Assistant for Consumer Affairs, a full-time position. This has, of course, greatly increased the duties of my staff.

The new budget we are requesting would increase the permanent committee staff from 19 to 46.

### OUTLINE OF TASKS

Perhaps if I outline for you what that staff has to do, you will see why such an increase is needed.

First of all, the President has given my office heavy responsibility for his legislative program for the consumer.

My office is responsible for research into consumer needs and for recommendations on consumer legislation and administrative programs;

For drafting specific legislation, for coordinating and evaluating legislative proposals by other Federal agencies;

For analysis of legislative proposals by Members of Congress; and

For testimony before congressional committees and general liaison with the Congress.

Since my appointment to this office on May 1 of last year, I have testified six times before congressional committees and testimony was given on two other occasions by a member of my staff because I was out of the city.

As new consumer bills reach their committees, I expect an increase in needed testimony from my office and a corresponding increase in workload.

On request, the President's Committee also serves in an advisory capacity for consumer legislation and administrative programs within the States.

In the last year alone, 10 States established consumer bureaus and others are developing them. This work is advanced with the help of the President's Committee.

We have talked with Governors and legislators, Attorneys General and local consumer groups in an effort to get the States to match the new attention the Federal Government is directing toward the consumer and his growing needs.

### Efforts To Inform Consumer

That new Federal attention has also increased the duties of our public affairs office which is working hard to serve the consumer's right to be informed.

We are doing everything we can to let the consumer know what he can do to help himself.

Since May, I have made 54 speeches in 18 States and the District of Columbia and been on radio and television 44 times, exclusive of news coverage.

In all of these apearances, I have tried to let the consumer know what the Government is doing to inform and protect him, what business is doing to help him, what he can do to advance himself.

The increased public attention consumer matters are gaining is reflected well in the rising flow of mail—especially consumer complaints—coming to me. My consumer mail has more than doubled since November 1st and almost tripled since September 1st.

### Efforts To Handle Complaints

The consumer not only has a right to be heard but should expect something to be done about his complaints. We work very hard to see that something is done about them.

We meet often with industry representatives, let them know what consumers want and need, and urge voluntary action to meet those needs.

Where consumer complaints involve the responsibilities of other Government agencies, we coordinate our efforts to see that the consumer is served and that Federal legislation is enforced as the Congress intended.

### CONSUMER EDUCATION PROGRAM

Now we have also established a consumer education program which was not included in the last budget.

Senator Hill. You did not have that last year, did you?

Miss Furness. Not at all. I think this may be the cornerstone to the eventual success of this program. We are doing all we can to assist local communities, State governments and schools at every level, and consumer organizations throughout the country in developing comprehensive consumer education for every age and income group.

This is no easy task. Our schools are far behind in meeting the consumer challenge with progressive consumer programs.

Many high schools have some economics courses and these efforts are useful and good. But transmitting skills of cooking and sewing alone is not enough.

Our students must be taught how to understand our complicated marketplace and how to get what they need out of it. They must become informed buyers and here is how: English classes can teach teenagers how to evaluate and analyze advertising claims and explore the language of mass media or the fine print of a contract.

Mathematic courses can teach students how to finance purchases, what sources of credit are, how to figure these credit charges and use charge accounts wisely.

Science courses can provide enough education in electronics to know how to shop intelligently for a television set or be able to recognize safe wiring.

And business courses can provide more information on investments and interest rates and contracts.

Such is the opportunity and helping the schools to respond to this challenge is going to be a hard and costly job.

We are also continuing our work to assist and further consumer organizations and with industry and marketing groups in all the areas of consumer need.

### CONSUMER REVOLUTION

We are involved today in something of a consumer revolution. The consumer has at last found his voice and started to use it.

The Government must respond to the consumer's call because it is national and just.

He has needs that deserve quick and able attention and it is for the President's Committee on Consumer Interests to see that he gets that attention.

President Truman once observed that while some Americans have their interests in Washington protected by special lobbies, most of the people depend on the President of the United States to be their lobbyist.

That is what his Committee on Consumer Interests is trying to do and I urge you to appropriate the funds we need to be successful.

Thank you.

Senator HILL. Were you not in Hollywood before you came here?

Miss FURNESS. That was a long time ago. Even you could not remember that.

Senator HILL. Is there anything you gentlemen would like to add?

Mr. KAYE. No, thank you, sir.

Mr. DIX. No, thank you.

Miss FURNESS. I really feel I am kind of underprivileged today. I have heard all of these people say they have been dealing with you all these years. I haven't had that opportunity but I am glad I got in at the last minute.

Senator HILL. I am awful glad you have been here today. You have brought us an interesting and most challenging statement.

Miss FURNESS. It is a challenging assignment and I think a very exciting one and a very necessary one.

Senator HILL. It is a challenging statement and a subject which in the past we have done very little about.

Miss FURNESS. That is true. I don't think that there was a need a generation ago. As the marketplace has changed, so the office has had to change.

You know very well what an excellent job Mrs. Peterson did when she had this job. How she ever did this job and her job as Assistant Secretary of Labor at the same time, I will never know.

Senator HILL. I think you are doing a very good job. I want to thank you very much.

Miss FURNESS. Thank you, sir. It is a great pleasure to meet you late in your time here.

Senator HILL. It is a privilege to have you here. Nice to have you gentlemen with us.

SUBCOMMITTEE RECESS

The subcommittee will recess, subject to the call of the Chair.

(Whereupon, at 12:35 p.m., Tuesday, April 2, the subcommittee was recessed, to reconvene at the call of the Chair.)

# DEPARTMENTS OF LABOR, AND HEALTH, EDUCATION, AND WELFARE, AND RELATED AGENCIES APPROPRIATIONS FOR FISCAL YEAR 1969

FRIDAY, APRIL 5, 1968

U.S. SENATE,
SUBCOMMITTEE OF THE COMMITTEE ON APPROPRIATIONS,
*Washington, D.C.*

The subcommittee met at 10 a.m. in room 1224, New Senate Office Building, Hon. Lister Hill (chairman) presiding.

Present: Senator Hill.

## NATIONAL LABOR RELATIONS BOARD

STATEMENTS OF:
FRANK W. McCULLOCH, CHAIRMAN, ARNOLD ORDMAN, GENERAL COUNSEL
ACCOMPANIED BY:
JOHN H. FANNING, BOARD MEMBER
OGDEN W. FIELDS, EXECUTIVE SECRETARY
DOMINICK L. MANOLI, ASSOCIATE GENERAL COUNSEL
H. STEPHAN GORDON, ASSOCIATE GENERAL COUNSEL
CLARENCE S. WRIGHT, DIRECTOR, DIVISION OF ADMINISTRATION
EDWARD GOODSTEIN, ASSISTANT DIRECTOR, DIVISION OF ADMINISTRATION
MORRIS S. MILLER, CHIEF, BUDGET BRANCH

APPROPRIATION ESTIMATE

"TITLE III—RELATED AGENCIES

"NATIONAL LABOR RELATIONS BOARD

"SALARIES AND EXPENSES

"For expenses necessary for the National Labor Relations Board to carry out the functions vested in it by the Labor-Management Relations Act, 1947, as amended (29 U.S.C. 141–167), and other laws, [$32,288,000] *$35,074,000*: *Provided*, That no part of this appropriation shall be available to organize or assist in organizing agricultural laborers or used in connection with investigations, hearings, directives, or orders concerning bargaining units composed of agricultural laborers as referred to in section 2(3) of the Act of July 5, 1935 (29 U.S.C. 152), and as amended by the Labor-Management Relations Act, 1947, as amended, and as defined in section 3(f) of the Act of June 25, 1938 (29 U.S.C. 203), and including in said definition employees engaged in the maintenance and operation of ditches, canals, reservoirs, and waterways when maintained or operated on a mutual, nonprofit basis and at least 95 per centum of the water stored or supplied thereby is used for farming purposes."

TABLE I.—COMPARISON OF PROGRAM AND FINANCING BY ACTIVITIES FOR 1968 AND 1969 FISCAL YEARS (OBLIGATION BASIS)

| Description | Fiscal year 1968 estimate | | Fiscal year 1969 request | Comparison of 1969 request to 1968 estimate | |
|---|---|---|---|---|---|
| | Before Pay Act | After Pay Act | | Before pay Act | After pay Act |
| Program by activities: | | | | | |
| 1. Field investigations | $19,264,848 | $19,823,948 | $21,489,100 | +$2,224,252 | +$1,665,152 |
| 2. Trail examiner hearings | 3,115,800 | 3,222,500 | 3,556,000 | +440,200 | +333,500 |
| 3. Board adjudication | 3,890,200 | 4,016,900 | 4,472,000 | +581,800 | +455,100 |
| 4. Securing of compliance with board orders | 4,903,200 | 5,031,600 | 5,556,900 | +653,700 | +525,300 |
| Total obligations | 31,174,048 | 32,094,948 | 35,074,000 | +3,899,952 | +2,979,052 |
| Financing: Unobligated balance lapsing | +135,340 | +135,340 | | −135,340 | −135,340 |
| Proposed new obligational authority | 31,309,388 | 32,230,288 | 35,074,000 | +3,764,612 | +2,843,712 |
| New obligational authority: | | | | | |
| Appropriation | 32,288,000 | 32,288,000 | 35,074,000 | +2,786,000 | 2,786,000 |
| Transferred to "Operating expenses" | −57,712 | −57,712 | | +57,712 | +57,712 |
| Total appropriation (adjusted) | 32,230,288 | 32,230,288 | 35,074,000 | +2,843,712 | +2,843,712 |
| Additional obligations from "Advances and reimbursements": | | | | | |
| 1. Field investigation | 49,200 | 50,800 | 23,800 | −25,400 | −27,000 |
| 2. Trial examiner hearings | 6,000 | 6,000 | 6,000 | | |
| 3. Board adjudication | 7,300 | 7,400 | 6,100 | −1,200 | −1,300 |
| 4. Securing of compliance with Board orders | 8,600 | 8,900 | 4,200 | −4,400 | −4,700 |
| 5. Total obligations | 71,100 | 73,100 | 40,100 | −31,000 | −33,000 |

TABLE II.—COMPARISON OF PROGRAM AND FINANCING BY OBJECT FOR 1968 AND 1969 FISCAL YEARS (OBLIGATION BASIS)

| | | Fiscal year 1968 estimate | Fiscal year 1969 request | Comparison of 1969 request to 1968 estimate |
|---|---|---|---|---|
| | OBJECT CLASSIFICATION | | | |
| 11 | Personnel compensation | $25,644,350 | $27,155,400 | +$1,511,050 |
| 12 | Personnel benefits | 1,943,900 | 2,177,100 | +233,200 |
| 21 | Travel and transportation of persons | 1,363,600 | 1,639,200 | +275,600 |
| 22 | Transportation of things | 37,900 | 72,400 | +34,500 |
| 23 | Rent, communications, and utilities: | | | |
| | Communication services | 1,006,500 | 1,096,300 | +89,800 |
| | Rents and utilities | 220,800 | 370,200 | +149,400 |
| 24 | Printing and reproduction | 524,400 | 846,100 | +321,700 |
| 25 | Other services | 938,548 | 1,120,600 | +182,052 |
| 26 | Supplies and materials | 273,397 | 320,913 | +47,516 |
| 31 | Equipment | 138,725 | 260,500 | +121,775 |
| 42 | Insurance claims and indemnities | 2,828 | 15,287 | +12,459 |
| | Total direct obligations | 32,094,948 | 35,074,000 | +2,979,052 |
| | Estimated pay increase | 920,900 | | +920,900 |
| | ADDITIONAL OBLIGATIONS FROM "ADVANCES AND REIMBURSEMENTS" | | | |
| 11 | Personnel compensation | 58,600 | 33,100 | −25,500 |
| 12 | Personnel benefits | 4,500 | 2,400 | −2,100 |
| 21 | Travel and transportation of persons | 7,800 | 2,500 | −5,300 |
| 23 | Rent, communications, and utilities: | | | |
| | Communications | 1,500 | 1,500 | |
| | Rents | 300 | 300 | |
| 25 | Other services | 100 | 100 | |
| 26 | Supplies and materials | 300 | 200 | −100 |
| | Total reimbursable obligations | 73,100 | 40,100 | −33,000 |

*Summary of changes*

| | |
|---|---|
| Enacted Appropriation, fiscal year 1968 | $32,288,000 |
| Proposed unobligated balance | 135,340 |
| Total estimated requirements for fiscal year 1968 | 32,152,660 |
| Request for fiscal year 1969 | 35,074,000 |
| Net change | 2,921,340 |

*Synopsis of changes*

| | |
|---|---|
| A. Mandatory administrative items | 885,988 |
| B. Program items | 2,035,352 |
| Net change | 2,921,340 |

*Detail of changes*

A. MANDATORY ADMINISTRATIVE ITEMS

| | *Amount* |
|---|---|
| I. Extension of 1968 grade and within-grade promotions to a full year basis in 1969. Provision is made for 582 grade promotions and 495 within-grade promotions out of a potential 1,376 within-grade promotions for 1968 | $171,100 |
| II. Provision is made for 670 out of a potential 1,620 within-grade promotions for 1969 | 35,600 |
| III. Provision is made for 582 grade promotions expected to be made during 1969 | 289,300 |
| IV. Increased pay: Federal Employees Salary Act of 1967 (Public Law 90–206)—Civilian pay increases | 316,300 |
| Wage board increases | 4,300 |
| Postal rate increases | 12,100 |
| V. Increased cost of additional general purpose office space | 57,288 |
| Total mandatory administrative items | 885,988 |

*Detail of changes*

B. PROGRAM ITEMS BY ACTIVITY

I. *Field Investigation of cases.*—Includes either informal disposition or preparation for formal processing. The estimate for 1969 provides for the following increases in case processing compared with 1968: 1,329 unfair labor practice charges of which 1,121 are out of intake and 208 out of backlog; 444 representation petitions out of intake for field processing; 132 priority cases out of increased intake requiring consideration in District Court and 83 appeals from Regional Director's refusal to issue complaint in processing additional intake in 1969.

| | Average employment | Amount |
|---|---|---|
| Personal services requirements: | | |
| Processing out of intake | 63.4 | $548,850 |
| Processing out of backlog | 11.7 | 90,900 |
| Automated printing program | 2.9 | 20,900 |
| Subtotal, personal services | 78.0 | 660,650 |
| Miscellaneous expenses: | | |
| Processing out of backlog | | 41,600 |
| Automated printing program | | 124,400 |
| Computer program | | 45,000 |
| Conferences | | 90,000 |
| Other miscellaneous expenses | | 470,602 |
| Gross requirements | 78.0 | 1,432,252 |
| Less savings due to increased rate of production: Improvement of 2 percent in field processing and varying rates of improvement in related activities: | | |
| Personal services | −25.5 | −187,100 |
| Miscellaneous expenses | | −83,800 |
| Net requirements, activity I | 52.5 | 1,161,352 |

II. *Trial examiner hearings.*—The estimate provides for an increase of 283 hearings (172 out of intake and 111 out of backlog) and 26 trial examiner decisions (36 out of intake, a reduction of 10 in the number to be processed out of backlog).

| | Average employment | Amount |
|---|---|---|
| Personal services requirements: | | |
| Processing out of intake | 14.8 | $183,800 |
| Processing out of backlog | .7 | 22,400 |
| Automated printing program | .3 | 2,300 |
| Subtotal, personal services | 15.8 | 208,500 |
| Miscellaneous expenses: | | |
| Processing out of backlog | | 20,100 |
| Automated printing program | | 17,200 |
| Computer program | | 4,900 |
| Other miscellaneous expenses | | 38,600 |
| Gross requirements | 15.8 | 289,300 |
| Less savings due to increased rate of production: Improvement of 2 percent in trial examiner processing and varying rates of improvement in related activities—Personal services | −2.6 | −46,500 |
| Net requirements, activity II | 13.2 | 242,800 |

III. *Board adjudication.*—The estimate for fiscal year 1969 provides for the following increases over 1968: *Unfair Labor Practice Decisions*—14 additional contested decisions by the Board, of which 28 are out of intake and 14 less out of backlog. *Representation Decisions*—78 additional contested decisions out of intake, 71 by Regional Directors and 7 by the Board.

| | Average employment | Amount |
|---|---|---|
| Personal services requirements: | | |
| Processing out of intake | 20.5 | $193,200 |
| Processing out of backlog | −1.8 | −12,200 |
| Automated printing program | .6 | 4,000 |
| Subtotal, personal services | 19.3 | 185,000 |
| Miscellaneous expenses: | | |
| Automated printing program | | 27,700 |
| Computer program | | 8,700 |
| Conferences | | 4,300 |
| Other miscellaneous expenses | | 70,600 |
| Gross requirements | 19.3 | 296,300 |
| Less savings due to increased rate of production: Improvement of 2 percent in board adjudication and 2 percent improvement in field processing and varying rates of improvement in related activities: | | |
| Personal services | −4.1 | −28,900 |
| Miscellaneous expenses | | −1,200 |
| Net requirements, activity III | 15.2 | 266,200 |

IV. *Securing compliance with board orders.*—Including enforcement through court orders: The estimate provides for an increase of one case in which compliance is expected to be secured. It also provides for an increase of 71 cases in which court enforcement of Board orders will be required. Provision has been made for increased requirements for supplemental court activity such as miscellaneous litigation, contempt, and Supreme Court matters.

| | Average employment | Amount |
|---|---|---|
| Personal services requirements: | | |
| Processing out of intake | 16.7 | $100,300 |
| Processing out of backlog | 13.0 | 110,700 |
| Automated printing program | .7 | 4,800 |
| Subtotal, personal services | 30.4 | 215,800 |
| Miscellaneous expenses: | | |
| Processing out of backlog | | 73,300 |
| Automated printing program | | 33,200 |
| Computer program | | 10,400 |
| Conferences | | 15,700 |
| Other miscellaneous expenses | | 111,100 |
| Gross requirements | 30.4 | 459,500 |
| Less savings due to increased rate of production: Improvement of 2 percent in field processing and 7.9 percent in court enforcement litigation and varying rates of improvement in related activities: | | |
| Personal services | −9.2 | −79,800 |
| Miscellaneous expenses | | −14,700 |
| Net requirements, activity IV | 21.2 | 365,000 |

RECAP—DETAIL OF CHANGES

| | Average employment | Amount |
|---|---|---|
| Program items: | | |
| Activity I | 52.5 | $1,161,352 |
| Activity II | 13.2 | 242,800 |
| Activity III | 15.2 | 266,200 |
| Activity IV | 21.2 | 365,000 |
| Total, program items | 102.1 | 2,035,352 |

| | Printing | | Computer | | Net requirements | |
|---|---|---|---|---|---|---|
| | Average employment | Amount | Average employment | Amount | Average employment | Amount |
| Automated printing and computer program: | | | | | | |
| Personal services | 4.5 | $32,000 | | | 4.5 | $32,000 |
| Miscellaneous expenses | | 202,500 | | $69,000 | | 271,500 |
| Total requirements | 4.5 | 234,500 | | 69,000 | 4.5 | 303,500 |

## Narrative Justification of Appropriation Estimates, Fiscal Year 1969

### "Salaries and expenses, National Labor Relations Board"

*Appropriation request for 1969*

An appropriation of $35,074,000 is requested for fiscal year 1969. A comparison of fiscal year 1968 appropriation availability and the fiscal year 1969 appropriation request follows:

| | Fiscal year 1968 | Fiscal year 1969 | Increases, 1969/1968 |
|---|---|---|---|
| A. Appropriation availability 1968 and net increase for 1969 before pay and postal cost increases: | | | |
| Total appropriation | $32,288,000 | | |
| Less congressional reduction | 1,056,240 | | |
| Total | 31,231,760 | $33,820,000 | $2,588,240 |
| B. Plus increased cost due to Postal Revenue and Salary Act of 1967 | 920,900 | 1,254,000 | 333,100 |
| C. Funds available 1968 and request 1969 | 32,152,660 | 35,074,000 | 2,921,340 |

The increase in appropriation availability (before increased pay and postal costs) is broadly accounted for by (a) $1,385,052 for increased case filings in fiscal year 1969, (b) $346,800 for increased backlog work of which $200,000 represents a deferral of 1968 work, (c) $303,500 for increased printing and computer program costs, including $112,000 of 1968 expenditures deferred to 1969, and (d) $552,888 for additional mandatory administrative costs.

| | Fiscal year 1968 | Fiscal year 1969 | Increases, 1969/1968 |
|---|---|---|---|
| Positions | 2,418.0 | 2,528.0 | 110.0 |
| Average employment | 2,347.8 | 2,449.9 | 102.1 |

The Agency's work program budget for 1969 is based upon the large increase in work in 1967 and 1968 as well as that estimated for 1969. As we notified the Committee, fiscal year 1967 unfair labor practice intake jumped suddenly in the last half of the year and has continued to increase at a faster rate than originally estimated for 1968. Consequently we are attempting to process in 1968 an unfair labor practice intake 7½% higher than estimated. Although this was offset to some extent by a reduction in representation intake from estimate, the net effect has been a substantial increase in workload over estimate in 1968.

The Congressional reduction in the Agency's fiscal year 1968 funds will make it necessary to reschedule for 1969 some of the work we had hoped to process in 1968. We estimate this rescheduled 1968 work at 6/10ths of 1% of the total work increase scheduled in 1969. The 1969 work increase due to rising intake is projected at another 4.8% (5.5% in unfair labor practice work and 3.5% in in representation work). Additional backlog reduction in 1969 is rated at 4/10ths of 1%. The total 5.8% increase in work scheduled for 1969 (1.0% backlog and 4.8% increased intake) is to be processed with a 4.3% increase in employment, with the balance of the work scheduled for 1969 to be accomplished by cost reduction valued at $400,000.

We must anticipate definite setbacks in the scheduled fiscal year 1968 improvements, as a result of the reduction in available funds. Our fiscal year 1969 work plan, therefore, must call for minimizing the deferment and for resumption as soon as possible, of our program for improving production and more adequately fulfilling the statutory mandate of Congress.

ORGANIZATIONAL SUMMARY OF NEW EMPLOYMENT REQUESTED

| | Increases in positions | Increases in average employment |
|---|---|---|
| Board members and related units: | | |
| Board members | 13 | 11.2 |
| Trial examiners | 13 | 11.7 |
| Office of the General Counsel: | | |
| Field staff | 44 | 40.2 |
| Washington staff | 40 | 39.0 |
| Total | 110 | 102.1 |

The Appropriation, "Salaries and Expenses, National Labor Relations Board" provides funds for the Agency to fulfill its responsibilities under the National Labor Relations Act, as amended. It covers all operating costs of the Agency, including all field and departmental activities of the Office of the General Counsel and all functions of the Board Members' Offices and activities thereunder.

FORMULATION OF THE AGENCY WORKLOAD BUDGET

*Workload*

The Agency's request for funds and positions is primarily based upon its estimates of the filing of unfair labor practice charges and representation petitions by the public. The agency has no control over these filings and bases its estimates upon various factors which experience demonstrates will affect the volume of filings.

Currently the Agency is experiencing one of its periods of intensive growth in case filings, and the estimates for 1969 reflect this.

Our budget estimates make provision for the cost of processing cases from initial filing of a charge or petition by a party to the final disposition of the matter by the Agency. Costs vary greatly according to the type of disposition required; cases requiring a formal hearing, Board decision, and Court litigation are the most costly. Accordingly, the Agency's emphasis on encouragement of voluntary settlements or adjustments of cases, as early as possible, and at least prior to formal trial examiner or Board decision, achieves a major economic benefit to the government and the parties, as well as the other obvious benefits to the parties which flow from the prompt removal of sources of industrial conflict by voluntary settlement or adjustment without litigation.

The budget estimate provides for the reduction of time delay by administrative action where possible and by reduction of backlog where necessary. Reduction of time delay is exceedingly important in the volatile field of labor relations.

All program costs are established by means of basic case processing performance rates. Each year these performance rates are adjusted to reflect our most recent experience, internal management improvements, and higher productivity requirements. The Agency's estimates reflect its continuing efforts to reduce all cost factors.

*Current situation*

The Agency had estimated an increase in filings of unfair labor practice charges of about 4% for fiscal years 1967 and 1968 combined (1% in fiscal year 1967 and 2.9% in fiscal year 1968), but filings increased dramatically in the last half of fiscal year 1967 (as we notified the Committee). We had a 7% increase in 1967 and currently estimate another 4½% in fiscal year 1968, or a total of 11½% for the two years as compared to the 4% originally estimated.

In representation work we had estimated an increase of 10% for the two years. But filings were not as heavy as expected, and we now estimate an increase of 5% for the 2 years.

Since the work required for processing unfair labor practice charges is about 2½ times the work involved in processing representation petitions, we have had for the two year period a net increase in work of 10%, as compared to the 5.5% estimated before this unexpected buildup in the intake picture.

The Committee recognized this problem when it was considering our fiscal year 1968 request a year ago and approved our entire appropriation request. After our appropriation was approved, however, the Congress in response to a proposal by the President (Title 2 of President's Surtax Proposal 11–29–67) made an across the board cut in most agency appropriations, materially reducing the funds available to this Agency in the second half of fiscal year 1968. In order to accomplish the decrease we put into effect a freeze on hiring and, except for emergencies, a freeze on filling vacancies which occur as a result of turnover. In addition, miscellaneous expenses, particularly printing, travel, transfer of employees, and equipment, were postponed or cut to the bone insofar as possible.

These actions have necessarily slowed the flow of cases and will in some areas reduce efficiency. We expect the trial calendar for example, to extend to 12 weeks or more before the end of the fiscal year, as compared to the 8–9 weeks to which we had been able to hold it despite the case increase. We have stretched out our program for the automated printing of volumes of Board Decisions, as well as our program to computerize our information gathering and reporting systems. One of the results of these postponements was to reduce drastically the need for funds for printing in fiscal year 1968, and to increase just as drastically, the need for obligating funds for printing in fiscal year 1969.

The fund increase sought for 1969, therefore, will be used to counteract the problems which develop in 1968, and to get the Agency's casehandling back into the rapid, regular movement of cases we keep trying to achieve and improve. We hope to regain the losses in processing time which we are unable to prevent in 1968, and to pick up again our forward progress toward improvement and reduction in time delay.

INTAKE

*Experience*

Since 1958 the Agency has had a continuing increase in filings each year, almost without exception. The average annual rate of increase has been about 10% in unfair labor practice filings (with the exception of 1965 and 1966, when intake rose 1% each year) and somewhat lower in representation filings. In 1967 unfair labor practice work picked up again and increased by 7%.

*Current estimates*

*Fiscal year 1968*

Unfair labor practice charges and situations are estimated to rise 4½% from 1967 to 1968 resulting in a 1968 intake of 17,805 charges and 16,185 situations. Representation filings are estimated to rise by 2½% in 1968 resulting in an intake of 13.745 petitions and related representation questions.

TABLE A.—COMPARISON OF RECENT CASE INTAKE EXPERIENCE WITH BUDGET ESTIMATES FOR FISCAL YEARS 1961, 1962, 1963, 1964, 1965, 1966, 1967, 1968, AND 1969

| | Unfair labor practices | | Representations, cases [1] |
|---|---|---|---|
| | Cases | Situations | |
| A. Actual recent experience for— | | | |
| 1. Fiscal year 1958 | 9,260 | 7,673 | 7,488 |
| 2. Fiscal year 1959 | 12,739 | 9,061 | 9,394 |
| 3. Fiscal year 1960 | 11,357 | 9,128 | 10,170 |
| 4. Fiscal year 1961 | 12,132 | 10,592 | 10,559 |
| 5. Fiscal year 1962 | 13,479 | 11,877 | 11,369 |
| 6. Fiscal year 1963 | 14,166 | 12,719 | 11,205 |
| 7. Fiscal year 1964 | 15,620 | 13,978 | 11,783 |
| 8. Fiscal year 1965 | 15,800 | 14,423 | 12,225 |
| 9. Fiscal year 1966 | 15,933 | 14,540 | 13,060 |
| 10. Fiscal year 1967 | 17,040 | 15,499 | 13,385 |
| 11. Fiscal year 1968 (July–December 1967) | 8,574 | 7,914 | 6,179 |
| B. Budget estimates for fiscal year 1961— | | | |
| 1. As estimated in 1961 budget | 11,400 | 9,400 | 10,425 |
| 2. As estimated in 1962 budget | 11,275 | 9,470 | 11,100 |
| 3. Revised estimate in 1962 budget | 12,100 | 10,500 | 10,550 |
| 4. Actual intake | 12,132 | 10,592 | 10,559 |
| C. Budget estimates for fiscal year 1962— | | | |
| 1. As estimated in 1962 budget | 11,275 | 9,470 | 11,100 |
| 2. As estimated in 1963 budget | 13,100 | 11,500 | 11,250 |
| 3. Actual intake | 13,479 | 11,877 | 11,369 |
| D. Budget estimates for fiscal year 1963— | | | |
| 1. As estimated in 1963 budget | 14,600 | 12,750 | 12,300 |
| 2. As estimated in 1964 budget | 14,600 | 13,000 | 12,590 |
| 3. Actual intake | 14,166 | 12,719 | 11,205 |
| E. Budget estimates for fiscal year 1964— | | | |
| 1. As estimated in 1964 budget | 15,500 | 13,750 | 13,300 |
| 2. As estimated in 1965 budget | 15,300 | 13,750 | 11,800 |
| 3. Actual intake | 15,620 | 13,978 | 11,783 |
| F. Budget estimates for fiscal year 1965— | | | |
| 1. As estimated in 1965 budget | 16,800 | 15,125 | 12,600 |
| 2. As estimated in 1966 budget | 16,615 | 14,875 | 12,400 |
| 3. Actual intake | 15,800 | 14,423 | 12,225 |
| G. Budget estimates for fiscal year 1966— | | | |
| 1. As estimated in 1966 budget | 18,010 | 16,150 | 13,100 |
| 2. As estimated in 1967 budget | 17,080 | 15,590 | 13,100 |
| 3. Actual intake | 15,933 | 14,540 | 13,060 |
| H. Budget estimate for fiscal year 1967— | | | |
| 1. As estimated in 1967 budget | 18,200 | 16,615 | 13,550 |
| 2. As estimated in 1968 budget | 16,100 | 14,700 | 13,750 |
| 3. Actual intake | 17,040 | 15,499 | 13,385 |
| I. Budget estimates for fiscal year 1968— | | | |
| 1. As estimated in 1968 budget | 16,565 | 15,124 | 14,440 |
| 2. As estimated in 1969 budget | 17,805 | 16,185 | 13,745 |
| J. Budget estimates for fiscal year 1969 | 18,785 | 17,075 | 14,235 |

[1] Includes union decertification (UD), amendment of certification (AC), and unit clarification (UC) cases.

For the first 6 months of fiscal year 1968, however, unfair labor practice case intake actually rose 9.3%, unfair labor practice situations rose 9.8%, and representation matters rose 1.7%. Unfair labor practice filings are ahead of our estimate, and representation filings are lower. We hope that intake for the full year will not exceed our estimate.

*Fiscal year 1969*

Unfair labor practice charges and situations are estimated to rise by 5½% in 1969 to 18,785 charges and 17,075 situations. Representation matters are estimated to rise by 3½% to 14,235.

FACTORS AFFECTING INTAKE

*General*

The major factors affecting filings with the Agency normally include industrial growth, increases in the work force, automation, plant closings and relocations, sales and mergers. These phenomena give rise to increased labor union organizing and collective bargaining activity, dislocations and readjustments of bargaining realtionships: all of which add to potential case filings.

Our fiscal year 1965–1966 experience, when the unfair labor practice intake increase was low, appeared to reflect the manpower shortage problem resulting from the Vietnam situation at that time as well as the general well-being of the economy. This leveling off of the upward curve, however, was only temporary.

In 1967, as noted above, we had a sharp rise again in unfair labor practice filings, all in the second half of the fiscal year. We have attributed this sudden rise to the industrial unrest that was also reflected in the large increase in strikes. This situation has continued into the first half of fiscal year 1968. For the full calendar year of 1967 strikes were higher than in any year since 1953, and man-days idle were the highest since 1959, representing 30/100 of 1 percent of working time as compared to 19/100 of 1 percent in calendar year 1966. The increase in unfair labor practice filings in 1967 was reflected mainly in filings by individuals. These rose by 776 as compared to a total increase of 1,107 in all charges filed.

*Continuing industrial growth*

Our regional directors, in reviewing the basis for their work estimates for 1968 and 1969 report continuing industrial growth across the country. The President in his economic forecast (as well as other informed opinion) expects the economy to continue to grow. Estimates of real growth (after deducting price increases) vary from 4% to 5% as compared to the 2½% achieved in 1967.

*Increased labor union activity*

Labor unions are planning increased organizing activity in several fields. Traditional organizing effort continues with special emphasis in a number of areas. Bulding trades unions are planning to organize non-union building contractors. One regional director, for example, sent us a newspaper report of a building trades union plan for a four state organizing drive. Efforts to organize white collar workers are being spurred by a "white collar council" organized by the AFL–CIO. Although the most publicized efforts in this area involve for the most part local, state, and federal government employees, other white collar organizing efforts are being felt in areas over which the Agency has jurisdiction. For example, it was recently reported that UAW–AFL–CIO added 5,000 clerical workers to its rolls in 1967. Our own records indicate that elections involving white collar units rose by 75% from fiscal year 1966 to 1967, and the number of eligible voters rose by 40%. These elections now constitute about 10% of all the elections we hold.

The entire July 1967 issue of the monthly AFL–CIO Federationist was devoted to a discussion of organizing efforts and problems. The articles discussed organizing: the new young worker, the changing geographical site of the job (greatest growth in the South, Southwest, and West, and in the suburbs as compared to metropolitan areas), the public employee, the white collar worker, and the gray collar worker (service industries), The various activities of organized labor mentioned above reflect themselves in the filings which we actually experience.

The rise in individually filed charges was mentioned previously. We have also had significant increases in charges alleging violations by unions of the various portions of subsection 8(b) of the Law including (in popular language): allegations of discrimination against individuals in hiring halls or by other means, allegations of secondary boycott for organizational as well as jurisdictional purposes, jurisdictional dispute questions, and allegations of illegal picketing. The types of charges mentioned above, are of course all additional to the most numerous type of charges filed, that is the allegations of violations of subsection 8(a) by employers which result mainly from traditional union organizing campaigns. The most numerous alleged violations of subsection 8(a), which protects the rights of employees as enumerated in section 7, are 8(a)(1) interference, re-

straint or coercion, 8(a)(3) discrimination by discharge or other means, and 8(a)(5) refusal to recognize or bargain in good faith with a representative freely chosen by employees.

## WORKLOAD PROCESSING REVIEW

### *General*

#### *1968 picture*

The two most important factors in the Agency's workload picture and its program for 1969, are, first, the unexpectedly large rise in unfair labor practice work in fiscal years 1967 and 1968, resulting in a total workload intake increase of 10% for 1967–1968 as compared to the 5.5% estimated; and, second, the reduction in case processing resulting from cutbacks in funds available from our 1968 appropriation.

#### *Effects of unexpectedly large rise in intake*

In fiscal year 1967 the large rise in intake was reflected mainly in increases in cases pending at all levels. In total number, for example, unfair labor practice charges pending rose from 6,658 on June 30, 1966 to 7,338 on June 30, 1967. This was a rise in pending cases of 680 as compared with the 1,107 increase in charges filed. Representation petitions pending on June 30, 1966 amounted to 2,659, and by June 30, 1967 the number pending was 2,892, or a rise of 233 out of the 337 additional petitions filed in fiscal year 1967.

Despite these increases in pending case-load, the speed of Agency operations had not been affected through December. In the 6 months from July to December, 1967 the Agency was able to hold the line; although it was unable to improve time delay as originally hoped for, before the unexpectedly large increase in case work in 1967. Table B shows that it took the same time to process a case from hearing to Board decision in these 6 months as it did the year before. However, in view of the restrictions adopted to reduce the expenditure of funds in the remainder of fiscal year 1968, we expect to experience greater time delay and other problems as detailed below.

TABLE B.—COMPARISON OF MEDIAN TIME (DAYS) ELAPSED IN PROCESSING CASES

| Stages | July–December (fiscal years) | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|
| | 1959 | 1960 | 1961 | 1962 | 1963 | 1964 | 1965 | 1966 | 1967 | 1968 |
| UNFAIR LABOR PRACTICE CASES | | | | | | | | | | |
| From filing to complaint | 143 | 63 | 44 | 46 | 49 | 56 | 57 | 59 | 60 | 59 |
| From complaint to close of hearing | 54 | 71 | 43 | 45 | 51 | 53 | 62 | 73 | 67 | 64 |
| From close of hearing to trial examiner decision | 73 | 87 | 95 | 65 | 70 | 77 | 126 | 114 | 103 | 106 |
| From trial examiner decision to Board decision | 194 | 146 | 150 | 176 | 132 | 123 | 136 | 105 | 119 | 120 |
| Total, filing to decision | 464 | 367 | 332 | 332 | 302 | 309 | 381 | 351 | 349 | 349 |
| REPRESENTATION CASES | | | | | | | | | | |
| A. Field processing: | | | | | | | | | | |
| From filing to notice of hearing | 12 | 11 | 10 | 10 | 10 | 10 | 8 | 9 | 9 | 9 |
| From notice of hearing to close of hearing | 16 | 15 | 14 | 14 | 13 | 13 | 13 | 13 | 13 | 14 |
| Subtotal, filing to close of hearing | 28 | 26 | 24 | 24 | 23 | 23 | 21 | 22 | 22 | 23 |
| B. Decisional processing: | | | | | | | | | | |
| 1. Before decisional delegation to regional director: From close of hearing to Board decision | 49 | 52 | 50 | ---- | ---- | ---- | ---- | ---- | ---- | ---- |
| Total, filing to Board decision | 77 | 78 | 74 | ---- | ---- | ---- | ---- | ---- | ---- | ---- |
| 2. After decisional delegation to regional director: | | | | | | | | | | |
| (a) By the Board:[1] From hearing to Board decision | | | | 112 | 121 | 108 | 101 | 109 | 143 | 118 |
| Total, filing to Board decision | | | | 136 | 144 | 131 | 122 | 131 | 165 | 141 |
| (b) By regional director:[1] From hearing to regional director's decision | | | | 20 | 17 | 18 | 17 | 20 | 20 | 21 |
| Total, filing to regional director's decision | | | | 44 | 40 | 41 | 38 | 42 | 42 | 44 |

[1] Fiscal year 1967 the Board issued only 206 decisions while the regional directors issued 1,882 or approximately 90 percent of the total initial representation decisions.

*Effects of reduction from 1968 appropriations*

The reduction in funds from the Agency's appropriation in fiscal year 1968 requires severe retrenchments during the last half of the fiscal year. We expect greater time delays in the investigation of cases as a result of the necessary consolidation of travel plans for investigations to save time and travel costs. Similarly, the deferral of hearings, and the consolidation of dates for formal hearing so that several cases can be heard by one trial examiner on a calendar call basis or by one trial examiner travelling from one case to the next one scheduled, is expected to extend our trial calendar from 8–9 weeks to about 12 weeks. These measures were required in order to reduce reporting costs as well as travel costs. (The exact effects of the retrenchment on operations in 1968 had not been worked out at the time such data were submitted for the President's budget. We would like to bring to your attention, therefore, our expectation that we shall probably hold about 970 unfair labor practice hearings in 1968 rather than the 1,160 shown in the budget. and that to make up for it, we shall hold about 1,253 hearings in 1969 instead of the 1,192 shown. An additional effect of this hearing shift is an estimated increase in trial examiner decisions in 1968 from the 1,020 shown to 1,033, and a decrease in trial examiner decisions in 1969 from 1,090 to 1,059.)

We also expect program results in 1968 to be affected by our decision to leave vacancies unfilled except for emergencies. We expect the resulting turnover will produce uneven ratios of staff to work, thereby aggravating the program difficulties described above.

All of the problems noted above will probably be aggravated by the large pending case-loads now being processed in our field offices. One of the most costly results could be a reduction in the percentage of cases that can be settled because of the time required to investigate, determine merit, and proceed to hearing.

In summary, we expect the 1968 retrenchments to cause operating problems as a result of maldistribution of staff, and we expect to have to defer to 1969 a portion of the work, especially hearings, which we had expected to process in 1968.

*1968 summary*

The inability to carry out our field office program as a result of the deferral of hearings, reduction of travel funds, and freeze on the filling of vacancies is expected to increase time required to process cases in the field offices and to decrease efficiency. We have, however, made every effort to minimize the detrimental effects in 1968, and as indicated below, we will move quickly in 1969 to correct the deficiencies as they develop.

Since our trial examiners all have less hearings to conduct and less travel, they will have more time to concentrate on reducing the number of cases pending trial examiner decision. This should bring that stage into processing balance and reduce the time required to issue trial examiner decisions, offsetting to some extent the additional time required to investigate and to go to hearing.

The Board expects to continue to process the cases coming to it and to try to reduce the time needed to issue a Board Decision. The Board expects to increase the number of unfair labor practice decisions it issues in 1968 from the 803 it issued in 1967 to as many as 906, depending on the number it receives for processing and the loss of Board legal assistants.

Our court enforcement branch also plans to increase its brief filings in the Circuit Courts of Appeal by 25% over 1967, from 312 to 393, provided loss of staff does not impair the program.

*1969 request*

The budget request for 1969 includes $1,385,052 additional for processing the increase in intake, and $346,800 additional for further backlog reduction.

Our proposed program, as detailed below, is to continue to go forward in terms of efficient handling of cases, and in terms of further reduction of time delay. The funds requested for backlog reduction will be used to repair the breaks in our time delay program and to further reduce backlog in all areas. This may mean, if necessary, some rearrangement of employment and funds from current plans.

If we are successful in fiscal year 1969 we should be able to maintain or restore, if necessary, to current processing the 90% of our cases which are handled informally in our field offices. In addition, we should be able to reduce time required to process formal cases from charge to decision by about 20 days as a result of improvement at the trial examiner decision stage.

*Informal case processing in the field offices*

Our objectives for this phase of case processing are twofold: first, to accomplish the job of processing the expected 4.8% increase in intake workload in 1969; second, to further improve time delay by reducing hearing backlog. This is a 5% increase in work to be accomplished with about 3% increase in employment. We are holding to these objectives despite the many operational problems created by the required retrenchments in fiscal year 1968. However, we want to point out here, as elsewhere in this statement, that some of the side effects of the fiscal year 1968 retrenchments may well result in additional and unexpected backlogs and impairments in time service. We are aware of this possibility, but have provided in this request only for an employment increase sufficient to process the estimated intake increase and the programmed backlog reduction, less our provision for cost reduction in the form of productivity and efficiency improvements.

HEARING STAGE

*Formal case processing*

*1968 expectations*

Our established goal is to process those cases which cannot be settled and require formal hearing within stated time limits. In fiscal year 1967 and the first half of fiscal year 1968 we were unable to improve significantly on the time taken at this stage because of the unexpected influx of unfair labor practice casework. (We held 1,035 hearings in 1966 and expect to hold 1,253 in 1969.) In the first half of fiscal year 1967 it took 67 days to process the median case from complaint to close of hearing, and in the first half of fiscal year 1968 it took 64 days.

As a result, however, of the retrenchments required in the second half of fiscal year 1968, we shall, as previously indicated, have to defer hearings and extend the trial calendar. (We had expected to hold 1,160 hearings, but we have had to reduce our estimate to 970.) This will increase the time required to process a case from complaint to close of hearing in 1968.

*1969 program*

As stated, we plan to increase the number of hearings held in 1969 to 1,253 from the 970 expected in 1968 in order to catch up with the deferral of hearings from 1968. By doing this we expect to contract the calendar again and bring time delay at this stage back to current levels or better, or about 60 to 65 days if possible. We have provided for an 8% increase in trial examiner staff to handle a 29% increase in hearings and a 2½% increase in trial examiner decisions. We have provided a 2% increase in productivity of trial examiners in 1969 in addition to our 7% in 1968, or a total of almost 10% for 1968 and 1969 combined.

*Trial examiner decision stage*

As a result of the deferral of hearings from 1968 to 1969, we were able to schedule more trial examiner decisions in 1968, and more significantly, look to 1968 as the year when we should be able to reduce our pending load of cases awaiting trial examiner decision to levels which we consider as allowing current processing and the achievement of significant reduction in time delay at this stage. Table B shows that it has been taking over 100 days to process a case from close of hearing to trial examiner decision. With the reduction in pending cases at this stage which we are hoping to achieve by the end of fiscal year 1968, we expect to be able to reduce the time required in the last half of fiscal year 1968 to about 90 days. We hope that this improvement will offset to some extent the loss of time from filing to complaint and from complaint to close of hearing. In 1969 we hope to continue the improvement at this stage and reduce the time required from close of hearing to trial examiner decision to 80 days or less.

*Board decision stage*

The Board was able to improve, as compared with 1967, the time required to issue a representation decision; so that in the first half of fiscal year 1968 it took about 120 days in the median case to process both unfair labor practice cases and representation petitions to Board decision.

The Board has at the same time been dramatically improving its productivity. Total productivity increase from 1965–1967 was in excess of 25%.

The Board's program for 1968 and 1969 is to keep pace with work intake and to continue its efforts to reduce time delay. To accomplish this the Board hopes to issue around 900 unfair labor practice decisions and about 200 representation decisions in each of these two years.

*Court enforcement*

The rising number of Board decisions has brought a constantly rising need for appellate court enforcement. Regional office referrals for enforcement have risen from 280 in fiscal year 1964 to 463 in fiscal year 1967. By 1969 they are estimated to be almost double the 1964 number.

Our enforcement branch has had to cope with the difficult legal problems of briefing and oral argument in the Circuit Courts of Appeal while relying more and more on inexperienced young attorneys. Our experienced staff, including supervisors, are often tempted to leave us by high salary offers from private law firms.

Nevertheless, in 1967, the branch was able to increase the number of briefs filed by 20%. Our goals in 1968 and 1969 are equally ambitious. It is our hope that we can both increase productivity and the number of briefs filed. This is, however, a very difficult program to accomplish.

*Settlement program*

We have assumed a continuation of our settlement program at levels achieved in fiscal years 1966 and 1967, which were so high that they constituted records of Agency achievement. It is our hope that these expectations can be met although delays in case processing at any stage, (but most importantly in our field offices) could have an adverse effect on the level of settlement achieved. Respondents are more inclined to settle a case if they know that failure to settle will mean a quick hearing with trial examiner and Board decision following in reasonable time. Conversely, a case delayed increases the cost of settlement, and correspondingly, the willingness to settle.

## MANAGEMENT IMPROVEMENT AND COST REDUCTION

The budget request is based upon our original plan for productivity improvement at all production levels providing cost reduction valued at $400,000. In view of the problems which are developing as a result of the 1968 retrenchments, the achievement of the goals set will probably be worth much more than that since we will have to surmount those problems and in addition achieve the productivity improvement set.

Important parts of our management improvement and cost reduction effort are our sub-programs to automate the printing of Board decisions and to computerize our agency information system. Because of the fund reduction in fiscal year 1968, we deferred the printing of about seven Board volumes of decisions. We are continuing the work of getting ready for such automated printing and have provided for the completion of 1 to 3 volumes this year. Similarly, our program to computerize the Agency information system provides for no increase in 1968 and for the hiring of only the nucleus of a staff in 1969. Expanded computer rental and operation has been postponed to 1970.

## SUMMARY

The Agency is very grateful to the Congress for its understanding of the many problems which beset us in administering the policies laid down in the law and for its recognition of the goals and financial needs which are necessary to help keep pace with the ever-increasing volume of work. We are mindful of our responsibilities under the law, and of our obligation to serve the public whom the Congress has sought to protect in the most efficient and economical way possible. The Agency firmly believes that on the basis of its experience thus far, it can continue its record of improvements in public service, and will make every effort to do so.

TABLE III.—COMPARISON OF 1968 AND 1969 POSITIONS AND ANNUAL SALARIES FOR THE ORGANIZATIONAL UNITS OF THE AGENCY

| Organizational unit | Fiscal year 1968 estimate | | Fiscal year 1969 request | | Change from 1968 estimate to 1969 request | |
|---|---|---|---|---|---|---|
| | Positions | Annual Salary | Positions | Annual Salary | Positions | Annual Salary |
| Board members' offices and related units: | | | | | | |
| Board members' offices and legal assistants | 177 | $2,432,776 | 187 | $2,538,752 | +10 | +$105,976 |
| Office of the Executive Secretary | 36 | 345,709 | 39 | 382,396 | +3 | +36,687 |
| Office of the Solicitor | 4 | 59,307 | 4 | 60,805 | | +1,498 |
| Division of Trial Examiners | 139 | 2,655,623 | 152 | 2,837,395 | +13 | +181,772 |
| Office of the Security Officer | 3 | 31,437 | 3 | 32,638 | | +1,201 |
| Division of Information | 11 | 115,020 | 11 | 116,809 | | +1,789 |
| Subtotal, Board members and related units | 370 | 5,639,872 | 396 | 5,968,795 | +26 | +328,923 |
| General Counsel and staff: Office of the General Counsel | 15 | 179,000 | 15 | 182,750 | | +3,750 |
| Division of Operations: | | | | | | |
| Departmental staff | 60 | 725,330 | 63 | 800,455 | +3 | +75,125 |
| Field staff: | | | | | | |
| Regional directors and regional attorneys | 63 | 1,367,046 | 63 | 1,374,047 | | +7,001 |
| All other field professionals | 849 | 11,041,673 | 880 | 11,349,070 | +31 | +307,397 |
| Field clericals | 609 | 3,802,768 | 622 | 3,826,137 | +13 | +23,369 |
| Subtotal, field staff | 1,521 | 16,211,487 | 1,565 | 16,549,254 | +44 | +337,767 |
| Subtotal, Division of Operations | 1,581 | 16,936,817 | 1,628 | 17,349,709 | +47 | +412,892 |
| Division of Litigation: | | | | | | |
| Office of the Associate General Counsel | 3 | 43,270 | 4 | 59,316 | +1 | +16,046 |
| Supreme Court Branch | 3 | 41,816 | 4 | 53,707 | +1 | +11,891 |
| District Court Branch | 15 | 211,767 | 16 | 228,014 | +1 | +16,247 |
| Appellate Court Branch | 97 | 1,154,981 | 110 | 1,273,422 | +13 | +118,441 |
| Litigation Services section | 16 | 107,529 | 17 | 114,999 | +1 | +7,470 |
| Office of Appeals | 34 | 409,741 | 37 | 465,570 | +3 | +55,829 |
| Legal Research and Special Projects Branch | 25 | 270,131 | 26 | 286,317 | +1 | +16,186 |
| Subtotal, Division of Litigation | 193 | 2,239,235 | 214 | 2,481,345 | +21 | +242,110 |
| Division of Administration | 259 | 1,883,710 | 275 | 2,045,758 | +16 | +162,048 |
| Subtotal, General Counsel and Staff | 2,048 | 21,238,762 | 2,132 | 22,059,562 | +84 | +820,800 |
| Total permanent for the agency | 2,418 | 26,878,634 | 2,528 | 28,028,357 | +110 | +1,149,723 |

SUMMARY OF POSITIONS

| | Fiscal year 1968 estimate | Fiscal year 1969 request | Change from 1968 estimate to 1969 request |
|---|---|---|---|
| Total permanent, departmental | 897 | 963 | +66 |
| Total permanent, field | 1,521 | 1,565 | +44 |
| Total permanent, departmental and field | 2,418 | 2,528 | +110 |
| Deduct lapses | −112 | −129 | −17 |
| Net permanent, departmental and field | 2,306 | 2,399 | +93 |
| Obligations from "Advances and reimbursements" | 2 | 2 | |

SUMMARY OF SALARIES

| | | | |
|---|---|---|---|
| Total permanent, departmental | $10,667,147 | $11,479,103 | +$811,956 |
| Total permanent, field | 16,211,487 | 16,549,254 | +337,767 |
| Total permanent, departmental and field | 26,878,634 | 28,028,357 | +1,149,723 |
| Pay above the stated annual rate | | 101,000 | +101,000 |
| Deduct lapses | −1,154,984 | −1,317,257 | −162,273 |
| Deduct net decrease to lower pay scale for part of year | −275,600 | | +275,600 |
| Net permanent, departmental and field | 25,448,050 | 26,812,100 | +1,364,050 |
| Temporary employment | 106,900 | 153,800 | +46,900 |
| Parttime employment | 43,000 | 51,500 | +8,500 |
| Intermittent employment | 27,000 | 61,900 | +34,900 |
| Post differentials and cost-of-living allowances | 23,800 | 23,900 | +100 |
| Overtime and holiday pay | 16,400 | 23,900 | +7,500 |
| Compensation of witnesses | 37,800 | 61,400 | +23,600 |
| Personnel compensation | 25,702,950 | 27,188,500 | +1,485,550 |
| Summary, 11 Personnel compensation: | | | |
| Estimated obligations and expenses prior to Pay Act increases | 24,803,350 | 27,155,400 | +2,352,050 |
| Estimated increase in personnel compensation for Pay Act increases | 841,000 | | −841,000 |
| Total, 11 Personnel compensation | 25,644,350 | 27,155,400 | +1,511,050 |
| Additional obligations from "Advances and reimbursements": | | | |
| 11 Personnel compensation | 58,600 | 33,100 | −25,500 |

TABLE IV.—COMPARISON OF 1968 AND 1969 ESTIMATED AVERAGE EMPLOYMENT FOR THE ORGANIZATIONAL UNITS OF THE AGENCY

| Organizational unit | Average employment | | |
|---|---|---|---|
| | Fiscal year 1968 estimate | Fiscal year 1969 request | Change from 1968 estimate to 1969 request |
| Board members offices and related units: | | | |
| Board members' offices and legal assistants | 162.0 | 166.4 | +4.4 |
| Office of the Executive Secretary | 28.9 | 33.8 | +4.9 |
| Office of the Solicitor | 4.0 | 4.0 | |
| Division of Trial Examiners | 133.4 | 144.8 | +11.4 |
| Office of the Security Officer | 3.0 | 3.0 | |
| Division of Information | 10.7 | 10.7 | |
| Total, Board members' offices and related units | 342.0 | 362.7 | +20.7 |
| General Counsel and staff: | | | |
| Office of the General Counsel | 13.9 | 15.0 | +1.1 |
| Division of Operations: | | | |
| Departmental staff | 55.3 | 58.7 | +3.4 |
| Field staff: | | | |
| Regional directors and regional attorneys | 62.7 | 63.5 | +.8 |
| All other field professionals | 836.9 | 847.4 | +10.5 |
| Field clericals | 574.9 | 600.8 | +25.9 |
| Subtotal, field staff | 1,474.5 | 1,511.7 | +37.2 |
| Subtotal, Division of Operations | 1,529.8 | 1,570.4 | +40.6 |
| Division of Litigation: | | | |
| Office of the Associate General Counsel | 3.0 | 3.3 | +.3 |
| Supreme Court Branch | 2.8 | 4.0 | +1.2 |
| District Court Branch | 15.0 | 16.0 | +1.0 |
| Appellate Court Branch | 89.2 | 97.2 | +8.0 |
| Litigation Services Section | 14.3 | 16.6 | +2.3 |
| Office of Appeals | 33.0 | 34.0 | +1.0 |
| Legal Research and Special Projects Branch | 24.9 | 23.4 | −1.5 |
| Subtotal, Division of Litigation | 182.2 | 194.5 | +12.3 |
| Division of Administration | 237.5 | 255.9 | +18.4 |
| Subtotal, General Counsel and staff | 1,963.4 | 2,035.8 | +72.4 |
| Net permanent for the agency [1] | 2,305.4 | 2,398.5 | +93.1 |
| Summary: | | | |
| Total permanent, departmental | 830.9 | 886.8 | +55.9 |
| Total permanent, field | 1,474.5 | 1,511.7 | +37.2 |
| Net permanent for the agency | 2,305.4 | 2,398.5 | +93.1 |
| Additional obligations from "Advances and reimbursements" | 2.6 | .6 | −2.0 |

[1] Excludes man-years for "Positions other than permanent": 1968 estimate, 42.4; 1969 request, 51.4; change, +9.

TRIBUTE TO SENATOR HILL

Senator HILL. The committee will kindly come to order.

We are happy to hear from the representatives of the National Labor Relations Board, Mr. McCulloch, and we will be glad to have any of you other gentlemen come up.

Mr. McCulloch, we are glad to have you back with us. You are an oldtime friend. You may proceed in your own way now, sir.

Mr. MCCULLOCH. I appreciate the opportunity to present our appropriation request. I hope it will not unduly prejudice us if at the outset I join the many, many others who have expressed their gratitude for the service which the chairman of the subcommittee before which we appear today has rendered to the people of the United States.

This may be my last official opportunity to do so. I wish to take advantage of it.

Senator HILL. Thank you. You are most gracious and kind; and I appreciate it.

Mr. MCCULLOCH. This is not just for your service to a group of Government agencies that have worked in connection with your chairmanship of this committee, but it is also for your untold contributions to the welfare of the people that those agencies serve.

It is grinding hard work, and we appreciate the perception and thought and leadership you have given to the problem of how best to devote the people's dollars to the people's needs.

We, however, are among the many who would pay tribute to you.

Senator HILL. Thank you. I wish to express my deep appreciation. Thank you for all the help and cooperation which you have given me through the years.

PREPARED STATEMENT

Mr. MCCULLOCH. That has been an easy thing to do with the chairman of the subcommittee.

I would ask the chairman's permission to insert at this point in the record of this hearing my full statement.

Senator HILL. Your statement will appear in full.

(The statement follows:)

I wish to thank the Committee for this opportunity to appear on behalf of the National Labor Relations Board, and to support its budget request for fiscal year 1969 to carry out the vital responsibilities laid upon it by Congress.

THE AGENCY REQUEST

The Agency is requesting an appropriation of $35,074,000 in 1969. This is $2,921,340 more than the amount we expect to be available in 1968. In 1968, $32,288,000 was appropriated, $1,056,240 of this amount was reduced and placed in reserve by action of the Congress, and $920,900 of this reserve will be needed to pay for increased costs of the Postal Revenue and Salary Act of 1967. In total therefore, the Agency expects to have available in 1968 $32,152,660, as compared to the $35,074,000 requested for 1969.

The $2,921,340 increase requested is 9% above funds expected to be available in 1968. This increase will pay for (1) a 4.3% increase in employment to handle a 5.8% increase in work; plus (2) an $885,988 increase for increased pay and other mandatory administrative costs; as well as (3) $234,500 for increased printing costs, and $69,000 for moving our computer automation program along slowly.

The $2,921,340 fund increase request includes about $200,000 for case work deferred from 1968 to 1969, and $112,000 for printing costs deferred from 1968 to 1969. In addition most items of miscellaneous expenditure reflect in their 1969

increases the tightening up of these expenditures in 1968. Furniture and equipment costs for 1969, for example, are almost double the 1968 estimate; but the request for 1969 is actually below expenditures for equipment in 1967.

In summary, the 9% increase in funds requested for 1969 is higher than the 4.3% increase in employment because the request reflects the measures taken by the Agency in 1968 to conform with the reductions enacted by the Congress after our appropriation was initially approved. In order to maintain service as well as possible, reductions were made in items which could be deferred to 1969 without immediate serious impairment of the program. In the long run, however, continued deferral of these items, including further deferral of miscellaneous expenditures, would seriously affect the Agency's operations.

The 4.3% increase in employment is an increase of 102.1 in average employment. This employment increase will be shared between our field offices and our Washington staff, with the greater increase taking place in our Washington staff. The Washington staff increases will allow us to concentrate on reducing problems of delay and backlog in the formal processing of cases.

### THE AGENCY'S ROLE IN THE CURRENT LABOR RELATIONS PICTURE

The most noticeable feature of today's general labor relations situation is the rise in industrial unrest, which has manifested itself in the increasing number of strikes and man-days of employment lost, as well as in the number of strike settlements and negotiated agreements rejected by union members.

Although we do not have jurisdiction over contract negotiation break-downs in the absence of unfair labor practice charges or over the public employment areas (local, state and federal employment) which have also been involved in this unrest, we have been playing a role in quenching some of the incipient fires in the private sector. Our substantial rise in intake beginning in January, 1967, has been to a large extent, due to filing of charges by individuals. By offering these individuals—and other charging parties—an opportunity to litigate their grievances or complaints in an orderly manner, we believe we have made a contribution to the peaceful handling of these problems, and provided a damper on some of the sources of industrial conflict.

### APPRAISAL OF OUR PRESENT SITUATION

When we submitted our 1968 budget request a year ago it was based upon the filing of an estimated 16,565 unfair labor practice charges and 14,400 representation questions. This was a combined workload increase of about 3½% over estimated 1967 intake at that time. Today, as a result of the unexpectedly large rise in unfair labor practice filings, we have revised the 1968 estimate of filings to 17,805 charges and 13,945 representation filings, which then becomes in workload terms, an increase of 4.3% over the original 1968 estimate (and a 7.8% increase over the original fiscal year 1967 estimated intake.)

The Committee's approval of our entire appropriation request ($32,288,000) was based upon notification and explanation of the large rise in unfair labor practice filings starting with January, 1967. Thereafter, the Congress decided on an across-the-board cut in the funds of all Federal Government agencies in order to accommodate the Federal Government's expenditures to the overall economic situation. This reduction, which was not effective until December, 1967, created a difficult operational problem affecting us during the last 6 months of fiscal year 1968.

To cope with this problem, we put a freeze on hiring except for emergencies and a freeze on the filling of vacancies. In addition, miscellaneous expenses were postponed or cut to the bone insofar as possible. In printing we deferred the issuance of Board Volumes, which were to be obligated this year, into 1969. In order to cut travel and reporting costs, we reduced the number of hearings which we had planned to hold. We also asked our regional offices to consolidate their case handling travel so as to save as much travel fund money and employee time as possible. This means, however, that in individual cases we will not be able to give the prompt service we had been trying to provide.

These measures have been successful thus far in terms of the need for expenditure reduction. At this point we have hopes of ameliorating some of the flat restrictions mentioned above. We cannot, however, tell you as yet, what the full effects of these forced reductions will be.

In summary therefore, our appraisal shows that we may well be heading into trouble on all fronts, because of the cross conflict between more work than esti-

mated on the one hand, and fewer people on the other, along with fewer dollars to move them about flexibly so as to plug up the gaps which develop in our case handling process.

### THE 1969 REQUEST

In our plans for 1969 we have provided basically for a continuation of our established program of processing case intake and reducing backlog. We are assuming that we shall be able to cope with the problems which develop as a result of the reduced funds in the last half of fiscal year 1968. Our goals, therefore, are to reduce backlog, contain or reduce time delay in all critical areas, and improve productivity.

### INTAKE

As you know, the Agency's workload is based upon the filings of charges and petitions by unions, employers, and individuals. We have no control over these filings, but we do our best to estimate them as correctly and as conservatively as possible.

Our experience since 1958 has been a continuously rising flood of cases filed, which for most years has averaged out to almost a 10% rise. In fiscal year 1967 unfair labor practice intake rose by 7% and representation work intake rose by 2½%. For 1968 and 1969 we have conservatively estimated a continuation of this rise but at a lower rate. We are estimating in unfair labor practice work a 4½% rise in 1968, and a 5½% rise in 1969. In representation work we are estimating a 2½% rise in 1968, and a 3½% rise in 1969.

Our filings thus far this fiscal year, are higher than our estimate for unfair labor practice work and lower than estimated for representation work. In view of the fact that our unfair labor practice situation normally requires that we expend 2½ times the manpower and cost of a representation case; our intake experience thus far in 1968 means that we will undoubtedly receive the workload equivalent of our intake estimate.

### FACTORS AFFECTING INTAKE

The major factors which normally affect our intake are industrial growth, increases in the work force, labor union organizing and collective bargaining activity, industrial shifts resulting from automation, plant closings and relocations, and changes in local employment.

Starting, however, with January 1967, the major factor affecting our intake was the increase in filing of charges by individuals against both unions and employers. We are not certain as to why this occurred. In our last appearance before the Committee we thought that the rise in strikes and industrial unrest would not necessarily affect filings with this Agency. As we notified you, we were wrong in that estimate. We were affected, and we continue to be affected. The strong rise in unfair labor practice charges thus far this year, as well as last year, includes a very heavy rise in individually filed charges.

Our estimates for the rest of this year and next year are based upon this factor which has been continuing, as well as an expected pick-up in filings by unions in connection with organizing drives. Our experience this past year for example, indicates a rise in filings involving building trades union organizing activities, as reflected by increased charges against these unions (and others) in the areas of secondary boycotts, jurisdictional disputes, and allegations of illegal picketing. Supporting this experience are reports that building trades unions are picking up their labor organizing activities both formally and informally. Another area where our workload is picking up is in the white collar organizing field. Our records indicate a 75% rise in elections involving such units from fiscal year 1966 to 1967. In 1967 these elections represented about 10% of all the elections we held. That percentage had risen in that one year from a little over 5% in 1966 to the 10% level in 1967. We expect increased organizing in retail, wholesale and other service industries. We also expect a pickup in regular manufacturing organization efforts.

### THE AGENCY'S WORK PROGRAM

*A. General*

In order to carry out the Congressional purpose to reduce or minimize the effects of labor disputes, the Agency has established a goal of quality work handling with special emphasis on (1) maximum speed in the handling of cases and (2) minimum litigation, by encouraging voluntary settlement before formal litiga-

tion, and voluntary compliance with formal orders as early in the litigation process as can be achieved.

Our 1969 program is designed to carry out these objectives. Despite the problems that lie ahead of us, we are relying on the experience and the dedication of our staff, to find ways to cope with the problems that do arise, and to carry on our program for improving service and reducing time delay.

*B. Informal Processing*

Most of our cases (about 90%) are handled informally in our regional offices. Till now, these offices have been current in their case handling for the most part. Although we know and expect that we shall have some impairment in this kind of service, we are confidently looking forward to the solution of those problems and the ability to maintain our service in 1969. The General Counsel, who supervises these offices, will discuss this in greater detail.

*C. Formal Case Processing*

*Processing by Trial Examiners*

As a result of the fund reductions in fiscal year 1968, we have reduced the tempo of the unfair labor practice hearing process, so that a lesser number of hearings will be conducted in 1968 than was estimated. We believe that the Agency will hold about 970 hearings in 1968, as compared to the 1,160 we had planned to hold. Although this will delay case processing at this stage and create a number of other problems, it will also have the effect of providing more time for the trial examiners to write their decisions on the cases they have heard. As a result, we expect the trial examiner decision stage to become more current and take less time this year and next.

In 1969 we plan to step up the number of hearings held in order to process the cases deferred from 1968. We expect to increase the number of hearings from about 970 in 1968 to about 1,253 in 1969. Our 1969 program provides for 8 additional trial examiner positions, to assist in handling this increase in work, and hopefully to bring the entire trial examiner operation, including hearings, closer to current processing. If we are sucessful, we should be able to reduce the time required from issuance of complaint to issuance of trial examiner decision from the 170 days now needed to around 150 days. We have also provided for increased productivity at this stage, and we shall do our best to achieve it.

*Board Decision Work*

The Board itself hopes to continue its improvements in both increasing productivity and reducing time delay. The Board has scheduled for decision this year about 900 unfair labor practice cases and about 200 representation cases. We shall make every effort to keep up with all the work we get from the trial examiners and regional directors, and the efficiency of our program will depend upon the ability of our staff in the field and in Washington to keep the cases moving, despite the problems of attrition and unfilled vacancies.

In view of the increased number of trial examiner decisions which we expect this fiscal year as a result of the reduction in hearings, we expect that we shall need no increase in the number of decisions the Board must issue in 1969. Our program in 1969 provides again for the issuance of about 900 contested unfair labor practice decisions, about 200 decisions resolving representation questions. and over 200 more decisions on objections and challenges to elections.

*Court Enforcement*

The Agency has been facing and will continue to face a tremendous job of Court Enforcement. As the Board's unfair labor practice decisions have risen from about 200 ten years ago, to about 900 in the current estimate, the need for enforcement of these decisions has risen proportionately. We have provided for very heavy increases in this area to catch up with a rising back-log. The General Counsel will describe this operation in greater detail, since it comes under his supervision. It is crucial in the administration of the Act that we carry out this court litigation program effectively.

MANAGEMENT IMPROVEMENT AND COST REDUCTION

Since most of the Agency's funds are spent on personnel, the Agency puts special emphasis on productivity improvements. Our division heads, as well as the Board and General Counsel, are looking for better ways to accomplish the Agency's work so as to keep with the constant need to operate more efficiently

and more economically. The Agency spurs this effort on by setting increased productivity goals each year and by asking our entire staff to cooperate in the achievement of these goals.

We have valued our cost reduction and management improvement program for 1969 at over $400,000. We shall use every resource to carry out this program, although we are aware that the problems caused by the necessary fund reductions in fiscal year 1968, may very well affect our overall production and efficiency and make it difficult for us to reach the goals set.

SUMMARY

Our main concern at this time is still the solution to the rising tide of unfair labor practice charges and resulting formal actions. At the same time, we have pursued, and will continue to pursue, diligently the President's and the Congress' goal of making certain that full value is secured for every dollar spent.

With your guidance and understanding, as in previous years, we intend to meet and deal with these problems as effectively and skillfully as we can, bearing in mind at all times the responsibilities laid on us by the Congress to resolve as speedily as possible those industrial conflicts which arise from representation and unfair labor practice disputes.

BUDGET REQUEST

Mr. McCulloch. The agency is requesting an appropriation of $35,074,000. This is an increase of $2,921,340 over the funds that we expect for 1968. It would make possible an increase in the authorized positions of 110.

This increase would be divided roughly on the basis of 44 in the field and 66 in Washington.

Now before describing the immediate workload figures on which this request is based, I would like to make these general comments.

We are keenly aware of the enormous pressures on the Federal Treasury in this time of national and international crisis.

WORKLOAD INCREASE

We have, therefore, estimated the needs of our work as conservatively as possible. Yet the growing demands by the persons who file their cases with us in this agency to protect the legal rights which Congress says should be protected must be reported to you, frankly, for it is on this workload that our appropriation request is very squarely based.

Thus, the $2,921,000 requested increase is computed to cover, in addition to the pay act and mandatory administrative costs of about $885,000, an added printing and computer automation program cost of $303,000, and an increase to cover expected workload.

We figure this in our estimates as a 5.8-percent increase in workload over and above the current year, with a 4.3-percent increase in employment to be made possible by the requested funds.

Senator Hill. Do you think there will be that much increase in the workload?

Mr. McCulloch. This is what the figures drawn from our recent experience tell us to conclude.

In 1967, for which, of course, we now have the actual figures, the increase over the prior year in unfair labor practice cases filed was some 7 percent.

In the current year, we expect that it will aggregate 4½ percent over 1967, and for the fiscal year for which we are asking appropriations we are estimating that unfair labor practice increase at 5½

percent. That is only about half of the average increase through the years since 1958 of very nearly 10 percent a year.

So that we think this is conservative, and it is less than the increase in 1967 over 1966. The increases in representation casework are estimated at somewhat less than that. They were 2½ percent in 1967 over the prior year.

We expect them to be about 2½ percent or maybe a little less than that in the current year, and it has been estimated at 3½ percent in the year to come.

Interestingly enough at the time these figures were drawn up and prepared for presentation to you, we concluded they should be based on an intake increase for 1968 of about 4½ percent. But now we find that for the first 9 months of the fiscal year, in unfair labor practice cases, that increase is running at 6.2 percent.

If we took a percentage of a percentage, that is nearly a third more than the percentage of increase on which our budget figures were presented and are set forth in the justification. So that the 9 months' figures suggest that our conservative estimate is likely to prove out to be correct.

PRINTING COSTS, EQUIPMENT, AND TRAVEL

Now in addition to the expected increase in the new case filings coming in, our request for funds is also aimed to enable us to reach the essential casework, printing costs, and equipment needs which were deferred as a result of the reduction in the 1968 appropriation.

Senator HILL. What was the last item, sir?

Mr. MCCULLOCH. Equipment. Because of the cut in the appropriation last December, we deferred a good many items. The agency put a freeze on hiring except for emergencies, and a freeze on the filling of vacancies. Miscellaneous expenses were postponed or cut to the bone.

In printing we deferred the issuance of Board volumes which were to have been obligated this year into the following year. We cut travel costs and reduced the number of hearings. We consolidated the case handling travel in order to effectuate the economies within the last 6 months of the fiscal year because, of course, it was not until close to the end of December that we knew what that cut was going to be.

But these things do not go away. They remain, and we have to try to pick them up.

So, we are estimating in this total increase of workload of about 5.8 percent, that there is an item of about 1 percent for picking up some of that increase backlog from the current year.

The result is that a combination of needs of the increased caseload, picking up the deferred services, equipment needs, printing and the like from 1968 results in the appropriation request that we have made.

DECISION OUTPUT

I would only say further that our goals in terms of case processing by our trial examiners and by the Board are set out a little more fully both in the justifications and in my statement.

There is a real drive to increase our decisional output. It has kept going up, in spite of the pressure of the very heavy increase in the overall caseload. These goals also include an effort to reduce the time

delays which tend to build up a little as the caseload goes up, and a real drive to maintain the quality of the work at all levels.

### VALIDITY OF CASE ESTIMATE

Finally, I wish we could report that these case intake predictions of ours were too high but we cannot.

I wish I could report that the probable violations, cases likely to have been a violation, have fallen and that the so-called merit cases were less numerous, but I can't report that.

I wish I could report that the compliance with Board orders had been greater, but I cannot, and our court litigation volume continues at a very high level.

So the work is there. It takes people to do it, and our budget and appropriation request is based on those plain facts.

### TRIBUTE TO SENATOR HILL

Senator HILL. Mr. Ordman.

Mr. ORDMAN. Mr. Chairman, although I haven't had the privilege and pleasure of knowing you as long as Frank McCulloch has, in my more limited experience I have enjoyed the benefits of your personal kindness and the agency which I am representing here has enjoyed it, too. We appreciate your whole-hearted cooperation.

I will not try to duplicate the beautiful expression of appreciation and tribute stated by Mr. McCulloch. I do, however, concur in all that he has said.

Senator HILL. Thank you, sir. I appreciate that very deeply.

### PREPARED STATEMENT

Mr. ORDMAN. I, too, would like, if I may, to submit my statement for the record.

Senator HILL. It will be received for the record.

(The statement follows:)

I thank the Committee for this opportunity to appear on behalf of the National Labor Relations Board and to support its budget request for fiscal year 1969.

### THE AGENCY REQUEST

The Agency is requesting $35,074,000 for fiscal year 1969, or $2,921,340 more than the $32,152,660 which is required for fiscal year 1968. This increase will pay for $885,988 in mandatory administrative costs, and $2,035,352 for increased program and miscellaneous expense costs to support an increase in average employment of 102 or 4.3% to handle an increase of 5.8% in our work program.

Average employment on the General Counsel's staff is to be increased by 79.2 for an increase of 4%. This is distributed as follows: field employment is to be increased by 40 for an increase of less than 3% to process a 5% work increase. Washington employment is being increased by 7.8% to handle work increases ranging from 6% to 25%. The larger percentage increases are in the Washington staff because of increased emphasis on the backlog program in the Agency's formal work. We propose to absorb the increased work for which additional manpower is not provided by our management improvement cost reduction efforts.

### RESPONSIBILITIES OF THE OFFICE OF THE GENERAL COUNSEL

The National Labor Relations Act provides that "the General Counsel shall exercise general supervision over all attorneys employed by the Board (other than trial examiners and legal assistants to Board members) and over the officers and employees in the regional offices. He shall have final authority, on

behalf of the Board, in respect of the investigation of charges and issuance of complaints under Section 10, and in respect of the prosecutions of such complaints before the Board, and shall have such other duties as the Board may prescribe . . ."

As a result of the delegations in the statute and those made by the Board under the statute, the General Counsel is responsible for the operation of the Agency's field offices and in addition supervises all litigation before and after Board decision. The Board has also delegated to the General Counsel supervision over the Division of Administration.

## FISCAL YEAR 1967 OPERATIONS SUMMARY

### *General*

As we indicated to you in our letter of last May, the Agency faced an unexpectedly large increase in filings in the last 6 months of fiscal year 1967. Since these filings have their initial and major impact in our field offices, the problem we faced was maintenance of service in those offices. As I will indicate in greater detail below, I think we accomplished a great deal in fiscal year 1967. In terms of program our greatest accomplishment was in the time delay area; there we held the line, despite the large rise in intake and the resultant increase in pending caseloads. As Table B of our justification indicates, it took no longer this year to process an unfair labor practice case, than it took the previous year, before this unexpectedly large increase in filings occurred. In representation work the field offices were taking a little longer.

### *Field Operations*

Despite the operational problem referred to above, our field offices once more did a fine job of carrying out their mission in fiscal year 1967.

Again, we can point to the fact that cases are being investigated currently and the great bulk of the cases are being processed in 45 days or less. The length of time cases have been pending under investigation on the average was 25 days in February, 1967 and 25 days in February, 1968. Even as to cases going to complaint, through February, the 59 day interval between filing of charge and issuance of complaint achieved last year has been maintained.

Although the percentage of cases settled declined a little from the record highs achieved in fiscal year 1966, the percentage settled in the field is still higher than any year before 1966. As we have indicated previously, we cannot overestimate the importance of cases settled. The Agency settles those charges which after investigation are considered to have merit. A voluntary settlement not only contributes to better labor relations, a paramount objective of the National Labor Relations Act; failure to obtain such a settlement results in a substantial increase in costs, because formal litigation and its attendant costs and manpower requirements become necessary. We are pleased to report that we are still settling between 75 and 80% of all cases which our field offices consider to have merit.

In essence, therefore, our field officers were able to hold the line and continue to provide reasonable service despite the large increase in intake during the last 6 months of fiscal year 1967 and the first eight months of fiscal year 1968.

### *Court enforcement*

As I reported to you last year, our court litigation dockets are extremely heavy. As part of our program to decrease backlog and provide better service, we have been trying to build up the staff of attorneys who prepare and argue petitions for enforcement or review of Board Orders in the Circuit Courts of Appeal. We now have about 80 attorneys in our Apellate Court Branch, which handles the problems of Circuit Court enforcement. In fiscal year 1967 the branch was able to increase its output in the form of pleadings, supporting briefs, and related activities by 25% over fiscal year 1966. Despite this tremendous increase in work accomplished, the branch was not able to keep up with the tremendous flood of cases coming to it from the constantly increasing number of Board Decisions in unfair labor practice cases. As I will indicate hereafter, we have adopted ambitious programs in 1968–1969 to deal with this problem.

### *Management improvement*

The General Counsel is responsible for the Agency's program to automate its operations both in the field of printing of Decisions, and in the development of a modern case operations information system.

In fiscal year 1967, we began the establishment of a regular operation for the printing of Board Volumes of Decisions by the Government Printing Office's computer system for setting print. It had been our hope that a large number of volumes of Board Decisions could be printed by this method in fiscal year 1968, saving the Agency a substantial amount of money in the cost of printing. As indicated hereafter, this program has been affected by 1968 retrenchments.

Similarly, the Agency had begun to lay plans for automating its information gathering and reporting systems. Our program in this area as in the computer typesetter program was recommended on the basis of a feasibility study by the Bureau of Standards. In fiscal year 1967 we managed to train a few members of our staff to program regular work reports for computer processing. However, our program for proceeding in this direction has also been affected by 1968 fund reductions.

1968–1969 PROGRAM

*General*

*1968 Outlook*

As you know, the Committee had approved our entire request for fiscal year 1968 recognizing the need of the Agency for coping with the unexpectedly large intake. After approval of our appropriation, however, the Congress in agreement with the President reduced all appropriations and budget requests in the attempt to control inflationary forces in the economy. This Agency found itself with a requirement for reducing a significant sum from its program needs in the last half of fiscal year 1968. The Agency carried out this reduction by stopping all hiring and by not filling vacancies, except for emergencies. In addition, miscellaneous expenses (many of which affect our ability to carry out our program) were cut or deferred to the greatest extent possible. Although we do not as yet know the full extent to which these reductions will affect our operations, we are already experiencing certain types of problems as set forth below.

One of the most difficult problems we have is the recruitment and retention of able people. At the moment we are faced with the critical problem of the loss of experienced personnel, both professional and clerical. Private industry is paying high prices for experienced and able people. For example, we recently lost an able Grade 5 legal secretary although we were able to offer her a promotion to Grade 6. A private law firm was offering her better than the starting salary of Grade 7 to leave us and come to them. Another example, of this trend, which I found rather startling, was an article in the New York Times to the effect that the competition for young lawyers leaving school had gotten so strong that the top New York City law firms were offering $15,000 to a young lawyer just out of school. This must be compared to the Grade 9 or $8.000 we offer new professional employees and most of the professionals we hire are new law school or college graduates. At the very least therefore, we think it essential to contact the schools 6 months before graduation and to start making commitments for hire after graduation as soon as the people we want to hire are willing to accept such a commitment.

The loss of experienced personnel who cannot be replaced may seriously weaken the ability of our staff to continue processing the case work as it has been doing; both in terms of quality of investigation and analysis, and in terms of speed of processing.

The deferment of hearings means that our field trial attorney will have to spend much more time on those cases keeping in touch with their witnesses than they might otherwise. It also means the possible loss of witnesses while awaiting trial.

The restrictions on travel mean deferment of investigations. The longer it takes to investigate and determine whether merit exists, the greater the difficulty of eventual settlement; because the cost of settlement rises as time passes. Most of our settlements are informal adjustments reached quickly after a charge is filed when both parties are more likely to want to end the proceeding, and get back to their regular activities.

Our latest financial review indicates the possibility that we may now be able to ameliorate some of these restrictions. However, at this point we cannot foretell what the final results of the fund restrictions will be.

*1969 Program*

*1. General*

Our 1969 program provides for putting the Agency case processing machinery back into high gear. This means that (1) work and expenditures deferred from

1968 must be provided for, (2) 1969 filings must be processed, and (3) backlog and time delay must be reduced insofar as possible. We hope to be able to report to you a continuation of our progress in reducing time delay and improving service when we return to present our budget program for fiscal year 1970.

*2. Field Operations*

We have provided a 3% increase in employment to process an expected increase in filings of 4.8% and the requirements for reducing backlog, which includes the holding of the deferred unfair labor practice hearings. Those offices which accumulate backlogs in fiscal year 1968, as a result of the retrenchments, will be given top priority in our fiscal year 1969 staffing program. In addition, it may be necessary to provide mobile units of professionals from other regions in order to overcome such backlogs quickly. This approach may prove to be quite expensive, but is is absolutely necessary. We cannot allow any regional office to stay in a state of non-current case handling for more than a minimal period. The inability to correct such a problem quickly could engender a sense of frustration in those who rely on our services. It could destroy very quickly the value of a number of years of hard work, spent establishing the principle that excessive delay will not be countenanced in initiating field investigations, and in reaching determinations on the merits of cases filed. Our clients know our approach and are conditioned to expecting and cooperating with a quick investigation. This attitude has helped us maintain a state of currency in most regional office investigations, and has facilitated the high percentage of settlement of which we are so proud.

Although we are proud of the achievements of our field staff, we must temper our hopes for 1969 with the understanding that the loss of experienced staff and the needs for recruitment provide a very stiff challenge to our program hopes for 1969. The high rate of turnover means that we have a constant program of training new staff members on a large scale each year. The success of this recruitment effort and the ensuing training effort are vital to the success of the program.

*Court Enforcement*

In order to cope with the rising tide of unfair labor practice decisions which require enforcement, we have provided for substantial increases in personnel in our Appellate Court Branch in fiscal years 1968 and 1969. We are hoping that this staff will be able to increase briefs filed in Appellate Court from 312 in fiscal year 1967 to 393 in fiscal year 1968 and to 464 in fiscal year 1969. These are increases in work of about 25% each year as compared to proposed employment increases of about 15% in 1968, and only another 8% in 1969. Through this program we hope we can achieve currency in the enforcement of Board Decisions in 1968 and maintain that currency in 1969.

*Management Improvement*

As indicated previously, we have deferred the printing of Board Volumes from fiscal year 1968 to fiscal year 1969 except for a small number (1 to 3). This is why the fiscal year 1969 request includes a large increase in funds for printing in 1969. If we are successful with this program, we shall be able to issue Board Volumes of Decisions within 3 to 6 months after the last decision is issued by the Board, as compared to about 15 months under the old system.

Our program for the automation of our information gathering and reporting system has also been delayed. We hope to hire the nucleus of a computer staff in 1969. If we are successful in these efforts, then we would return to you for authorization to expand our computer rental and the computer handling of our information system in fiscal year 1970.

SUMMARY

With your help and understanding we have been able to make demonstrable progress in virtually all the areas which are significant in the operations under the supervision of the Office of the General Counsel. In cooperation with the Chairman and the Members of the Board, but respecting our separate statutory functions, substantial progress has been made to fulfill the functions which have been delegated to the Agency by the Congress. I look forward hopefully to a continuation of your understanding and assistance in our further efforts.

CASELOAD INCREASE AND BACKLOG

Mr. ORDMAN. The increase in funds we are requesting is to take care of the anticipated case intake and the backlog.

The dramatic increase in caseload which started about a year and a half ago shows no signs of diminishing.

To the contrary, it seems to be increasing.

The second basis for our request, of course, is the impact of the fund retrenchment made in the last fiscal year which has left us with a backlog.

ENFORCEMENT

Senator HILL. I notice you make this statement:

Washington employment is being increased by 7.8 percent to handle work increases ranging from 6 to 25 percent.

Mr. ORDMAN. Mr. Chairman, one of the places where our workload is markedly increasing is in our litigation branch. Board orders, as you know, are not self-enforcing. We must go to court to obtain enforcement. Roughly, at the present time, about 60 percent of the Board output, which is reaching the almost incredible figure of 900 cases a year, are going to the appellate courts for review or enforcement.

Senator HILL. That large a percent?

Mr. ORDMAN. Yes, sir; at the present time. It is moving up to 60 percent at the present time.

It should be stated that we have had a remarkable degree of success in the courts. We have won 82 percent of the cases in court in whole or in part.

Nonetheless, we continue to have a large caseload in the courts. In many instances, I suspect the reason is that respondents can get substantial delays at relatively little cost by stretching out the process of litigation. Since Board orders are not self-enforcing, delay usually works to the advantage of the respondents.

CASE PROCESS DURATION

Senator HILL. Let me ask you a question.

How long do these cases generally drag out, so to speak?

Mr. ORDMAN. If a respondent seeks to drag it out it will take approximately a year before issuance of a Board decision.

Then if he wants to exhaust his rights in the appellate court, that depends a little bit on the court calendar, I would estimate again 6 to 8 months as a median time between filing and appellate court decision.

Then if he wants to further exhaust his rights, he can petition for certiorari before the Supreme Court that will take another several months before that is determined.

Most of the petitions for certiorari are routinely denied. There are only a handful, four or five a year, which are granted, but most of them are denied.

Senator HILL. You have that delay?

DISPOSITION OF CASES WITHOUT LITIGATION

Mr. ORDMAN. Under that law as written, a case can easily be dragged out 2 or 3 years before the Board order becomes effective.

This explains the need. Of course, I should point out that these long-drawn-out cases should not be taken as typical of the work of the agency. Roughly 90 percent of our cases never reach the state of litigation, are disposed of quickly in our regional offices, in a median of 45 days.

So the bulk of the caseload, the bulk of the Board's operation is quick and efficient and timely. One can lose perspective if one thinks merely about the handful of cases that take so terribly long.

The bulk of our work is done in quick and timely fashion both in the unfair labor practice and representation areas.

As I point out, our needs at this time are dictated by the fact that we do have the effect of the retrenchment. The economies we have made we are going to have to pay for. Sometimes economies become costly because we have no elbow room.

### Work of Services

There are no programs, for example, that we can cancel out and feel we can get along without.

All of our work is service to people who come and demand that service.

We must furnish that service. Our objectives, and I think we are effectuating them in 90 percent of the cases, are to give timely and effective service, and we do.

But we have had to accommodate to the shortage of funds and to some extent this has cramped our operation.

What we hope, and this committee has been cooperating in the past, is that you will give us the amount of money we need so that we can give current and effective operation and serve the purposes which Congress gave us in the statute.

Senator Hill. Is there anything else you gentlemen would like to add?

Mr. McCulloch. I think that is our story. We shall be glad to respond to any questions.

Senator Hill. I think you have made your case quite clear. I want to thank you again for your most generous words and for the very fine help and cooperation which you have given this subcommittee through the years.

Mr. McCulloch. We intend to accord it to your successor, too.

Senator Hill. Thank you, sir.

Mr. McCulloch. We hope he will be half as pleasant as you have been, Mr. Chairman.

Senator Hill. Thank you, sir. I am deeply grateful to you. Thank you very much.

# NATIONAL MEDIATION BOARD

## STATEMENT OF HOWARD G. GAMSER, CHAIRMAN
## ACCOMPANIED BY:
## FRANCIS A. O'NEILL, JR., MEMBER
## THOMAS A. TRACY, EXECUTIVE SECRETARY

APPROPRIATION ESTIMATE

"NATIONAL MEDIATION BOARD

"SALARIES AND EXPENSES

"For expenses necessary for carrying out the provisions of the Railway Labor Act, as amended (45 U.S.C. 151–188), including temporary employment of referees under section 3 of the Railway Labor Act, as amended, at rates not in excess of $100 per diem; and emergency boards appointed by the President pursuant to section 10 of said Act (45 U.SC 160), [$2,150,000] *$2,242,000 (45 U.S.C. 154.)*"

FUNCTION OF THE BOARD

The national Mediation Board administers the Railway Labor Act governing labor relations in the Railroad and Airline industries. The general purposes of the Act are as follows:

1. To avoid any interruption to commerce or to the operation of any carrier engaged therein;
2. To forbid any limitation upon freedom of association among employees or any denial, as a condition of employment or otherwise, of the right of employees to join a labor organization;
3. To provide for the complete independence of carriers and of employees in the matter of self-organization;
4. To provide for the prompt and orderly settlement of all disputes concerning rates of pay, rules, or working conditions;
5. To provide for the prompt and orderly settlement of all disputes growing out of grievances or out of the interpretation of application of agreements governing rates of pay, rules, or working conditions.

These general purposes are implemented through the activities of the National Mediation Board, Arbitration and Emergency Boards and the National Railroad Adjustment Board.

PROGRAM AND PERFORMANCE

1. *Mediation.*—The Board mediates labor disputes and determines collective-bargaining representatives for the 700 carriers and the one million employees in the railroad and airline industries.

| Mediation cases | 1966 actual | 1967 actual | 1968 estimate | 1969 estimate |
|---|---|---|---|---|
| Pending, start of year | 372 | 545 | 629 | 589 |
| Received during year | 519 | 420 | 360 | 360 |
| Closed during year | 346 | 336 | 400 | 400 |
| Pending, end of year | 545 | 629 | 589 | 549 |

2. *Voluntary arbitration and emergency disputes.*—When mediation fails, the parties are urged to submit their differences to arbitration or special adjustment boards, including neutral members paid from this account. If neither mediation nor voluntary arbitration is successful, the President, when notified of disputes which threaten seriously to interrupt service, may appoint an emergency board to investigate and report on the disputes as a basis for agreement.

| Number of boards convened | 1966 actual | 1967 actual | 1968 estimate | 1969 estimate |
|---|---|---|---|---|
| Arbitration boards | 5 | 6 | 10 | 10 |
| Emergency boards | 1 | 5 | 7 | 7 |
| Special adjustment boards | 121 | 136 | 120 | 100 |
| Cases closed | 2,753 | 2,275 | 2,200 | 2,000 |
| Public law boards | | 31 | 110 | 110 |
| Cases closed | | 92 | 1,000 | 1,800 |

3. *Adjustment of Railroad Grievances.*—Railroad employee grievances resulting from application of collective bargaining contracts may be brought for settlement to the 36-man board composed of 4 divisions. Each division has an equal number of carriers and union representatives paid by the parties and handles the grievances of a particular type of employee. The appropriation provides clerical assistance to the Board and neutral referees to sit with divisions of the board when they are deadlocked.

| | Workload | | | |
|---|---|---|---|---|
| | 1966 actual | 1967 actual | 1968 estimate | 1969 estimate |
| Pending, beginning of year | 6,245 | 6,090 | 5,346 | 5,046 |
| Received during year | 1,554 | 1,689 | 1,400 | 1,425 |
| Closed during year | 1,709 | 2,433 | 1,700 | 1,800 |
| Pending, end of year | 6,090 | 5,346 | 5,046 | 4,671 |

SCHEDULE OF FUNDS AVAILABLE FOR OBLIGATION AND AN ANALYSIS OF OBLIGATIONS BY UNIFORM OBJECT CLASS

| Standard classification | | 1967 actual | 1968 estimate | 1969 estimate |
|---|---|---|---|---|
| | Personnel compensation: | | | |
| 11.1 | Permanent positions | $980,000 | $1,029,000 | $1,098,000 |
| 11.3 | Positions other than permanent | 565,000 | 600,000 | 621,000 |
| 11.5 | Other personnel compensation | 3,000 | | 4,000 |
| | Total personnel compensation | 1,548,000 | 1,629,000 | 1,723,000 |
| 12.0 | Personnel benefits | 87,000 | 90,000 | 94,000 |
| 21.0 | Travel and transportation of persons | 199,000 | 216,000 | 240,000 |
| 23.0 | Rent, communications, and utilities | 54,000 | 61,000 | 61,000 |
| 24.0 | Printing and reproduction | 64,000 | 46,000 | 78,000 |
| 25.1 | Other services | 20,000 | 21,000 | 21,000 |
| 26.0 | Supplies and materials | 18,000 | 16,000 | 17,000 |
| 31.0 | Equipment | 12,000 | 8,000 | 8,000 |
| | Total obligations | 2,002,000 | 2,087,000 | 2,242,000 |

PROGRAM AND FINANCING

| | 1967 actual | 1968 estimate | 1969 estimate |
|---|---|---|---|
| Program by activities: | | | |
| 1. Mediation | 710,000 | 750,000 | 817,000 |
| 2. Voluntary arbitration and emergency disputes | 409,000 | 589,000 | 615,000 |
| 3. Adjustment of railroad grievances | 883,000 | 748,000 | 810,000 |
| Total program costs-obligations[1] | 2,002,000 | 2,087,000 | 2,242,000 |
| Financing: Unobligated balance lapsing | 83,000 | 63,000 | |
| New obligational authority (appropriation) | 2,085,000 | 2,150,000 | 2,242,000 |
| New obligational authority: Appropriation | 2,085,000 | 2,150,000 | 2,242,000 |

[1] Selected resources as of June 30 are as follows: Unpaid undelivered orders, 1966, $57,000; (1967 adjustment —$7,000) 1967, $50,000; 1968, $30,000; 1969, $30,000.

PERSONNEL SUMMARY

| | 1967 actual | 1968 estimate | 1969 estimate |
|---|---|---|---|
| Total number of permanent positions | 103 | 104 | 104 |
| Full-time equivalent of other positions | 22 | 23 | 24 |
| Average number of all employees | 120 | 125 | 127 |
| Average GS grade | 8.7 | 8.7 | 8.7 |
| Average GS salary | $9,386 | $9,821 | $10,071 |

## Organization and Activities

### ACTIVITY: MEDIATION

The amended Railway Labor Act administered by the National Mediation Board is the culmination of more than 60 years of experience in the field of Federal legislation dealing with the relationship of employer and employee in the transportation industry. This history commenced with the passage of the Newlands Act by Congress in 1898, and through several successive steps of legislative action, has finally resulted in the present Railway Labor Act, passed in 1926 and amended in 1934. The airline industry was placed under this law by the Congress in 1936.

The basic aims of the present Act are to promote the settlement of all disputes concerning rates of pay, rules and working conditions by negotiation and agreement between the duly authorized and designated representatives of management and the employees. This is accomplished through the process of collective bargaining between the representatives of the rail and air carriers and their employees. Representatives for this purpose may be chosen by each party without interference, influence or coercion of either party on the other.

The primary obligation imposed by the Act on both parties is that of making agreements to govern rates of pay, rules and working conditions and to reduce strife in the industry.

The Act also imposed the definite obligation on both sides to confer and make every reasonable effort to adjust their differences through negotiation and agreement. When this is not found possible the mediation services of this Board may be invoked by either party and the Board then exerts its best efforts in mediation to bring about an adjustment. Should these efforts be unsuccessful, the law then makes it the duty of the Board to urge the parties to submit their differences to final and binding arbitration. As a last resort the Board may certify to the President emergencies which threaten to interrupt interstate commerce to a substantial portion of the country, and the controversy may then be considered by an emergency board.

The Mediation Board also determines representation disputes arising among various crafts or classes of railroad and airline employees, by conducting secret ballot elections or checking signed authorization cards, and certifies the names of the chosen representatives to the carriers. In addition, the Board appoints referees to sit with the various divisions of the National Railroad Adjustment Board on deadlocked cases, and, when requested to do so appoints neutral arbitrators to sit with arbitration boards set up under the Act; and appoints neutrals to work with special boards of adjustment on the rail carriers and with system boards of adjustment on the airlines.

Approximately 1,000,000 rail and airline employees are under the jurisdiction of this Board and the Act.

The Mediation Board has three members who are Presidential appointees, and 39 employees, making a total staff of 42. All of the staff, with the exception of the Board Members, are under the classified civil service.

### STATUS OF WORK OF BOARD

The case load of the Board in the past fiscal year increased approximately 15 percent. The basis for this increase is the failure of the parties in the railroad industry to handle certain disputes through national committees designated to represent all carriers involved. The result is that the Board instead of having one case before it, is faced with a number of cases on many railroads all involving the same issue. The number of cases disposed of has decreased approximately 3 percent. Although the workload has significantly increased, there is some indication that if pattern settlements can be reached on some carriers, the disputes on the remaining railroads may be disposed of with a minimum of mediation effort. Developments will be carefully monitored to note the progress in this area.

The following table shows the actual case load figures for 1966 and 1967, and estimated figures for 1968 and 1969 based on experience for the past four years. This table is divided to show cases pending at start of year, cases docketed, cases closed and cases on hand at the end of each fiscal year. The estimated workload for 1969 is based on analysis of cases received for the past three years.

| Mediation cases | 1966 actual | 1967 actual | 1968 estimate | 1969 estimate |
|---|---|---|---|---|
| Pending, start of year | 372 | 545 | 629 | 589 |
| Received during year | 519 | 420 | 360 | 360 |
| Closed during year | 346 | 336 | 400 | 400 |
| Pending, end of year | 545 | 629 | 589 | 549 |

AIRLINE CASES

Title II of the Railway Labor Act, placing the airlines of the United States thereunder, was approved April 10, 1936. During the first few years thereafter, very few cases arose among airline employees requiring the mediatory service of the Board, or its services in connection with representation disputes. Organizational activity among certain employee groups in the airline industry is still in progress and numerous individual labor organizations are involved.

Technological changes have continued in the airline industry bringing in their wake labor problems arising out of requests for revised working rules and increased compensation. The demonstrated increased earning capacity of larger and faster planes have brought demands for higher wages. Improved navigational aids and the use of jet engines have been a basis for requests for improved severance pay contracts.

The establishment of new routes or changes in established routes has resulted in approaches for changes in agreements, which included rules and rates for handling joint routes and interchange service.

Consolidation of established airlines by purchase and merger has resulted in disputes involving the status of the personnel of the affected units including integration of seniority lists, severance pay formulae, etc. The airline industry is still expanding and mergers and consolidations under authority of the Civil Aeronautics Board continue. Many problems arise in connection with this phase of airline operations.

Except for the pilots, who are represented by a single labor organization, other groups on the airlines are represented by many different organizations, which has resulted in a divergency in the terms of agreements on rates and rules. Many of the classes of ground service employees are still unrepresented, and with organizing campaigns in progress among them by various organizations, we do not anticipate a decline in the number of representation disputes among airline employees.

REVIEW OF OPERATIONS

In the railroad industry problems, which PL 88–108 approved August 28, 1963, was intended to dispose of, continue to be a factor in labor disputes. Suitable lodging problems and crew consist disputes still remain unresolved. Upon the expiration of PL 88–108 early in 1966, the labor organizations initiated demands in areas which had been the subject of the Public Law. Final resolution of many of these problems awaits completion of pending litigation.

In the airline industry all organizations continue to press for more favorable contracts covering issues involving job security, union shop and wage increases. The Board does not anticipate any decline in its workload, but rather expects an increase as the organizations' effort continues to be directed toward more favorable agreements.

Representation disputes in both the airline and railroad industries are increasing due to the abrogation of a no-raid policy among railroad operating employees, unorganized airline employees' desire to obtain representation rights, the problems of representation of employees arising subsequent to mergers, as well as an increase in the number of disputes among competing organizations among employees already represented.

PERSONNEL SERVICES

For the Mediation activity, the Board is requesting $28,000 additional to meet increased pay cost, PL 90–206 dated December 16, 1967.

ANALYSIS OF TRAVEL, 1967

| Year | Total travel days | Cost per travel day | Total | Number cases closed | Travel days per case | Number of travelers | Travel days per traveler |
|---|---|---|---|---|---|---|---|
| 1965 | 4,863 | $25.34 | $123,249 | 302 | 16 | 22 | 221 |
| 1966 | 4,794 | 26.38 | 126,544 | 346 | 14 | 23 | 209 |
| 1967 | 3,645 | 28.00 | 103,448 | 336 | 11 | 23 | 158 |
| 1968 | 4,415 | 28.40 | 125,500 | 400 | 11 | 25 | 175 |
| 1969 | 4,700 | 28.40 | 132,600 | 400 | 12 | 25 | 188 |

SUMMARY

The amount requested for this activity is $817 thousands, an increase of $28,000 to meet increased pay cost.

MEDIATION

| | 1967 actual | 1968 estimate | Increase (+) or decrease (−) | 1969 estimate |
|---|---|---|---|---|
| 11 Personnel compensation | | | | |
| Permanent positions | 524,838 | 566,950 | +25,120 | 592,070 |
| Pay above the stated annual rate | 1,737 | | +1,830 | 1,830 |
| Positions other than permanent YOC | 1,797 | 2,500 | | 2,500 |
| Total personnel compensation | 528,372 | 569,450 | +26,950 | 596,400 |
| 12 Personnel benefits | 37,173 | 42,450 | +2,050 | 44,500 |
| 21 Travel and transportation of persons | 100,964 | 133,600 | −1,000 | 132,600 |
| 23 Rent, communications and utilities | 21,266 | 25,000 | | 25,000 |
| 24 Printing and reproduction | 6,043 | 6,000 | | 6,000 |
| 25 Other services | 2,204 | 2,500 | | 2,500 |
| 26 Supplies and materials | 7,639 | 8,000 | | 8,000 |
| 31 Equipment | 5,933 | 2,000 | | 2,000 |
| Total appropriation | 709,594 | 789,000 | +28,000 | 817,000 |
| Savings cutback Public Law 90-218 | | −39,000 | | |
| Total obligations | 709,594 | 750,000 | | 817,000 |

ACTIVITY: VOLUNTARY ARBITRATION AND EMERGENCY DISPUTES

Despite the labor unrest in the industries subject to the Railway Labor Act the number of legal work stoppages in the airline and railroad industries has been relatively low as compared to other industries. While there have been many incidents which potentially threatened to interrupt rail and air traffic, the Board feels that the whole record of this performance indicates that its efforts have, in the main, succeeded in keeping the wheels of the transportation industry moving. In many instances the efforts of the members and staff of the National Mediation Board are successful in achieving peaceful settlements of labor disputes through the procedures financed under this activity establishing emergency and arbitration boards as well as special boards of adjustment.

A total of $615,000 is requested for this activity to finance operations in the fiscal year 1969. This is $45,000 less than the amount appropriated for fiscal 1968.

*Emergency Board.*—Under the terms of Section 10 of the Railway Labor Act, if a dispute between a carrier and its employees is not adjusted through mediation or the other procedures prescribed by the Act, and should, in the judgment of the National Mediation Board, threaten to interrupt interstate commerce to a degree such as to deprive any section of the country of essential transportation service, the Board shall notify the President, who may thereupon, in his discretion, create an emergency board to investigate and report to him respecting such dispute. Any emergency board may be composed of such number of persons as the President designates, and persons so designated shall not be pecuniarily or otherwise interested in any organization of employees or any carrier. The compensation of emergency board members is fixed by the President. An emergency board is created separately in each instance, and is required to investigate the facts as to the dispute and report thereon to the President within 30 days from the date of its creation.

During the past fiscal year five emergency boards were created by the President. A total of $48,463 was obligated for the expenses of these boards.

*Arbitration Board.*—Section 5.3(a), of the Railway Labor Act provides in the event mediation of a dispute is unsuccessful, the Board shall endeavor to induce the parties to submit their controversy to arbitration under the provisions of Section 7 of the Act. Generally, arbitration boards consist of three members, a representative of the carrier and of the organization and a third neutral member. The compensation of the neutral member is fixed by the Mediation Board.

During the past fiscal year three arbitration boards were created, three boards created in the prior fiscal year met during the past year, thus six boards were financed during the past fiscal year. For this a total of $13,027 was obligated.

*Special Board of Adjustment.*—Public Law 89–456 was approved June 20, 1966. This law provides that either the carrier or the organization can request the establishment of a special adjustment board to dispose of disputes otherwise referable to the National Railway Adjustment Board.

Neutral members of such boards will be appointed and compensated by the National Mediation Board. In addition to neutrals appointed to dispose of disputes involving grievances, neutrals may be appointed to dispose of procedural issues which arise as to the establishment of the Board itself. These neutrals will also be compensated by the National Mediation Board. The interest of both the carriers and organizations in this procedure indicated that many demands will be made upon the Board for the payment of neutrals.

During the past year 66 PL Boards were set up of which 31 boards convened, costing $38,613. The 66 PL Board set up in fiscal 1967 had a total case assignment of 1,695; of which 628 cases had been withdrawn from the National Railroad Adjustment Board. These Boards had disposed of 92 cases as of June 30.

Special Boards of Adjustment continued to function during the past fiscal year. Thirty-five new special boards of adjustment were created, and during this period a total of 136 boards convened. This represents a decrease over the number, 73, of boards created in fiscal year 1966; also an increase over the number, 121, of boards which convened in that year. A total of $285,397 was obligated for these boards in fiscal 1967.

It is not possible to forecast precisely the total expenditures needed for this activity nor to determine exactly the amount needed for the various types of boards established. The estimate is based on past experience, knowledge of the industry problems and a reasonable reserve for contingencies. In summary, the expenditures for 1967 were as follows:

| | |
|---|---|
| Emergency Boards | $48,463 |
| Arbitration Boards | 13,027 |
| Special Boards of Adjustment | 285,397 |
| Public Law Boards | 38,613 |
| Communications Services | 16,064 |
| Taxes and Assessments | 7,815 |
| Total | 409,379 |

VOLUNTARY ARBITRATION AND EMERGENCY DISPUTES

| | 1967 actual | 1968 estimate | Increase (+) or decrease (−) | 1969 estimate |
|---|---|---|---|---|
| 11 Personnel compensation | | | | |
| Positions other than permanent | 314,975 | 520,000 | −45,000 | 475,000 |
| 12 Personnel benefits | 7,815 | 10,500 | | 10,500 |
| 21 Travel and transportation of persons | 51,515 | 90,000 | | 90,000 |
| 23 Rent, communications and utilities | 18,953 | 21,500 | | 21,500 |
| 24 Printing and reproduction | 1,963 | 3,000 | | 3,000 |
| 25 Other services | 14,158 | 15,000 | | 15,000 |
| Total appropriation | 409,379 | 660,000 | −45,000 | 615,000 |
| Transferred to activity: Adjustment of RR Grievances | | −47,000 | | |
| Savings cutback Public Law 90–218 | | −24,000 | | |
| Total obligations | 409,379 | 589,000 | | 615,000 |

EMERGENCY BOARDS, 1967

| No. | Carrier and organizations | Salaries | Per diem and transportation | Printing | Other contract service | Rents, utilities | Total |
|---|---|---|---|---|---|---|---|
| 167 | American Airlines-TWU | $7,700 | $1,991.38 | $347.20 | $1,389.00 | $515.60 | $11,943.18 |
| 168 | Pan American Airways-TWU | 6,200 | 1,612.24 | 398.05 | 2,402.25 | 615.04 | 11,227.58 |
| 169 | National Railway Labor Conference-Employees Dept., AFL-CIO | 3,500 | 498.66 | 517.44 | 1,784.60 | | 6,300.70 |
| 170 | Long Island RR-BRT, IBEW, IAM & AW | 6,225 | 2,196.02 | 520.00 | 2,389.00 | 819.00 | 12,149.02 |
| 171 | National Railway Labor Conf.-ORC & B | 4,500 | 392.79 | | 1,400.00 | 550.00 | 6,842.79 |
| | Total | 28,125 | 6,691.09 | 1,782.69 | 9,364.85 | 2,499.64 | 48,463.27 |

ARBITRATION BOARDS, 1967

| | | | | | | | |
|---|---|---|---|---|---|---|---|
| 168 | E. W. and S. E. Carriers Conf. Committee-BLE, BLF&E, ORC | $2,525 | $541.81 | | | | $3,066.81 |
| 289 | Erie Lackawanna-BRC | 700 | 3.08 | | $245.60 | | 948.68 |
| 292 | Clinchfield-BRT, ORC&B | 900 | 557.58 | | 265.65 | | 1,723.23 |
| 293 | Atchison, Topeka & St. Fe-BRC | 750 | 409.77 | | 921.50 | | 2,081.27 |
| 294 | Pan Am World Airways-TWU | | | | 1,200.80 | | 1,200.80 |
| 295 | Braniff Airways, Inc-BRC | 2,000 | | | 2,006.60 | | 4,006.60 |
| | Total | 6,875 | 1,512.24 | | 4,640.15 | | 13,027,39 |

| No. | Parties | Referee | Selected by— | Total days | Number of cases disposed of | Average number of days per case | Salaries | Per diem and transportation | Total |
|---|---|---|---|---|---|---|---|---|---|
| 18 | Southern Pac.-BLF&E, ORC&B, BRT | Donaldson | Parties | 29.75 | 63 | .47 | $2,975 | $997.43 | $3,972.43 |
| | | Abernethy | do | 6.75 | | (1) | 675 | 281.85 | 956.85 |
| 41 | Texas & New Orleans-BRT | Begley | do | 30.00 | 6 | 5.00 | 3,000 | 601.49 | 3,601.49 |
| 88 | Texas & New Orleans-BLFE | Moore | do | 28.25 | 49 | .57 | 2,825 | 571.74 | 3,396.749 |
| 99 | Pittsburgh & Lk Erie-ORCB | Gilden | do | 8.00 | 8 | 1.00 | 800 | 81.20 | 881.20 |
| 107 | NW Pac.-ORC&B, BRT | Hanlon | do | 4.50 | 8 | .56 | 450 | 163.00 | 613.00 |
| 140 | Chicago, Milwaukee, St. Paul, Pac.-ORC&B, BRT | Boyd | do | 23.50 | 8 | 2.94 | 2,350 | 580.78 | 2,930.78 |
| 148 | Kansas City South-BRT | Begley | NMB | 11.00 | | (1) | 1,100 | 220.69 | 1,320.69 |
| 161 | Long Island-BRT | Gilden | Parties | 14.50 | 3 | 4.83 | 1,450 | 300.59 | 1,750.59 |
| 179 | Missouri Pac.-BRT | Douglass | do | 2.00 | 1 | 2.00 | 200 | 75.80 | 275.80 |
| 180 | Southern Pac-BLE | do | do | 32.25 | 34 | .94 | 3,225 | 692.45 | 3,917.45 |
| 182 | NW Pacific-BLE | do | do | .50 | 1 | .50 | 50 | 39.05 | 89.05 |
| 189 | Spokane, Portland, Seattle-BRT | Gilden | do | 46.75 | 32 | 1.46 | 4,675 | 317.89 | 4,992.89 |
| 195 | Grand Trunk West-BRT | Douglass | do | 33.50 | 58 | .57 | 3,350 | 152.60 | 3,502.60 |
| 196 | Long Island-BLE | Seidenberg | do | 3.25 | | (1) | 325 | 105.65 | 430.65 |
| 197 | Del, Lackawanna & West-BLE, BLF&E | Douglass | do | 43.00 | 97 | .44 | 4,300 | 189.20 | 4,489.20 |
| 231 | NY Central-BRT | do | do | 14.00 | 19 | .74 | 1,400 | 191.30 | 1,591.30 |
| 235 | Chicago & NW-BRT | Murphy | do | 221.00 | 139 | 1.58 | 22,100 | 1,893.75 | 23,993.75 |
| 245 | Indiana Harbor Belt BRT | Coburn | do | 30.75 | 28 | 1.09 | 3,075 | 543.82 | 3,618.82 |
| 248 | Del, Lackawanna, West-Brt | Gilden | do | 20.50 | 38 | .54 | 2,050 | 515.63 | 2,565.63 |
| 255 | Central RR of NJ=BRT | Guthrie | do | 9.00 | | (1) | 900 | 256.18 | 1,156.18 |
| 260 | St. Louis SW=BLE | Daugherty | do | 30.00 | 22 | 1.36 | 3,000 | 745.90 | 3,745.90 |
| 266 | Del, Lackawanna, West=TCEU | Bailer | do | 18.00 | 31 | .58 | 1,800 | | 1,800.00 |
| 293 | Central RR of NJ=BMWE | do | do | 2.00 | 2 | 1.00 | 200 | | 200.00 |
| 318 | New Orleans of Publ. Belt=SUNA | Sempliner | do | 16.00 | 13 | 1.23 | 1,600 | 441.95 | 2,041.95 |
| 343 | Central RR of NJ=BLE | Guthrie | do | 2.00 | 10 | .20 | 200 | | 200.00 |
| 353 | St. Louis SW=TCEU | Harr | do | 63.50 | 28 | 2.26 | 6,350 | 433.26 | 6,783.26 |
| 356 | Chicago & NW=BRT | O'Gallagher | do | 20.00 | 37 | .54 | 2,000 | | 2,000.00 |
| 361 | Union Pacific=BRT | Wyckoff | do | 11.25 | 33 | .34 | 1,125 | 249.50 | 1,374.50 |
| 365 | Chicago & East Ill.-BRT | Douglass | do | 24.25 | 44 | .55 | 2,425 | 198.23 | 2,623.23 |
| 379 | A.T. & St. Fe-BRT, ORC&B | Stone | NMB | 10.50 | 26 | .40 | 1,050 | 326.05 | 1,376.05 |
| 387 | NY Central-BRT | Boyd | Parties | 9.00 | 17 | .53 | 900 | 191.48 | 1,091.48 |
| 393 | NY Central, Pitts, Lk Erie-ORC&B | Anrod | NMB | 19.00 | 1 | 19.00 | 1,900 | 354.55 | 2,254.55 |
| 411 | Baltimore & Ohio-BRT | Coburn | Parties | 67.50 | 39 | 1.73 | 6,750 | 365.23 | 7,115.23 |
| 421 | NY Central-ORT | Bailer | do | 8.00 | 5 | 1.60 | 800 | | 800.00 |
| 423 | Port Terminal-BRT | Wyckoff | do | 4.75 | 15 | .32 | 475 | 296.90 | 771.90 |
| 424 | Erie Lackawanna-BRT | Begley | do | 25.00 | 60 | .41 | 2,500 | | 2,500.00 |
| 434 | Spokane, Portland, Seattle-ORC&B | Douglass | do | 6.00 | 9 | .66 | 600 | 255.75 | 855.75 |
| 443 | Texas-Pac-Mo. Pac Term-SUNA | Sempliner | do | 13.00 | 1 | 13.00 | 1,300 | 434.01 | 1,734.01 |
| 465 | Boston & Maine-BRT | Begley | do | 54.75 | 37 | 1.48 | 5,475 | 558.67 | 6,033.67 |
| 496 | NY Central-BRC | Bailer | do | 19.50 | 7 | 2.78 | 1,950 | | 1,950.00 |
| 513 | Pac Electric-BLE | Stone | do | 6.25 | 1 | 6.25 | 625 | 221.15 | 846.15 |
| 517 | Elgin, Joliet & East-BRT | Boyd | do | 14.50 | 28 | .52 | 1,450 | 378.93 | 1,828.93 |

| | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|
| 535 | NY Central et al.-ORC&B | do | do | 22.00 | 28 | .78 | 2,200 | 241.97 | 2,441.97 |
| 543 | A.T. & St. Fe-ORC&B, BRT | do | NMB | 25.25 | 14 | 1.80 | 2,525 | 647.51 | 3,172.51 |
| 547 | No. Pac Term of Oregon-SUNA | do | Parties | 5.00 | | (1) | 500 | | 500.00 |
| 551 | Detroit & Toledo Shore Line-BRT | Cluster | do | 21.75 | 19 | 1.14 | 2,175 | 227.26 | 2,402.26 |
| 553 | South Pac-ORT | Ray | NMB | 2.25 | 17 | .13 | 225 | 233.60 | 458.60 |
| 560 | Maine Central-BRT | Seidenberg | NMB | 25.50 | 25 | 1.02 | 2,550 | 358.75 | 2,908.75 |
| 562 | Chicago & NW Ry-ORC&B | Murphy | Parties | 48.25 | 31 | 1.55 | 4,825 | 366.48 | 5,191.48 |
| 564 | Missouri Pacific-BRC | Dolnick | do | 22.00 | 10 | 2.20 | 2,200 | 347.46 | 2,547.46 |
| 568 | St. Louis, San Francisco-BRT | Coffey | NMB | 19.50 | 10 | 1.95 | 1,950 | 333.00 | 2,283.00 |
| 569 | Reading Company-ORC&B | Boyd | Parties | 13.50 | 38 | .35 | 1,350 | 203.69 | 1,553.69 |
| 570 | Nat Ry Labor Conf EW & SE Carriers Conf Comm-AFL-CIO | Panel | NMB | 81.75 | 12 | 6.81 | 8,175 | 982.18 | 9,157.18 |
| 577 | A.T. & St. Fe-BLE, BLF&E, ORC&B, BRT | Gilden | Parties | 33.00 | 10 | 3.30 | 3,300 | 425.88 | 3,725.88 |
| 583 | Akron, Canton & Youngston-BRT | Boyd | do | 5.25 | 10 | .52 | 525 | 120.21 | 645.21 |
| 588 | NY Central-BLF&E | Bailer | do | 8.50 | | (1) | 850 | | 850.00 |
| 589 | Pennsylvania-BRT | Seidenberg | NMB | 75.50 | 51 | .48 | 7,550 | 567.75 | 8,117.75 |
| 592 | Union Pacific-ORC&B | Stone | Parties | 7.50 | 1 | 7.50 | 750 | 181.75 | 931.75 |
| 596 | Chicago & NW-BLF&E | Daugherty | do | 20.00 | 26 | .76 | 2,000 | | 2,000.00 |
| 599 | St. Louis SW Ry-BLF&E | Douglass | do | 9.50 | 12 | .79 | 950 | 199.60 | 1,149.60 |
| 600 | Lehigh & Judson River-BLF&E | Bailer | do | 4.00 | 6 | .66 | 400 | | 400.00 |
| 601 | Reading Co.-BRT | Boyd | do | 13.00 | 20 | .65 | 1,300 | 251.46 | 1,551.46 |
| 603 | Great Northern-TCEU | Bailer | do | 12.25 | | (1) | 1,225 | 219.08 | 1,444.08 |
| 605 | Nat. Ry Labor Conf EW&SE Carriers Conf-Employees | Coburn | do | 10.00 | 1 | 10.00 | 1,000 | 126.41 | 1,126.41 |
| | Nat Conf Comm Five Coop. Ry Labor Organization | Dolnick | do | 6.75 | 9 | .75 | 675 | 256.10 | 931.10 |
| 608 | South Ry-BRC, BMWE, TCEU, BRS | do | do | 2.50 | | (1) | 250 | 117.80 | 367.80 |
| 609 | Disputes Comm Art X, Agr. 4/5/57, EW&SE Carriers-BRT | Cluster | NMB | 14.50 | 19 | .76 | 1,450 | 122.87 | 1,572.87 |
| 611 | Erie, Lackawanna-BLF&E | Begley | Parties | 13.00 | | (1) | 1,300 | | 1,300.00 |
| 623 | Western Md-BRT | do | do | 11.50 | 28 | .41 | 1,150 | 145.76 | 1,295.76 |
| 625 | Indiana Harbor Belt-BLF&E | Seidenberg | NMB | | | | | 5.16 | 5.16 |
| 632 | Delaware & Judson-BRT | Douglass | Parties | 74.75 | 135 | .55 | 7,475 | 515.80 | 7,990.80 |
| 633 | Monongahela-BRT | Begley | do | 2.25 | | (1) | 225 | 70.27 | 295.27 |
| 634 | Tennessee Central-BRT | Hanlon | do | 3.75 | 4 | .93 | 375 | 342.15 | 717.15 |
| 637 | NY, NH, Hartford-BLE | Bailer | do | 14.00 | 21 | .66 | 1,400 | | 1,400.00 |
| 642 | Missouri, Kansas, Texas-BRT | Coburn | do | 54.50 | 157 | .34 | 5,450 | 1,025.96 | 6,475.96 |
| 646 | Union Pacific (East)-BLE | Daugherty | do | 23.50 | 12 | 1.95 | 2,350 | 476.05 | 2,826.05 |
| 648 | Lehigh Valley-BRT | Boyd | NMB | 9.50 | 14 | .67 | 950 | 118.00 | 1,068.00 |
| 652 | Lehigh & Judson River-BRT | Donaldson | Parties | 4.25 | | (1) | 425 | 260.06 | 685.06 |
| 653 | Detroit & Toledo Shore Line-BLF&E | Douglass | do | 19.50 | 35 | .56 | 1,950 | 184.86 | 2,134.86 |
| 654 | Elgin, Joliet, East-BLFE | Seidenberg | do | 2.50 | 3 | .83 | 250 | 175.95 | 425.95 |
| 657 | Ogden Union Ry & Depot-BRT | Wyckoff | do | 7.25 | 21 | .34 | 725 | 207.07 | 932.07 |
| 663 | Monon PR-BRT | Boyd | do | 2.00 | 41 | .48 | 200 | 233.26 | 433.26 |
| 664 | Missouri Pacific-BRT | O'Gallagher | do | 17.00 | 8 | 2.12 | 1,700 | 152.69 | 1,852.69 |
| 665 | Chicago, St. Paul, Pac-BLE | Boyd | do | 10.00 | 16 | .62 | 1,000 | 195.26 | 1,195.26 |
| 668 | Detroit & Toledo Shore Line-BLF&E | Daugherty | NMB | 2.50 | 1 | 2.50 | 250 | 100.52 | 350.52 |
| 669 | Pittsburgh & Lk Erie-BLE | Boyd | Parties | 9.00 | 15 | .60 | 900 | 115.44 | 1,015.44 |
| 671 | Union Pac-BLF&E | Douglass | NMB | 8.50 | 8 | 1.06 | 850 | 469.55 | 1,319.55 |
| 672 | Mo., Kansas, Texas-ORC&B | Sempliner | Parties | 8.25 | 11 | .75 | 825 | 212.60 | 1,037.60 |
| 675 | Southern Pac-BRT | Douglass | do | 1.50 | | (1) | 150 | 191.81 | 341.81 |
| 676 | Southern Pac-BLF&E | Gilden | do | 19.00 | 7 | 2.71 | 1,900 | 718.94 | 2,618.94 |
| 677 | Ft. Worth & Denver-BRT | Boyd | do | 19.00 | 5 | 3.80 | 1,900 | 619.93 | 2,519.93 |
| 678 | Soo Line-BRT | Begley | do | 21.25 | | (1) | 2,125 | 209.91 | 2,334.91 |
| 679 | Norfolk Southern-BRT | Seidenberg | do | 15.50 | 15 | 1.03 | 1,550 | 281.60 | 1,831.60 |
| 680 | Chicago, W. Pullman & Southern-BRT | Boyd | do | 17.25 | 12 | 1.45 | 1,725 | 459.21 | 2,184.21 |
| 681 | Ashley, Drew, & North-BLF&E | Douglass | do | 2.75 | 3 | .91 | 275 | 116.40 | 391.40 |

| No. | Parties | Referee | Selected by— | Total days | Number of cases disposed of | Average number of days per case | Salaries | Per diem and transportation | Total |
|---|---|---|---|---|---|---|---|---|---|
| 682 | Penn RR-Penn Reading Seashore Lines-BRT | Stark | NMB | 4.00 | 1 | 4.00 | $400 | $33.00 | $433.60 |
| 683 | A.T. & St. Fe (West)-BLE | Seidenberg | Parties | 13.25 | 1 | 13.25 | 1,325 | 699.98 | 2,024.98 |
| 684 | Art 11 & Art 14 Disputes Comm-BLE, BLF&E, ORC&B | Coffey | NMB | 17.75 | 10 | 1.77 | 1,775 | 328.92 | 2,103.92 |
| 685 | Agr of 8/11/48 Disputes Comm EW&SE Carriers Conf Comm-BLE, BLF&E, SUNA. | Abernethy | NMB | 24.50 | 9 | 2.72 | 2,450 | 323.31 | 2,773.31 |
| 686 | Union Pac (Salt Lk City-Butte & Granger-Huntington) and BRT | Wyckoff | Parties | 21.00 | 20 | 1.05 | 2,100 | 323.25 | 2,423.25 |
| 688 | South Pac (Tex & La)-SUNA | Coffey | do | 36.25 | 21 | 1.72 | 3,625 | 513.30 | 4,138.30 |
| 689 | A.T. & St. Fe (East)-BRT, BLF&E, BLE | Boyd | do | 3.50 | 1 | 3.50 | 350 | 158.04 | 508.04 |
| 690 | Bessemer & Lk Erie-BRT | Begley | do | 11.00 | 10 | 1.10 | 1,100 | 73.60 | 1,173.60 |
| 691 | Chicago & East Ill-BLE | Douglass | do | 7.00 | 12 | .58 | 700 | 66.62 | 766.62 |
| 692 | Portland Terminal-BLF&E | O'Gallagher | do | 31.75 | 7 | 4.53 | 3,175 | 849.65 | 4,024.65 |
| 693 | Detroit & Toledo Shore Line-BLF&E | Whiting | do | 4.00 | 1 | 4.00 | 400 | | 400.00 |
| 694 | Richmond, Fredericksburg, Potomac-ORC&B | Seidenberg | do | 10.0 | | (1) | 200 | 40.49 | 240.49 |
| 695 | Elgin, Joliet & East-BLFE | Coffey | do | 4.00 | 1 | 4.00 | 400 | 6.32 | 406.32 |
| 696 | Buffalo Creek-SUNA | Shister | do | 46.00 | | (1) | 4,600 | 140.20 | 4,740.20 |
| 697 | Atlanta & West Pt. RR the West Ry of Ala-BRT | Gliden | do | 6.75 | | (1) | 675 | 211.50 | 886.50 |
| 698 | Georgia RR-BRT, ORC&B | do | do | 16.75 | 9 | 1.86 | 1,675 | 357.90 | 2,032.90 |
| 699 | Chicago & West Indiana-BRT | Douglass | do | 26.00 | 26 | 1.00 | 2,600 | 109.85 | 2,709.85 |
| 701 | Disputes Comm-ArtX, Agr of April 5, 1957, EW&SE Carriers Conf Comm-BRT | Custer | do | 7.00 | | (1) | 700 | 56.85 | 756.85 |
| 702 | Union-USWA Local 3263 | Begley | do | 14.00 | 14 | 1.00 | 1,400 | 124.17 | 1,524.17 |
| 703 | South Pac (Tex & La)-BLE | Coffey | do | 6.25 | 1 | 6.25 | 625 | 131.44 | 756.44 |
| 704 | Kansas City South-BRT | Boyd | do | 3.25 | | (1) | 325 | 115.60 | 440.60 |
| 705 | NE Oklahoma-BRT | Douglass | do | 3.00 | 4 | .75 | 300 | 43.60 | 343.60 |
| 706 | Portland Terminal-SUNA | Sempliner | do | 39.50 | 17 | 2.32 | 3,950 | 768.45 | 4,718.45 |
| 707 | Florida East Coast-BRT | Whiting | do | 16.00 | 11 | 1.45 | 1,600 | 379.60 | 1,979.60 |
| 708 | Florida East Coast-BLE | Daugherty | do | 23.75 | 30 | .79 | 2,375 | 511.05 | 2,886.05 |
| 710 | Mississippi Export-BLF&E | Ives | do | 4.50 | | (1) | 450 | 194.99 | 644.99 |
| 711 | Atlantic Coast Line-BLFE | Vadakin | NMB | 7.00 | 1 | 7.00 | 700 | 246.55 | 946.55 |
| 713 | Elgin, Joliet & East-ORCB | Boyd | do | 9.50 | 5 | 1.90 | 950 | 250.22 | 1,200.22 |
| 715 | Denver & Rio Grande West-SUNA | Rohman | do | 5.25 | 2 | 2.62 | 525 | 187.60 | 712.60 |
| 716 | Houston Belt & Tenn-BRT | Coburn | Parties | 17.00 | 8 | 2.12 | 1,700 | 733.00 | 2,433.00 |
| 718 | Western Maryland-BLF&E | Seidenberg | do | 19.00 | 15 | 1.26 | 1,900 | 96.61 | 1,996.61 |
| 719 | Patapsco & Back Rivers-BLFE | Stone | do | 9.25 | 1 | 9.25 | 925 | 429.65 | 1,354.65 |
| 720 | Gulf, Mobile & Ohio-BRT | Hanlon | do | 7.50 | 15 | .50 | 750 | 427.40 | 1,177.40 |
| 721 | NY Central (North)-BRSC | Bailer | do | 1.00 | | (1) | 100 | | 100.00 |
| 723 | Brooklyn East Dist. Terminal-BRT | Boyd | do | 1.00 | 2 | .50 | 100 | 48.44 | 148.44 |
| 724 | Western Md.-BRT | Seidenberg | do | 6.00 | | (1) | 600 | 107.97 | 707.97 |
| 725 | Montour RR-BLF&E | Bailer | do | 2.25 | | (1) | 225 | 92.14 | 317.14 |
| 726 | Cuyahoga Valley-BRT | Boyd | do | 1.00 | | (1) | 100 | 53.40 | 153.40 |
| 727 | Erie Lackawanna-BRT | Begley | do | 17.00 | | (1) | 1,700 | 1.82 | 1,701.82 |
| 729 | NY Central (So. Dist.)-BRT | Seidenberg | do | 6.00 | | (1) | 600 | 36.55 | 636.55 |
| 731 | Union-USWA, AFL-CIO | Whiting | do | 12.00 | 18 | .66 | 1,200 | 91.34 | 1,291.34 |

| | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|
| 732 | Chicago, Milwaukee, St. Paul & Pacific-BLE | Boyd | do | 2.00 | | (1) | 200 | 98.60 | 298.60 |
| | Total | | | | | | 247,575 | 37,822.24 | 285,397.26 |

PUBLIC LAW BOARDS, 1967

| | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|
| 1 | Southern Pacific-SUNA | Mann | NMB | 13.75 | (2) | | $1,375 | $105.10 | $1,480.10 |
| | | Sempliner | Parties | 42.25 | 16 | 2.64 | 4,225 | 1,143.90 | 5,368.90 |
| 2 | Sacramento Northern-SUNA | McMahon | NMB | 3.75 | 1 | 3.75 | 375 | 244.40 | 619.40 |
| 3 | Western Md. Ry-BRSC | Seidenberg | Parties | 8.00 | 3 | 2.66 | 800 | 27.64 | 827.64 |
| 5 | Union Pacific-ORC&B | Murphy | do | 6.75 | 2 | 3.37 | 675 | 107.92 | 782.92 |
| 7 | Great Northern-TCEU | Dorsey | do | 25.00 | 1 | 25.00 | 2,500 | 434.00 | 2,934.00 |
| 8 | Chicago, Rock Island & Pac-BLE | Boyd | do | 2.50 | 1 | 2.50 | 250 | 31.47 | 281.47 |
| 9 | Reading Co.-MEBA | Bailer | do | 4.00 | 2 | 2.00 | 400 | | 400.00 |
| 10 | Great Northern-SUNA | Hall | NMB | 1.50 | (2) | | 150 | | 150.00 |
| | | Sempliner | Parties | 3.50 | (1) | (1) | 350 | 160.05 | 510.05 |
| 11 | South Buffalo Ry-BRT | Seidenberg | do | 5.00 | 3 | 1.66 | 500 | 161.25 | 661.25 |
| 12 | Grand Trunk Western-ORC&B | Sempliner | do | 8.00 | 1 | 8.00 | 800 | | 800.00 |
| 13 | Pittsburgh & Lake Erie & Lake Erie & Eastern-TWU | Cluster | do | 8.25 | 3 | 2.75 | 825 | 229.90 | 1,054.90 |
| 14 | Monon-BLE, BLF&E, ORC&B, BRT | Larkin | NMB | 4.50 | (1) | (1) | 450 | 45.90 | 495.90 |
| 15 | Southern Pacific-BRS | Hamilton | NMB | 44.00 | (1) | (1) | 4,400 | 156.00 | 4,556.00 |
| 16 | Indianapolis Union-BLF&E | Sempliner | Parties | 3.25 | 1 | 3.25 | 325 | 119.90 | 444.90 |
| 17 | Chicago, Burlington, & Quincy-BRC | Bailer | do | 2.75 | (1) | (1) | 275 | 180.53 | 455.53 |
| 18 | Chicago, Rock Island,& Pacific-BRT | Boyd | do | 1.00 | 1 | 1.00 | 100 | 33.08 | 133.08 |
| 19 | Spokane, Portland, Seattle-BRS | do | do | 6.25 | 2 | 3.12 | 625 | 185.20 | 810.20 |
| 20 | Detroit, Toledo, & Ironton Railroad-BRT | Rehmus | NMB | 9.00 | 8 | 1.12 | 9.00 | 52.82 | 952.82 |
| 22 | Richmond, Fredericksburg, & Potomac-BRT | Coburn | Parties | 33.25 | 40 | .83 | 3,325 | 336.80 | 3,661.80 |
| 25 | Chicago, Burlington, & Quincy-BLE | Hanlon | do | 10.00 | (1) | (1) | 1,000 | 626.80 | 1,626.80 |
| 27 | Minneapolis, Northfield & South-BLF&E | O'Gallagher | do | 4.00 | 1 | 4.00 | 400 | 167.30 | 567.30 |
| 30 | Monon RR-ORC&B | Abernethy | do | 2.75 | (1) | (1) | 275 | 205.31 | 480.31 |
| 32 | Erie, Lackawanna-BRC | Rose | do | 15.25 | (1) | (1) | 1,525 | 143.00 | 1,668.00 |
| 33 | Youngstown & Northern-BRT | Boyd | do | 6.25 | (1) | (1) | 625 | 117.95 | 742.95 |
| 34 | St. Louis-San Francisco | Ray | NMB | 1.50 | (2) | | 150 | 113.00 | 263.00 |
| | Railway-TCEU | Dorsey | Parties | 2.00 | (1) | (1) | 200 | 183.85 | 383.85 |
| 35 | Great Northern-ORC&B | Dolnick | NMB | 3.00 | (2) | | 300 | 128.20 | 428.20 |
| 36 | Atchison, Topeka & Sta. Fe-BLFE | O'Gallagher | Parties | 26.00 | (1) | (1) | 2,600 | 487.20 | 3,087.20 |
| 37 | St. Lousi-San Francisco-BRT | Moore | NMB | 2.50 | 5 | .50 | 250 | 101.80 | 351.80 |
| 50 | Spokane, Portland & Seattle and ORC&B | Boyd | do | 3.00 | (1) | (1) | 300 | 141.50 | 441.50 |
| 53 | Atchison, Topeka & Sta. Fe-BRT | do | Parties | 5.00 | 1 | 5.00 | 500 | 134.50 | 634.50 |
| 65 | Lake Terminal-BRT | Begley | do | 5.00 | (1) | (1) | 500 | 56.75 | 556.75 |
| | Total | | | | 92 | | 32,250 | 6,363.02 | 38,613.02 |

[1] Board met, no awards rendered during this fiscal year.

[2] Procedural.

## National Railroad Adjustment Board, Chicago, Illinois

### Digest of Estimate of Appropriation, 1969

#### FUNCTION OF THE BOARD

1. The Board was created for the adjudication of disputes between railroad labor and the carriers.
2. The 18 carrier members and the 18 labor members are selected and paid by the parties they represent. This also applies to the 5 carrier and 5 labor members of the Third Divisional Regional or Supplemental Board set up to reduce the backlog of cases on the Third Division. It is estimated that the cost to the carriers and to the labor organizations exceeds $800,000 per year.
3. The Government's portion of the cost of operation of the Board is for office personnel, referees, travel, printing and reproduction, and other miscellaneous expenses.

#### APPROPRIATION: SALARIES AND EXPENSES

1. The estimate of $810,000 for 1969 is $109,000 more than the $701,000 appropriated or estimated for 1968.
2. In the item personal services, office personnel, the increase of $27,800 is due to statutory pay and step increases.
3. Carrier and labor members are equally divided on each division; and in case of a deadlock, a referee is appointed to sit as a member to make an award. The estimate of $145,000 in the item of personal services, positions other than permanent, is for salaries of these referees. This amount is an increase of $45,000 over fiscal year 1968.
4. The amount estimated for printing and reproduction is $69,000, an increase of $32,000 over what is available for 1968. During the last two or three years our printing backlog has mounted, and it is hoped with the increased amount we will be able to bring it more nearly up to date.
5. Little change is anticipated in the other items.

#### JUSTIFICATION OF ESTIMATES AND STATEMENT OF PROPOSED EXPENDITURES FOR THE FISCAL YEAR 1969

The National Railroad Adjustment Board was created by Act of Congress, approved June 21, 1934, 45 U.S.C. 153, for the adjudication of disputes between an employee or group of employees and a carrier or carriers, growing out of grievances or out of the interpretation or application of agreements concerning rates of pay, rules, or working conditions, which are handled in the usual manner up to and including the chief operating officer of the carrier designated to handle such disputes; but, if not adjusted in this manner, the disputes are then referred to the appropriate division of the Adjustment Board for settlement.

The Board is composed of 36 members, 18 selected and paid by the carriers and 18 selected and paid by organizations of railroad employees which are national in scope. The Act provides for four divisions of the Adjustment Board, each of which has jurisdiction over disputes involving certain groups of employees. For example, the First Division has jurisdiction over disputes involving train and yard service employees; the Second Division, shop crafts; the Third Division, clerical forces, maintenance-of-way men, dispatchers, etc.; and the Fourth Division, water transportation and miscellaneous.

The establishment of a number of special boards on individual properties has been helpful in reducing the backlog of cases, and it is anticipated that there will be some further reduction in this manner during the year because of the amendment to the Railway Labor Act (Public Law 89–456) which provides for the establishment of special adjustment boards (PL Boards). In the meantime, however, new cases continue to be received almost as fast or faster than disposition is made of old ones. During the past few years, there has been a decided increase in the number of cases submitted by the nonoperating employees. Causes for increases are the amendment to the Railway Labor Act permitting the union shop and resulting agreements; changes in agreements including the adoption of the 40 hour work-week; the National agreement covering vacations, pay for holidays, and time limit for submitting cases.

In order to reduce the large backlog of Third Division cases, following an agreement of the parties, there has been established a supplemental board of

ten members, which is making progress in reducing the number of pending cases. The backlog on the Third Division has been reduced from 2,646 cases on hand as of June 30, 1961, to 1,360 cases on hand as of June 30, 1967, a reduction of 1,286 cases.

The Board has no control over the number of cases submitted.

The estimate for the fiscal year 1969 is $810,000 which is an increase of $109,000 over the funds available for fiscal year 1968.

We wish to stress the fact that the salaries of the members of the Board, as well as for the Third Division supplemental board, estimated in excess of $800,000 per year, are paid by the carriers and the labor organiaztions, and the Government pays the salaries of the employees of the Board, as well as supplies and other incidental expenses. It may, therefore, properly be pointed out that a large portion of the cost of operation of the Adjustment Board is borne by the carriers and the labor organizations.

The Board has now been in existence about thirty-three years, and the estimate for 1969 is based upon past experience, by which we endeavored to anticipate future requirements. We feel that conditions fully justify the amount requested.

There follows a statement showing the number of cases received, docketed, and disposed of by the various divisions during the fiscal years 1965, 1966, and 1967.

FISCAL YEAR 1965

| | Number pending July 1 | Number received | Total | Number closed | Number pending June 30 |
|---|---|---|---|---|---|
| 1st Division | 4,062 | 564 | 4,626 | 571 | 4,055 |
| 2d Division | 270 | 205 | 475 | 189 | 286 |
| 3d Division | 2,197 | 693 | 2,890 | [1] 1,018 | [2] 1,871 |
| 4th Division | 31 | 109 | 140 | 108 | 32 |
| Total | 6,560 | 1,571 | 8,131 | 1,886 | 6,244 |

FISCAL YEAR 1966

| | | | | | |
|---|---|---|---|---|---|
| 1st Division | [2] 4,056 | 490 | 4,546 | 497 | 4,049 |
| d Division | 286 | 238 | 524 | 187 | 337 |
| 3d Division | 1,871 | 719 | 2,590 | [3] 925 | 1,665 |
| 4th Division | 32 | 107 | 139 | 100 | 39 |
| Total | 6,245 | 1,554 | 7,799 | 1,709 | 6,090 |

FISCAL YEAR 1967

| | | | | | |
|---|---|---|---|---|---|
| 1st Division | 4,049 | 446 | 4,495 | 986 | 3,509 |
| 2d Division | 337 | 338 | 675 | 295 | 380 |
| 3d Division | 1,665 | 776 | 2,441 | [4] 1,081 | 1,360 |
| 4th Division | 39 | 129 | 168 | 71 | 97 |
| Total | 6,090 | 1,689 | 7,779 | 2,433 | 5,346 |

[1] 3d Division, 548; supplemental, 470.
[2] Adjusted to reflect previous closing 1 case.
[3] 3d Division, 470; supplemental, 455.
[4] 3d Division, 610; supplemental, 471.

The number of cases closed in fiscal year 1967 includes 513 withdrawn from the First Division and 170 from the Third Division. These withdrawn cases were assigned to PL Boards.

## Justification of Items

### PERSONAL SERVICES

*Salaries of office personnel*

The number of employees for the fiscal year 1969 is estimated at 62 at an estimated cost of $507,400. Little turnover is expected during the current year or in fiscal year 1969, so there is not much opportunity for savings in that area. None of the Board's personnel is engaged in public relations or publicity activities, nor is there any employee engaged as much as half time in personnel work.

*Salaries of Referees*

The Act creating the National Railroad Adjustment Board provides that in case of a deadlock or inability to secure a majority vote of the division members, a referee is selected to sit with the division as a member thereof to make an award. Referees are now paid a salary of $100 per day, actual and necessary travel expenses, and per diem in lieu of subsistence.

Referees are usually selected from among such groups as judges, attorneys, professors of universities, or labor relations consultants. Their qualifications must be of the highest.

Referees were required 2,483 days in the settlement of 1,292 cases in the fiscal year 1967. For the current fiscal year, we hope our funds will be sufficient for 1,000 referee days during which we expect they will participate in the settlement of 500 cases. The estimate for 1969 is for 1,450 referee days, during which we expect they will participate in the settlement of some 725 cases.

There follows a list of Referees rendering services during the fiscal year 1967.

REFEREES, FISCAL YEAR 1967

| Name and State | Number of days | Number of cases closed | Salary paid |
|---|---|---|---|
| Abernethy, Byron, Texas | 14 | 10 | $1,400 |
| Abrahams, Harry, Illinois | 86 | 29 | 8,600 |
| Brown, David H., Texas | 32¾ | 25 | 3,275 |
| Coburn, William H., District of Columbia | 17½ | 0 | 1,750 |
| Daugherty, C. R., Illinois | 15½ | 14 | 1,550 |
| Devine, Arthur W., Rhode Island | 74¾ | 37 | 7,475 |
| Dolnick, David, Illinois | 61½ | 49 | 6,150 |
| Dorsey, John H., District of Columbia | 235¾ | 109 | 23,575 |
| Dugan, Paul C., Missouri | 64½ | 84 | 6,450 |
| Engelstein, Nathan, Illinois | 124 | 59 | 12,400 |
| Hall, Levi M., Minnesota | 58½ | 43 | 5,850 |
| Hamilton, Donald, Oklahoma | 65½ | 32 | 6,550 |
| Harr, Don J., Oklahoma | 61½ | 25 | 6,150 |
| Harwood, Ben, Montana | 96½ | 29 | 9,650 |
| House, Daniel, New York | 123 | 56 | 12,300 |
| Ives, George S., District of Columbia | 141½ | 64 | 14,150 |
| Johnson, Howard A., Montana | 108 | 59 | 10,800 |
| Kabaker, David, Ohio | 61 | 26 | 6,100 |
| Kenan, Thomas J., Oklahoma | 48 | 23 | 4,800 |
| Larkin, John Day, Illinois | 17¾ | 19 | 1,775 |
| Lynch, Edward A., District of Columbia | 142½ | 76 | 14,250 |
| McGovern, John J., Maryland | 72¼ | 33 | 7,225 |
| McMahon, Donald F., Oklahoma | 29 | 8 | 2,900 |
| Mesigh, Herbert J., Oklahoma | 70½ | 18 | 7,050 |
| Miller, Wesley, Oklahoma | 40¾ | 12 | 4,075 |
| Moore, Preston J., Oklahoma | 21¾ | 25 | 2,175 |
| Perelson, Bernard, New York | 16¾ | 2 | 1,675 |
| Rambo, Dan, Oklahoma | 9½ | 7 | 950 |
| Ritter, Gene T., Oklahoma | 70½ | 33 | 7,050 |
| Rohman, Murray M., Texas | 38 | 63 | 3,800 |
| Seidenberg, Jacob, Virginia | 73 | 43 | 7,300 |
| Sempliner, Arthur, Michigan | 23¾ | 15 | 2,375 |
| Stark, Arthur, New York | 23¼ | 9 | 2,325 |
| Weston, Harold M., New York | 158 | 65 | 15,800 |
| Whiting, Dudley E., Michigan | 1 | [1] | 100 |
| Williams, Peyton, Oklahoma | 3¼ | [1] | 325 |
| Wolf, Benjamin H., New York | 20¾ | 14 | 2,075 |
| Woody, Claude S., Oklahoma | 62¾ | 29 | 6,275 |
| Zack, Arnold M., Massachusetts | 40¼ | 18 | 4,025 |
| Zumas, Nicholas H., District of Columbia | 58½ | 30 | 5,850 |
| Totals | 2,483½ | 1,292 | 248,350 |

[1] Interp.

*Personnel benefits*

Personnel benefits consist of the employer's share of costs of employees' life insurance, health benefits, Civil Service retirement, and Federal Insurance Contributions Act taxes amounting to approximately $41,000.

*Travel expenses*

Almost all of the amount for travel expenses is required for Referees, most of whom are from points other than Chicago. It is estimated that the over-all

average cost will be about $16,150 for the year, plus about $450 for other official travel, making a total of $16,600.

*Printing and reproduction*

The largest part of the appropriation for printing and reproduction is expended for printing awards of the various divisions for only the interested parties and for the use of Members of the Board. An initial supply of each of the awards is printed in pamphlet form; and when a sufficient number has been issued, a volume is bound. The Board receives 150 pamphlet copies and 100 of each of the volumes. It is also necessary to furnish the Library of Congress a number of copies of each volume for use in the library and for international exchange.

The field contract for printing and binding awards permits the contractor to sell to interested parties, largely railroad labor organizations and the carriers; and, therefore, the cost is spread so that the Government pays approximately one-third of the amount it would have to pay were it not for these outside sales.

At the present time, we have a backlog of more than two years' work for printing and binding. At the beginning of fiscal year 1968 we instituted a change in the method of binding volumes of awards which should decrease our cost somewhat.

*Other items*

The other items in the estimate involve comparatively small amounts, and in these little or no change is expected.

ADJUSTMENT OF RAILROAD GRIEVANCES

| | 1967 actual | 1968 estimate | Increase (+) or decrease (−) | 1969 estimate |
|---|---|---|---|---|
| 11 Personnel compensation: | | | | |
| Permanent positions | $454,789 | $477,600 | +$27,800 | $505,400 |
| Pay above the stated annual rate | 1,900 | ---------- | +2,000 | 2,000 |
| Positions other than permanent | 248,350 | 100,000 | +45,000 | 145,000 |
| Total, personnel compensation | 705,039 | 577,600 | +74,800 | 652,400 |
| 12 Personnel benefits | 41,627 | 39,000 | +2,000 | 41,000 |
| 21 Travel and transportation of persons | 45,097 | 16,600 | ---------- | 16,600 |
| 23 Rent, communications, and utilities | 14,461 | 13,300 | ---------- | 13,300 |
| 24 Printing and reproduction | 56,025 | 37,000 | +32,000 | 69,000 |
| 25 Other services | 3,840 | 3,500 | ---------- | 3,500 |
| 26 Supplies and materials | 10,407 | 8,000 | +200 | 8,200 |
| 31 Equipment | 6,117 | 6,000 | ---------- | 6,000 |
| Total appropriation | 882,613 | 701,000 | +109,000 | 810,000 |
| Transferred from activity: Voluntary arbitration and emergency disputes | ---------- | +47,000 | ---------- | ---------- |
| Total obligations | 882,613 | 748,000 | ---------- | 810,000 |

TRIBUTE TO SENATOR HILL

Senator HILL. Now, Mr. Gamser of the National Mediation Board, Mr. O'Neill, and Mr. Tracy. You may proceed in your own way.

Mr. GAMSER. Thank you, Mr. Chairman. I hope you won't mind my asking for permission to make a very short statement before submitting for the record our prepared statement.

Senator HILL. You go right ahead, sir.

Mr. GAMSER. As Chairman McCulloch and General Counsel and Mr. Ordman of the National Labor Relations Board have noted, this will probably be the last time that this agency appears before you as chairman of this subcommittee.

That is if, unfortunately, the newspapers have reported your present intention correctly.

I have had the honor and pleasure of appearing before you in the past 5 years as a member and Chairman of this Board.

Mr. O'Neill on my right, the senior member of our Board, has been doing so four times as long. He also would like to follow me with a short statement.

Senator Hill, in addition to the brilliant way you have performed this one of your many legislative chores, our appearances before you have always been distinguished by the conscientious and constructive way you have assisted us in our endeavors and by the depth of your knowledge of the operation of this small agency.

You have always been without doubt, one of the most kind and considerate Members of the Congress in all our dealings.

This experience has certainly enriched my period of Federal service and I know that I can say the same for all of the members of the executive branch of the Government who have had the pleasure and honor of working with you.

I know that we will be seeing you on the Hill from time to time in the months to come, but, before getting on to our formal presentation, I did not want to let this opportunity pass without expressing our appreciation to you and wishing you well.

Senator HILL. Thank you, sir. I deeply appreciate your kind words. I want to assure you that I also appreciate the very fine help and cooperation which you have given this committee.

We have worked together for the success of the programs.

Mr. O'NEILL. I wholly concur in what Mr. Gamser has said.

It has been a pleasure to work with you.

Senator HILL. Thank you.

### ADMINISTRATION OF RAILWAY LABOR ACT

Mr. GAMSER. As you know, this independent agency, first established by Congress in 1926, and composed in its present form in 1934, administers the Railway Labor Act.

This statute is designed to provide orderly procedures for the settlement of labor disputes in the railroad and airline industries.

Additionally, the National Mediation Board handles questions of representation as they arise in these industries and interprets agreements made in mediation.

### NATIONAL RAILROAD ADJUSTMENT BOARD

The National Railroad Adjustment Board, whose representatives are also appearing today, and who will identify themselves, was also established in 1934 under the Railway Labor Act for the purpose of disposing of grievances arising under the terms of collective bargaining agreements in the railroad industry.

That section of the Railway Labor Act which deals with the disposition of what are termed minor disputes was most recently amended by the 89th Congress in Public Law 456, approved June 20, 1966, to permit the decentralization, in some measure, of grievance disposition machinery.

Under Public Law 456, new grievances and those which have been on the docket before the National Railroad Adjustment Board for a

period of at least 12 months may be referred to a local board of adjustment on each individual railroad for expeditious disposition.

### Adjustment of Labor-Management Disputes

Thus, under the Railway Labor Act, Congress has provided for the railroad and airline industries specific machinery and procedures for the adjustment of labor-management disputes, that is, for mediation and the investigation of questions of representation; for emergency dispute procedures and arbitration; as well as for boards of adjustment and a National Railroad Adjustment Board to handle individual and group grievances arising under agreements between management and the labor organizations concerned.

### BUDGET REQUEST

The budget, as submitted, is designed to identify the functions just discussed and the amounts requested for each.

### Mediation

First: Mediation, which is concerned with the making and amending of agreements. This activity is the responsibility of the National Mediation Board.

A total of $817,000, an increase of $28,000 over the amount originally authorized for the current fiscal year, is being requested to finance the Board's activities in fiscal year 1969.

The increase is required in order to meet the obligations which will be incurred as a result of the pay legislation enacted December 16, 1967 (Public Law 90–206).

### Voluntary Arbitration and Emergency Board Investigation

The second activity of the Board relates to voluntary arbitration and the investigation of critical disputes through the emergency board procedure.

In arbitration proceedings, disputes are voluntarily submitted by labor and management to a neutral party for final and binding decision.

Emergency boards are created pursuant to section 10 of the act when the Board notifies the President that a dispute threatens substantially to interrupt interstate commerce to a degree such as to deprive any section of the country of essential transportation.

The President may, in these circumstances, in his discretion, create an emergency board to investigate and make recommendations as to the settlement of the dispute involved.

Funds available for this activity are used to finance arbitration boards, special boards of adjustment, such as those created under Public Law 89–456 about which I have spoken, and emergency boards.

The Board is not able to anticipate precisely the total expenditures for these activities and it is therefore advisable to have a small reserve available for emergency situations.

For the fiscal year 1969, the Board is requesting a total of $615,000, a decrease of $45,000 from the amount originally authorized for this activity in fiscal year 1968.

ADJUSTMENT OF RAILROAD GRIEVANCES

The third activity carried on under this appropriation is the adjustment of grievances in the railroad industry. This activity pertains to the operations of the National Railroad Adjustment Board mentioned earlier, which is concerned with the interpretation or application of wage and rule agreements in the railroad industry.

Representatives of the National Railroad Adjustment Board are here to answer questions in regard to this phase of our appropriation request.

A sum of $810,000 is being requested for the fiscal year 1969. This represents an overall increase of $109,000 over the amount appropriated for this activity in the fiscal year 1968.

In summary, the National Mediation Board is requesting a total of $2,242,000 to finance activities under the Railway Labor Act for the fiscal year 1969. This is an increase of $92,000 over the amount originally authorized for the present fiscal year.

That concludes the prepared portion of our presentation, Mr. Chairman. If you have any questions, we shall be glad to answer them.

Senator HILL. Do you think you can do a reasonably good job with this allowance?

Mr. GAMSER. We are certainly going to try.

Senator HILL. Mr. O'Neill.

Mr. O'NEILL. I haven't anything to add, Mr. Chairman. We do have quite a few dark clouds on the horizon, but I think we will be able to cope with them.

Senator HILL. You think you can make it?

Mr. O'NEILL. We hope so, sir. We will go around the clock again.

Senator HILL. It will be pretty strenuous.

Mr. O'NEILL. Yes.

## NATIONAL RAILROAD ADJUSTMENT BOARD

**STATEMENT OF C. E. KIEF, MEMBER**
**ACCOMPANIED BY H. V. BORDWELL, MEMBER**

PREPARED STATEMENT

Senator HILL. Mr. Kief.

Mr. KIEF. We have a prepared statement, Mr. Chairman. We have submitted that for the record.

(The statement follows:)

While many of these members of the Committee are familiar with this agency, we believe a brief statement of the establishment and operation of the Board will bear repeating. The National Railroad Adjustment Board was created by Act of Congress, approved June 21, 1934, for the adjudication of disputes between an employee or group of employees and a carrier or carriers, growing out of grievances or out of the interpretation or application of agreements concerning rates of pay, rules, or working conditions. The disputes are first handled locally on the property, and if not adjusted there, are processed through successive steps up to and including the chief operating officer of the carrier designated to handle such disputes. If not adjusted in this manner, they are then referred to the appropriate division of the Adjustment Board for settlement.

The Board is composed of thirty-six members, eighteen selected and paid by the carriers and eighteen selected and paid by organizations of railway employees which are national in scope. The Act provides for four divisions of the Adjustment Board, each of which has jurisdiction over disputes involving certain groups

of employees. For example, the First Division has jurisdiction over disputes involving train and yard service employees; the Second Division, shop crafts; the Third Division, clerical forces, maintenance-of-way men, dispatchers, etc.; and the Fourth Division, water transportation and miscellaneous.

There are ten members, five labor and five carrier on each the First, Second, and Third Divisions, and six members, three of each labor and carrier, on the Fourth Division. Since the labor and carrier members are equally divided, they frequently deadlock on cases, in which event they attempt and many times do agree upon and select a referee. If the members fail to agree upon a referee, that fact is certified to the Mediation Board, which Board then selects the referee.

The establishment of a number of special boards on individual properties has somewhat reduced the backlog of cases. In the meantime, new cases continue to be received almost as fast as disposition is made of old ones. Causes for the increases are the amendment to the Railway Labor Act permitting the union shop and resulting subsequent agreements; changes in agreements including the adoption of the 40 hour work-week; the national agreement covering vacations, pay for holidays, and time limit for submitting cases.

In order to reduce the large backlog of Third Division cases, following an agreement of the parties, there has been established a supplemental board of ten members, which is making some progress in reducing the number of pending cases. Salaries of these members are also paid by the parties they represent.

It might be pertinent to point out that there are some twenty standard railroad labor organizations and hundreds of railroads; and it is estimated there are about 5,000 agreements in effect between these carriers and labor organizations covering rates of pay, hours of service, working conditions, etc. It is these agreements with which we deal.

During the last fiscal year, the four divisions of the Board received and docketed 1,689 cases and closed 2,433, but a backlog of 5,346 remained as of June 30, 1967. Many of these cases may involve hundreds of thousands of dollars.

We shoud like to stress the fact that the salaries of the members of the Board and of the Third Division Supplemental Board are paid by the labor organizations and the carriers. It is estimated that this amounts to more than $800,000 per year. In addition, both labor organizations and the carriers furnish research and technical assistance to some of their members. Thus, these two parties bear more than half the cost of operation of the Board.

Mr. Chairman, that concludes my statement, but we shall be glad to answer any questions the Committee may want to ask.

### FUND SHORTAGES

Mr. KIEF. I would like to make a few verbal comments. This has been my third time to appear before your committee. As Mr. Gamser and Mr. O'Neill stated, we likewise appreciate the opportunity of appearing before you.

In Mr. Gamser's statement he brought out the amount that is requested for the National Railroad Adjustment Board. In the last few years the Adjustment Board has been very short of funds and inasmuch as it is allocated quarterly to the Board, we don't get the full value of the referees when we are short of funds that way.

Senator HILL. It makes it difficult; does it not?

Mr. KIEF. Yes; it does, because they have other assignments and they cannot be obtained as early as they might if we have sufficient funds to carry us through.

That is all I have to say. Thank you very much for the opportunity of appearing before you.

### BUDGET BUREAU REDUCTION

Senator HILL. What did you request?

Mr. KIEF. $810,000.

Mr. TRACY. The amount proposed to the Bureau of the Budget is $1,063,000.

Senator HILL. They cut you down from $1,063,000?

Mr. TRACY. To $810,000.

Senator HILL. That is about a quarter-of-a-million-dollar cut.

Mr. TRACY. The decrease was essentially in the referee amount, the amount that will be available for the use of referees.

Senator HILL. They play quite an important part, do they not, in your work?

Mr. KIEF. Without referees you are out of business.

Senator HILL. You have to have them. Is there anything else you gentlemen would like to add?

Mr. GAMSER. That concludes our presentation.

Senator HILL. Your budget is pretty tight; is it not?

Mr. GAMSER. Yes, sir; it is.

Senator HILL. It is very tight.

Well, I want to thank you gentlemen for your most kind and generous words and tell you that it has always been a pleasure to work with you. You have been very fine and most helpful and cooperative.

Mr. GAMSER. Thank you, Mr. Chairman.

# RAILROAD RETIREMENT BOARD

**STATEMENT OF HOWARD W. HABERMEYER, CHAIRMAN**
**ACCOMPANIED BY:**
**SAMUEL CHMELL, CHIEF EXECUTIVE OFFICER**
**MICHAEL RUDISIN, DIRECTOR OF BUDGET AND FISCAL OPERATIONS**

## Appropriation Estimate

## Railroad Retirement Board

### PAYMENT FOR MILITARY SERVICE CREDITS

For payments to the railroad retirment account for military service credits under the Railroad Retirement Act, as amended (45 U.S.C. 228c–1), [$17,839,000.] *$18,446,000.*

SUMMARY OF APPROPRIATIONS AND APPROPRIATION ESTIMATES

| Account title | Estimate, 1968 | Estimate, 1969 | Increase or decrease |
|---|---|---|---|
| General funds: Payment for military service credits | $17,839,000 | $18,446,000 | +$607,000 |
| Trust fund: | | | |
| Limitation on salaries and expenses (trust fund) | (12,850,000) | (14,490,000) | (+666,000) |
| Anticipated supplemental: | | | |
| Costs of 1967 amendments to Social Security Act | (550,000) | | |
| Increases in pay rates | (362,000) | | |
| Increases in postal rates | (62,000) | | |
| Total, general funds | 17,839,000 | 18,446,000 | +607,000 |

## Justification of Estimates for Fiscal Year 1969

### SUMMARY AND HIGHLIGHTS

*Programs Administered by the Railroad Retirement Board*

The Railroad Retirement Board administers a regular railroad retirement system which provides monthly benefits to employees who retire because of age or disability, and to the eligible wives of such employees. The disability annuities are payable both to employees not able to do any regular work and to career railroad employees not able to work at their regular railroad job. In addition, the system provides for monthly and lump-sum benefits to widows, children, and parents. Finally, there is provision for a residual payment designed to insure that an employee and his family receive at least as much in benefits as the employee contributes in railroad retirement taxes. For all benefits except the residual payment, a basic requirement is that the employee have at least 10 years of creditable railroad service, including service before 1937.

Under legislation enacted in October 1966, the Board also administers a program for the payment of supplemental annuities to career railroad employees who were awarded retirement annuities after June 1966. This new type of annuity is paid to employees aged 65 and over who retire directly from railroad service after completing 25 or more years of service and is in addition to their regular annuities.

Also, under the 1965 amendments to the Social Security and Railroad Retirement Acts and under a delegation of authority from the Social Security Administration, the Board participates in the administration of the hospital and medical insurance programs for persons covered by the Railroad Retirement Act. This combination of statutory and delegated authority places the Board in much the same position in dealing with persons covered by the Railroad Retirement Act with respect to the medicare program as that of the Social Security Admin-

istration in dealing with its beneficiaries. Of course, the delegated functions are performed on a reimbursable basis.

The Board also administers a system for the payment of unemployment, maternity, and sickness benefits to qualified railroad workers, and an employment service for placing unemployment benefit claimants in jobs.

*Organizational Structure of the Railroad Retirement Board*

The Board is composed of three members appinted by the President by and with the advice and consent of the Senate—one upon the recommendation of representatives of employees, one upon recommendation of representatives of carriers, and one, the Chairman, without designated recommendation. The Board's administrative organization is designed to integrate the administration of the programs conducted by the Board without duplication of facilities or operations.

*Means of Financing*

The regular railroad retirement system is financed by taxes paid equally by railroad workers and employers. The Railroad retirement account is credited with the taxes and annuity payments are made from the Account. The amounts needed for administrative expenses, as authorized by Congress in annual appropriation Acts, are derived from the Account.

The supplemental annuity program is financed by a tax paid by employers of two cents for each man hour for which they pay compensation. This tax is deposited in a separate trust account titled Railroad retirement supplemental account from which the supplemental annuities are paid. The amounts needed for administrative expenses of this program, as authorized by Congress in annual appropriation Acts, are derived from this Account.

The unemployment and sickness insurance system is financed by contributions paid wholly by employers. Of the total contributions paid for this purpose, the portion represented by 0.25 percent of the taxable payroll is permanently appropriated to the Board to cover the administrative costs of the system, with the remainder being credited to the Railroad unemployment insurance account in the unemployment trust fund for the payment of benefits.

*Payments to Railroad Retirement Account for Military Service Credits*

Railroad workers entering military service may have such service credited toward benefits under the railroad retirement system under certain conditions. An appropriation of $18,446,000 is requested to pay the fifth of ten yearly installments on the amount due the Railroad retirement account for creditable military service for the period through June 30, 1963.

*Effect to Recent Legislation on Work Loads of the Board*

Operations of the Board have been affected very materially by various legislation enacted by Congress in the last several years. Legislation which affects Board operations includes not only amendments to the Railroad Retirement Act but also by amendments to the Social Security Act. Higher cash benefits under the Social Security Act automatically result in higher cash benefits to some railroad retirement beneficiaries under a guaranty provision in the Railroad Retirement Act which provides that railroad retirement benefits must be at least 10% higher than the amount the social security system would pay. Also, the medicare program requires the Board's participation in its administration with respect to persons covered by the railroad retirement system.

The recent laws creating large new work loads for the Board include Public Law 89–97, approved July 30, 1965, which increased cash benefits under the social security system and established the medicare program; Public Law 89–212, approved September 29, 1965, which provided benefits to certain spouses not previously eligible and made certain other changes in the railroad retirement system; Public Law 89–699, approved October 30, 1966, which provided increases in regular railroad retirement benefits to persons who did not receive increases under Public Law 89–97, and which established a new system of supplemental railroad retirement benefits; Public Law 89–700, approved October 30, 1966, which provided benefits to full-time students and made various other changes in the railroad retirement system; and Public Law 90–248, approved January 2, 1968, which increased cash benefits and made other changes in the social security system and made various changes in the medicare program. Additionally, there is legislation now pending in Congress, supported by both railroad labor and railroad management, which would increase cash benefits to those railroad retirement beneficiaries who do not receive increases under Public Law 90–248 and which would make other changes in the railroad retirement system.

This series of laws has created work loads of such overwhelming proportions that backlogs of work have kept increasing until they now are of emergency proportions. For example, the pending load of retirement applications increased from 7,000 cases at the start of fiscal year 1966 to 11,000 cases at the start of 1967 to 23,000 cases at the start of 1968. In addition to this large backlog of regular claims work, a large amount of work has accumulated relating to checking on the eligibility of beneficiaries to continue to receive benefits. Delays in handling this work result in delays in the disclosure of disqualifying events causing larger accumulations of overpayments for subsequent collection, which increases the hardship to beneficiaries.

To sum up the work load situation, the Board is confronted with the task of dealing with large backlogs of work carried over into 1968; the task of handling the normal influx of regular work; the task of processing the large amount of additional work created by the 1967 amendments to the Social Security Act; and the task of processing large amounts of still additional work that will be created upon the almost-certain enactment of the amendments to the Railroad Retirement Act now pending in Congress.

Of course, supplemental appropriations will be requested for fiscal year 1968 to handle as much of the work created by new legislation as it will be possible to perform, and at the same time to keep backlogs in regular work from getting completely out of hand. However, there are practical limits on the amount of work the Board can handle in a given period of time. Thus, large backlogs can be expected to carry over into 1969, and provision has been made in our appropriation request for 1969 to reduce these backlogs and to restore service to beneficiaries to acceptable standards of performance.

*Administrative Expense Requirements of the Railroad Retirement System*

For fiscal year 1968, the present limitation on the amounts that may be expended for the administrative expenses of the railroad retirement system is established at $12,850,000. Public Law 90-206, approved December 16, 1967, which increased pay rates and postage rates, will require increases of $362,000 and $62,000 in the limitation for those two cost factors. Public Law 90-248, approved January 2, 1968, which amended the Social Security Act, created large new work loads for the Board which will require a further increase in the limitation of $550,000. Total requirements for the administrative expenses of the railroad retirement system for fiscal year 1968 to this point are as follows:

| | |
|---|---|
| Present limitation | $12,850,000 |
| Proposed increases in limitation: | |
| Costs of Public Law 90-206: | |
| Pay increases | 362,000 |
| Postage increases | 62,000 |
| Costs of Public Law 90-248 | 550,000 |
| | 974,000 |
| Total requirements for 1968, based on legislation enacted through Jan. 2, 1968 | $13,824,000 |

As explained previously, there is legislation now pending in Congress, supported by both railroad labor and railroad management, which would amend the Railroad Retirement Act. The almost-certain enactment of this legislation will create additional work loads larger than those created by Public Law 90-248. Of course, no provision has been made in the preceding tabulation of 1968 requirements for the costs of handling these added work loads, and an additional increase will be required in the limitation on administrative expenses for 1968 for this purpose upon enactment of this legislation.

For fiscal year 1969, the Board requests that the limitation on the administrative expenses of the railroad retirement system be established in the amount of $14,490,000. If related to total requirements for 1968 of $13,824,000 based on legislation enacted through January 2, 1968, the 1969 request represents an increase of $666,000 from 1968 to 1969.

The increase of $666,000 consists of $154,000 for the projection of new pay rates to an annual basis; $65,000 for the projection of new postal rates to an annual basis; $70,000 for within-grade salary advancement; $40,000 for the increase of one compensable day in 1969; $50,000 for an increase in lump-sum annual leave payments because of an expected increase in employee retirements (an unusually large number of employees become eligible in 1969); $533,000 to reduce backlogs

and to restore service to acceptable performance standards; and $100,000 to provide for a reserve for contingencies which would be used only to the extent necessary to process work loads not anticipated in the budget estimates; less $346,000 because of a decrease in the amount needed for equipment.

PAYMENT FOR MILITARY SERVICE CREDITS, RAILROAD RETIREMENT BOARD

| | Estimate 1968 | Estimate 1969 | Increase or decrease |
|---|---|---|---|
| Program by activities, payment to railroad retirement account | $17,839,000 | $18,446,000 | +$607,000 |
| Financing, new obligational authority (appropriation) | 17,839,000 | 18,446,000 | +607,000 |

PAYMENT FOR MILITARY SERVICE CREDITS, RAILROAD RETIREMENT BOARD, JUSTIFICATION OF ESTIMATES

Railroad workers entering military service may have such service credited toward benefits under the railroad retirement system under certain conditions. Under existing law the Government is obligated to pay to the Railroad retirement account the additional cost of crediting military service rendered prior to 1937 and used in computing annuities under the Railroad Retirement Act. For military service performed during war-service periods after 1936 and before 1957, the Government is required to pay the combined employer-employee payroll tax on $160 for each month of military service. For service after 1956 and before July 1963, the Government is required to pay the difference between the combined taxes on $160 and the combined social security taxes actually paid with respect to the military service involved. For creditable military service rendered after June 1963, payments are on a cost basis including an overhead factor.

An appropriation of $18,446,000 is requested for fiscal year 1969 for payment to the Railroad retirement account for military service credits under the Railroad Retirement Act. The appropriation request of $18,446,000 consists of $18,440,000 as the fifth of ten yearly installments on the amount due the Railroad retirement account for creditable military service for the period through June 30, 1963, plus $6,000 for the additional cost for military service performed before 1937 and used in computing annuities certified in fiscal year 1967.

Details regarding the calculation of the amount of the fifth installment and a schedule of the amounts of the remaining five installments are given in the following tables.

*Payment for military service credits calculation of fifth installment*

| | | |
|---|---|---|
| 1. | Appropriation due the Board on July 1, 1964 | $155,695,000 |
| 2. | Less first installment appropriated in fiscal year 1965 | —13,834,000 |
| 3. | Balance | 141,861,000 |
| 4. | Plus accrued interest on balance for fiscal year 1965 | 5,674,000 |
| 5. | Balance due July 1, 1965 | 147,535,000 |
| 6. | Less second installment appropriated in fiscal year 1966 (one-ninth of item 5) | 16,393,000 |
| 7. | Balance | 131,142,000 |
| 8. | Plus accrued interest on balance for fiscal year 1966 | 5,246,000 |
| 9. | Balance due July 1, 1966 | 136,388,000 |
| 10. | Less third installment appropriated in fiscal year 1967 (one-eighth of item 9) | 17,049,000 |
| 11. | Balance | 119,339,000 |
| 12. | Plus accrued interest on balance for fiscal year 1967 | 4,774,000 |
| 13. | Balance due July 1, 1967 | 124,113,000 |
| 14. | Less fourth installment appropriated in fiscal year 1968 (one-seventh of item 13) | 17,730,000 |
| 15. | Balance | 106,383,000 |
| 16. | Plus accrued interest on balance for fiscal year 1968 | 4,255,000 |

| | | |
|---|---|---|
| 17. | Balance due July 1, 1968 | $110,638,000 |
| 18. | Fifth installment for appropriation in fiscal year 1969 (one-sixth of item 17) | 18,440,000 |
| 19. | Plus additional cost for military service performed before 1937 and used in computing annuities certified in fiscal year 1967 | 6,000 |
| 20. | Appropriation requested for fiscal year 1969 | 18,446,000 |

SCHEDULE OF AMOUNTS OF 5 REMAINING INSTALLMENTS

| Fiscal year | Amount due | | | Divisor | Installments |
|---|---|---|---|---|---|
| | Principal | Interest | Total | | |
| 1970 | $92,198,000 | $3,688,000 | $95,886,000 | 5 | $19,177,000 |
| 1971 | 76,709,000 | 3,068,000 | 79,777,000 | 4 | 19,944,000 |
| 1972 | 59,833,000 | 2,393,000 | 62,226,000 | 3 | 20,742,000 |
| 1973 | 41,484,000 | 1,659,000 | 43,143,000 | 2 | 21,572,000 |
| 1974 | 21,571,000 | 863,000 | 22,434,000 | 1 | 22,434,000 |

## Appropriation Estimate

### LIMITATION ON SALARIES AND EXPENSES

For expenses necessary for the Railroad Retirement Board, [$12,850,000] *$14,490,000*, of which [$12,600,000] *$14,130,000* shall be derived from the railroad retirement account, and [$250,000] *$360,000* shall be derived from the railroad retirement supplemental account, as authorized by Public Law 89–699, approved October 30, 1966; *Provided, That $100,000 of the foregoing total amount shall be apportioned for use pursuant to section 3679 of the Revised Statutes as amended (31 U.S.C. 665) only to the extent necessary to process workloads not anticipated in the budget estimates and after maximum absorption of the costs of such workloads within the existing limitation has been achieved. (45 U.S.C. 228a–r.)*

### SUMMARY OF CHANGES

| | |
|---|---|
| Current appropriation: | |
| 1968 appropriation in annual act | $12,850,000 |
| Anticipated supplemental: | |
| Cost of work resulting from 1967 amendments to Social Security Act | 550,000 |
| Increases in pay rates | 362,000 |
| Increases in postal rates | 62,000 |
| Subtotal | 974,000 |
| 1968 total requirements | [1] 13,824,000 |
| 1969 request | 14,490,000 |
| Total change | +666,000 |
| Decreases from 1968: Decrease in amount needed for equipment | −346,000 |
| Increases over 1968: | |
| Projection of new pay rates to annual basis | +154,000 |
| Projection of new postal rates to annual basis | +65,000 |
| Within-grade salary advancements | +70,000 |
| Increase of 1 compensable day in 1969 | +40,000 |
| Increase in lump-sum leave payments | +50,000 |
| Net increase to reduce backlogs of work | +533,000 |
| Provision for reserve for contingencies | +100,000 |
| Subtotal | +1,012,000 |
| Total net change requested | +666,000 |

[1] Does not include supplemental that would be needed upon enactment of the amendments to the Railroad Retirement Act now pending in Congress.

| | 1968 estimate | | | | 1969 estimate | | Increase (+) or decrease (−) | | | |
|---|---|---|---|---|---|---|---|---|---|---|
| | Presently available | | Revised estimate [1] [2] | | | | Presently available | | Revised estimate | |
| | Positions | Amount | Positions | Amount | Positions | Amount | Positions | Amount | Positions | Amount |
| Program by activities: | | | | | | | | | | |
| 1. Maintenance of earnings accounts | 34 | $427,000 | 34 | $427,000 | 35 | $392,000 | +1 | −$35,000 | +1 | −$35,000 |
| 2. Processing regular claims | 923 | 9,708,000 | 963 | 10,271,000 | 995 | 10,703,000 | +72 | +995,000 | +32 | +432,000 |
| 3. Maintenance of beneficiary rolls | 80 | 1,562,000 | 80 | 1,611,000 | 87 | 1,770,000 | +7 | +208,000 | +7 | +159,000 |
| 4. Hearings and appeals | 5 | 70,000 | 5 | 70,000 | 5 | 72,000 | ---------- | +2,000 | ---------- | +2,000 |
| 5. Actuarial services | 24 | 274,000 | 24 | 274,000 | 24 | 277,000 | ---------- | +3,000 | ---------- | +3,000 |
| 6. Administration | 96 | 1,171,000 | 96 | 1,171,000 | 96 | 1,176,000 | ---------- | +5,000 | ---------- | +5,000 |
| 7. Contingency reserve | | | | | | 100,000 | ---------- | +100,000 | ---------- | +100,000 |
| Total obligations | 1,162 | 13,212,000 | 1,202 | 13,824,000 | 1,242 | 14,490,000 | +80 | +1,278,000 | +40 | +666,000 |
| Financing: Proposed increase in limitation due to pay increases | | −362,000 | | | | | | +362,000 | | |
| Limitation | | 12,850,000 | ---------- | 13,824,000 | ---------- | 14,490,000 | ---------- | +1,640,000 | ---------- | +666,000 |
| Obligations by object: | | | | | | | | | | |
| Personnel compensation: | | | | | | | | | | |
| 11.1 Permanent positions | | 9,354,000 | ---------- | 9,608,000 | ---------- | 10,157,000 | ---------- | +803,000 | ---------- | +549,000 |
| 11.3 Positions other than permanent | | 74,000 | ---------- | 99,000 | ---------- | 109,000 | ---------- | +35,000 | ---------- | +10,000 |
| 11.5 Other personnel compensation | | 224,000 | ---------- | 410,000 | ---------- | 566,000 | ---------- | +342,000 | ---------- | +156,000 |
| Total, personnel compensation | | 9,652,000 | ---------- | 10,117,000 | ---------- | 10,832,000 | ---------- | +1,180,000 | ---------- | +715,000 |
| 12.0 Personnel benefits | | 738,000 | ---------- | 758,000 | ---------- | 797,000 | ---------- | +59,000 | ---------- | +39,000 |
| 21.0 Travel and transportation of persons | | 264,000 | ---------- | 274,000 | ---------- | 275,000 | ---------- | +11,000 | ---------- | +1,000 |
| 22.0 Transportation of things | | 18,000 | ---------- | 23,000 | ---------- | 25,000 | ---------- | +7,000 | ---------- | +2,000 |
| 23.0 Rent, communications, and utilities | | 866,000 | ---------- | 943,000 | ---------- | 1,040,000 | ---------- | +174,000 | ---------- | +97,000 |
| 24.0 Printing and reproduction | | 56,000 | ---------- | 71,000 | ---------- | 70,000 | ---------- | +14,000 | ---------- | −1,000 |
| 25.1 Other services | | 236,000 | ---------- | 241,000 | ---------- | 262,000 | ---------- | +26,000 | ---------- | +21,000 |
| 25.2 Services of other agencies | | 784,000 | ---------- | 784,000 | ---------- | 803,000 | ---------- | +19,000 | ---------- | +19,000 |
| 26.0 Supplies and materials | | 133,000 | ---------- | 148,000 | ---------- | 167,000 | ---------- | +34,000 | ---------- | +19,000 |
| 31.0 Equipment | | 465,000 | ---------- | 465,000 | ---------- | 119,000 | ---------- | −346,000 | ---------- | −346,000 |
| 92.0 Undistributed (contingency reserve) | | | | | | 100,000 | ---------- | +100,000 | ---------- | +100,000 |
| Supplemental required for pay increases | | −362,000 | | | | | | +362,000 | | |
| Total, obligations | | 12,850,000 | ---------- | 13,824,000 | ---------- | 14,490,000 | ---------- | 1,640,000 | ---------- | +666,000 |
| Personnel summary: | | | | | | | | | | |
| Total number of permanent positions | | 1,162 | ---------- | 1,202 | ---------- | 1,242 | ---------- | +80 | ---------- | +40 |
| Full-time equivalent of other positions | | 18 | ---------- | 24 | ---------- | 27 | ---------- | +9 | ---------- | +3 |
| Average number of all employees | | 1,120 | ---------- | 1,162 | ---------- | 1,216 | ---------- | +96 | ---------- | +54 |
| Average GS grade | | 7.3 | ---------- | 7.3 | ---------- | 7.2 | ---------- | −0.1 | ---------- | −0.1 |
| Average GS salary | | $8,471 | ---------- | $8,471 | ---------- | $8,469 | ---------- | −$2 | ---------- | −$2 |

[1] Includes anticipated supplemental of $974,000, consisting of $550,000 for costs of handling work created by Public Law 90–248, approved Jan. 2, 1968, which amended the Social Security Act, and $362,000 for pay increases and $62,000 for postage increases provided by Public Law 90–206, approved Dec. 16, 1967.

[2] Does not include supplemental that would be needed upon enactment of the amendments to the Railroad Retirement Act now pending in Congress.

ACTIVITY 1. MAINTENANCE OF EARNINGS ACCOUNTS

| | 1968 estimate | | 1969 estimate | | Increase or decrease | |
|---|---|---|---|---|---|---|
| | Positions | Amount | Positions | Amount | Positions | Amount |
| Personnel compensation and benefits | 34 | $256,000 | 35 | $275,000 | +1 | +$19,000 |
| Other expenses | | 91,000 | | 101,000 | | +10,000 |
| Computer equipment | | 80,000 | | 16,000 | | −64,000 |
| Total | 34 | 427,000 | 35 | 392,000 | +1 | −35,000 |

Average manpower estimates are as follows:

| | Man-years | | |
|---|---|---|---|
| | 1968 | 1969 | Increase or decrease |
| Permanent and temporary employees | 32 | 33 | +1 |
| Overtime equivalent | 2 | 2 | |
| Total | 34 | 35 | +1 |

The maintenance of earnings accounts includes the work of processing of employers' reports of employees' compensation and service, for use in making claims payment determinations. Information must be accumulated for every railroad employee to identify the actual calendar months worked and the creditable earnings from January 1937 to date. In addition, railroad service rendered prior to 1937 also must be developed when claimed, since such service usually is creditable under the Act.

One indicator of the level of work in this activity is the number of accounts in which earnings are recorded, which are estimated at 920,000 in 1968 and 915,000 in 1969. The number of accounts in which earnings are recorded in any fiscal year approximates the total railroad employment in the preceding calendar year. However, to record data for employees with earnings in a calendar year, the master record of all accounts on tape must be processed by the computer and this record will increase from 10,672,000 accounts in 1968 to 10,782,000 in 1969. Thus, one workload indicator shows a slight decrease from 1968 to 1969 and the other shows a slight increase.

Man-year requirements increase slightly from 1968 to 1969 because of provision for reprogramming of some computer programs to secure optimum use of available computer equipment.

ACTIVITY 2. PROCESSING REGULAR AND SUPPLEMENTAL CLAIMS

| | 1968 estimate | | 1969 estimate | | Increase or decrease | |
|---|---|---|---|---|---|---|
| | Positions | Amount | Positions | Amount | Positions | Amount |
| Personnel compensation and benefits | 963 | $8,743,000 | 995 | $9,310,000 | +32 | +$567,000 |
| Other expenses | | 1,260,000 | | 1,340,000 | | +80,000 |
| Computer equipment | | 268,000 | | 53,000 | | −215,000 |
| Total | [1] 963 | [1] 10,271,000 | 995 | 10,703,000 | +32 | +432,000 |

[1] Includes 40 positions and $550,000 to be financed by supplemental appropriation request covering the costs of Public Law 90-248, approved Jan. 2, 1968.

Average manpower estimates are as follows:

| | Man-years | | |
|---|---|---|---|
| | 1968 | 1969 | Increase or decrease |
| Permanent and temporary employees | 930 | 974 | +44 |
| Overtime equivalent | 43 | 43 | |
| Total | [1] 973 | 1,017 | +44 |

[1] Includes 68 man-years to be financed by supplemental appropriation request.

The processing of claims includes the development, adjudication and initial certification for payment of claims for regular annuities from aged or disabled workers, wives, widows, children and dependent parents; the establishment of eligibility and enrollment of individuals covered by the Railroad Retirement Act for hospital and medical insurance; handling inquiries from beneficiaries or potential beneficiaries regarding their rights under the railroad retirement system; and the performance of related activities.

As explained in the summary and highlight section, various amendments to the Social Security and Railroad Retirement Acts have had such a heavy impact on work loads of the Board that increasingly larger backlogs have developed until they now are of emergency proportions. For example, the pending load of retirement applications increased from 7,000 cases at the start of fiscal year 1966 to 11,000 cases at the start of 1967 to 23,000 cases at the start of 1968.

The work load situation became more critical with the enactment of Public Law 90–248, approved January 2, 1968, which increased benefit rates and made certain other changes in the social security system and which made some changes in the medicare program. These changes created large new work loads for the Board which included the work of providing benefit increases for approximately 388,000 of the 948,000 beneficiaries receiving monthly benefits under the railroad retirement system. The 388,000 adjustments consist of 338,000 cases to be adjusted mechanically and 50,000 cases requiring manual work. Of course, other changes in benefit provisions and the changes made in the medicare program created additional work for the Board, including the handling of the many inquiries that changes in programs generate. A supplemental appropriation of $550,000 will be needed in 1968 because of this added work.

The work load situation will become still more critical upon the almost-certain enactment of amendments to the Railroad Retirement Act which now are pending in Congress. These amendments would provide increases in benefits to the 560,000 persons who did not receive benefit increases under Public Law 90–248, provide annuities for disabled widows, and would make certain other changes in the Railroad Retirement Act. These amendments would create new work loads even larger than those stemming from Public Law 90–248 and would result in the need for still another supplemental appropriation for fiscal year 1968. Because there are practical limits on the amount of work the Board can handle in 1968, large backlogs of regular work will carry over into 1969 plus the clean up of amendment work.

The preceding tabulation shows that the manpower requirements for this activity amount to 973 man years in 1968 and 1,017 man years in 1969, or an increase of 44 man years from 1968 to 1969. Although the 1968 total includes 68 man years to be financed by an anticipated supplemental to cover the costs of work created by the 1967 amendments to the Social Security Act, it does not include the man years that will be needed to handle the even larger additional work loads that will be created by the enactment of the amendments to the Railroad Retirement Act now pending in Congress. The 1969 request will permit the Board to step up the rate of claims dispositions to the extent that it would be possible to reduce the pending load of claims to 10,000 cases by the end of that year and enable the Board to correct the deterioration of service which inevitably occurs during emergency periods such as those that have and are now confronting the Board.

The principal work loads in this activity based on legislation enacted through January 2, 1968, are as follows:

| | 1968 estimate | 1969 estimate | Increase or decrease in 1969 |
|---|---|---|---|
| Regular claims dispositions, including reopened claims | 205,000 | 220,000 | +15,000 |
| Beneficiary inquiries and contacts | 860,000 | 820,000 | −40,000 |
| Benefit rate adjustments: | | | |
| Required by Public Law 90-248 | 382,000 | 6,000 | −322,000 |
| Other adjustments | | 30,000 | +30,000 |

ACTIVITY 3. MAINTENANCE OF BENEFICIARY ROLLS

| | 1968 estimate | | 1969 estimate | | Increase or decrease | |
|---|---|---|---|---|---|---|
| | Positions | Amount | Positions | Amount | Positions | Amount |
| Personnel compensation and benefits | 80 | $603,000 | 87 | $738,000 | +7 | +$135,000 |
| Other expenses | | 956,000 | | 1,024,000 | | +68,000 |
| Computer equipment | | 52,000 | | 8,000 | | −44,000 |
| Total | 80 | 1,611,000 | 87 | 1,770,000 | +7 | +159,000 |

Average manpower estimates are as follows:

| | Man-years | | |
|---|---|---|---|
| | 1968 | 1969 | Increase or decrease |
| Permanent and temporary employees | 77 | 86 | +9 |
| Overtime equivalent | 2 | 8 | +6 |
| Total | 79 | 94 | +15 |

This activity includes the maintenance of the monthly rolls of retirement and survivor beneficiaries, payments to the Treasury Department for the cost of preparing and mailing the monthly benefit checks, and the verification of the eligibility of beneficiaries to continue to receive monthly benefits. Methods used to check on continuing eligibility include the use of annual questionnaires and a comprehensive computer program under which the Board and the Social Security Administration earmark their master tape records and periodically each agency notifies the other of the occurrence of events which would affect the benefits payable by the other agency.

Because of large new work loads created for the Board by new legislation, serious backlogs have developed in the work of verifying the eligibility of beneficiaries to continue to receive monthly benefits. Delays in policing on eligibility cause larger accumulations of overpayments. The larger the accumulation of overpayments the greater is the hardship on the beneficiary in making repayments and the greater is the possibility of losses to the trust fund where full collection is not possible.

The increase requested for this activity is to enable the Board to bring this work to a current basis. This will involve clearing up the backlog of cases to be examined under the tape exchange program for application of work restrictions and the effects of entitlement to social security benefits, clearing up work on the 1968 annual questionnaires expected to carry over into 1969 because of the heavy amendment work loads in 1968, and provide for the triennial policing of court-appointed guardian cases and foreign beneficiaries, and for handling certain other policing work involving field investigations.

The number of case folders that will require examination of some kind is expected to increase from 50,000 in 1968 to 75,000 in 1969.

The number of beneficiaries on the rolls is expected to increase from 957,000 at the end of 1968 to 965,000 at the end of 1969. The number of retired employees on the rolls who also receive supplemental annuities is expected to increase from 37,000 at the end of 1968 to 52,000 at the end of 1969. The number of persons enrolled for medicare now is 816,000 with very little change in this number expected through 1969.

ACTIVITY 4. HEARINGS AND APPEALS

| | 1968 estimate | | 1969 estimate | | Increase or decrease | |
|---|---|---|---|---|---|---|
| | Positions | Amount | Positions | Amount | Positions | Amount |
| Personnel compensation and benefits | 5 | $65,000 | 5 | $67,000 | ---- | +$2,000 |
| Other expenses | | 5,000 | | 5,000 | | |
| Total | 5 | 70,000 | 5 | 72,000 | ---- | +2,000 |

Average manpower estimates are as follows:

| | Man-years | | |
|---|---|---|---|
| | 1968 | 1969 | Increase or decrease |
| Permanent and temporary employees | 5 | 5 | |
| Overtime equivalent | | | |
| Total | 5 | 5 | |

Individuals whose claims for annuities or benefits are disallowed or who dispute the award have the right to appeal to the Board's appeals council and subsequently to the Board itself, prior to the judicial review afforded by Section 11 of the Railroad Retirement Act.

Approximately 155 appeals are expected to be handled in 1968 and in 1969 by the Board's appeals council.

ACTIVITY 5. ACTUARIAL SERVICES

| | 1968 estimate | | 1969 estimate | | Increase or decrease | |
|---|---|---|---|---|---|---|
| | Positions | Amount | Positions | Amount | Positions | Amount |
| Personnel compensation and benefits | 24 | $242,000 | 24 | $252,000 | ---- | +$10,000 |
| Other expenses | | 30,000 | | 24,000 | ---- | −6,000 |
| Computer equipment | | 2,000 | | 1,000 | ---- | −1,000 |
| Total | 24 | 274,000 | 24 | 277,000 | ---- | +3,000 |

Average manpower estimates are as follows:

| | Man-years | | |
|---|---|---|---|
| | 1968 | 1969 | Increase or decrease |
| Permanent and temporary employees | 23 | 23 | |
| Overtime equivalent | | | |
| Total | 23 | 23 | |

This activity includes the work of preparing actuarial valuations of assets and liabilities of the railroad retirement system as required by law; preparing projections, cost estimates, and other reports relating to the existing benefit program as well as proposed amendments to either the Railroad Retirement Act or the Social Security Act; and conducting studies for the financial interchange with the social security system. These latter studies determine the amounts for transfer between the social security trust funds and the Railroad retirement account to place each trust fund in the same position in which it would have been if employment under the Railroad Retirement Act after December 31, 1936, had been employment under the Social Security Act from that date. The importance of these studies, which are required annually, can best be realized from

the fact that hundreds of millions of dollars are involved in the financial interchanges.

The files of statistical data compiled for analytical and actuarial purposes also have great administrative value. They have been used to give rapid effect to changes in benefits under amendments and to identify those beneficiaries who come under the several policing programs. The savings accruing to the Board over the years from these files have been very great.

No change is expected in man-year requirements from 1968 to 1969.

ACTIVITY 6. ADMINISTRATION

| | 1968 estimate | | 1969 estimate | | Increase or decrease | |
|---|---|---|---|---|---|---|
| | Positions | Amount | Positions | Amount | Positions | Amount |
| Personnel compensation and benefits | 96 | $965,000 | 96 | $986,000 | ---- | +$21,000 |
| Other expenses | ---- | 181,000 | ---- | 187,000 | ---- | +6,000 |
| Computer equipment | ---- | 25,000 | ---- | 3,000 | ---- | −22,000 |
| Total | 96 | 1,171,000 | 96 | 1,176,000 | ---- | +5,000 |

Average manpower estimates are as follows:

| | Man-years | | |
|---|---|---|---|
| | 1968 | 1969 | Increase or decrease |
| Permanent and temporary employees | 95 | 95 | ---- |
| Overtime equivalent | 1 | 1 | ---- |
| Total | 96 | 96 | ---- |

This activity embraces the functions of executive direction and general administration, including activities such as personnel, fiscal property management, budgeting, administrative planning and control, and other similar activities.

No change is expected in man-year requirements from 1968 to 1969.

ACTIVITY 7. CONTINGENCY RESERVE

| | 1968 estimate | 1969 estimate | Increase or decrease |
|---|---|---|---|
| Undistributed | ---- | $100,000 | +$100,000 |
| Total contingency reserve | ---- | 100,000 | +100,000 |

This activity provides a contingency reserve for use only to the extent necessary to process work loads not anticipated in the budget estimates. The need for a contingency reserve is especially important in 1969 because of the difficulty in estimating the amount of new amendment work which will fall into 1968 and the amount which will fall into 1969.

TRIBUTE TO SENATOR HILL

Senator HILL. Now the Railroad Retirement Board, Mr. Habermeyer.

Mr. HABERMEYER. Mr. Chairman, this is the 12th year that I have had the privilege and pleasure of appearing before you.

I would like to add my word of thanks for the kind consideration you and this committee have given the Railroad Retirement Board over these years.

I was instructed by the other two members, Mr. T. M. Healey and Mr. A. E. Lyon, to add their thanks to the ones I am offering.

Senator HILL. Thank you. You express my appreciation to them for their fine help and cooperation.

Mr. HABERMEYER. Yes, sir. I am sure I am speaking, too, for the people in the railroad industry, especially those covered by the Retirement Act who have always had kind consideration from you as chairman.

### ADMINISTRATION OF RETIREMENT SYSTEMS FOR RAILROAD EMPLOYEES SUPPLEMENTAL ANNUITY AND UNEMPLOYMENT AND SICKNESS BENEFIT

Mr. Chairman and members of the committee, the Railroad Retirement Board administers a regular retirement system for the payment of retirement and disability annuities to railroad employees, annuities to their spouses, and benefits to their survivors.

The Board also administers a system for the payment of supplemental annuities to career railroad employees who were awarded retirement annuities after June 1966.

These supplemental annuities are paid to employees aged 65 and over who retire directly from railroad service after completing 25 or more years of service and are in addition to their regular annuities.

The Board also administers a system for the payment of unemployment and sickness benefits to qualified railroad workers and an employment service for placing unemployment benefit claimants in jobs.

In addition, the Board participates in the administration of the hospital and medical insurance programs for persons covered by the Railroad Retirement Act.

### ORGANIZATIONAL STRUCTURE OF THE RAILROAD RETIREMENT BOARD

The Board is composed of three members appointed by the President by and with the advice and consent of the Senate—one upon the recommendation of representatives of employees, one upon recommendation of representatives of carriers, and one, the Chairman, without designated recommendation.

The Board's administrative organization is designed to integrate the administration of the programs conducted by the Board without duplication of facilities or operations.

### FINANCING

#### EMPLOYER CONTRIBUTIONS AND EMPLOYEE AND EMPLOYER TAXES

The unemployment and sickness insurance system is financed by contributions paid wholly by employers. Of the total contributions paid for this purpose, the portion represented by 0.25 percent of the taxable payroll is permanently appropriated to the Board to cover the administrative costs of the system, with the remainder being credited to the railroad unemployment insurance account in the unemployment trust fund for the payment of benefits.

The regular railroad retirement program is financed by taxes paid equally by railroad workers and employers. The railroad retirement account is credited with the taxes and annuity payments are made from the account.

### Administrative Expenses

The amounts needed for administrative expenses, as authorized by Congress, are derived from this trust fund.

The supplemental annuity program is financed by a tax paid by employers of 2 cents for each man-hour for which they pay compensation.

This tax is deposited in a separate trust account titled "Railroad retirement supplemental account" from which the supplemental annuities are paid.

The amounts needed for administrative expenses of this program, as authorized by Congress, are derived from this trust fund.

## EFFECT OF RECENT LEGISLATION ON WORKLOADS OF THE BOARD

Operations of the Board have been affected very materially by various legislation enacted by Congress in the last several years.

Legislation which affects Board operations includes not only amendments to the Railroad Retirement Act but also amendments to the Social Security Act.

Higher cash benefits under the Social Security Act automatically result in higher cash benefits to some railroad retirement beneficiaries under a guarantee provision in the Railroad Retirement Act which provides that railroad retirement benefits must be at least 10 percent higher than the amount the social security system would pay.

Also, the medicare program requires the Board's participation in its administration with respect to persons covered by the railroad retirement system.

The recent laws creating large new workloads for the Board include the Social Security Act Amendments of 1965, which increased cash benefits under the social security system and established the medicare program; the Railroad Retirement Act Amendments of 1965, which provided benefits to certain spouses not previously eligible and made other changes in the railroad retirement system; the RRA Amendments of 1966, which provided increases in regular railroad retirement benefits to persons who did not receive increases under the SSA Amendments of 1965, and which established a new system of supplemental railroad retirement benefits; the RRA Amendments of 1966, which provided benefits to full-time students and made other changes in the railroad retirement system; the SSA Amendments of 1967, which increased cash benefits and made other changes in the social security system and made various changes in the medicare program; and finally the RRA Amendments of 1968, which increased cash benefits to those railroad retirement beneficiaries who did not receive increases arising from the SSA Amendments of 1967, and which provided benefits to disabled widows and made other changes in the railroad retirement system.

### Workload Increases

This series of laws has created workloads of such overwhelming proportions that backlogs of work have kept increasing until they now are of emergency proportions.

For example, the pending load of retirement applications increased from 7,000 cases at the start of fiscal year 1966 to 11,000 cases at the start of 1967 to 23,000 cases at the start of 1968.

In addition to this large backlog of regular claims work, a large amount of work has accumulated relating to checking on the eligibility of beneficiaries to continue to receive benefits.

Delays in handling this work result in delays in the disclosure of disqualifying events causing larger accumulations of overpayments for subsequent collection, which increases the hardship to beneficiaries and reduces the Board's chances of making full recovery.

To sum up the workload situation, the Board is confronted with the task of dealing with large backlogs of work carried over into 1968; the task of handling the normal influx of regular work; the task of processing the large amount of additional work created by the 1967 amendments to the Social Security Act; and the task of processing large amounts of still additional work created by the 1968 amendments to the Railroad Retirement Act.

### Supplemental Request, 1968

Of course, supplemental appropriations have been requested for fiscal year 1968 to handle as much of the work created by new legislation as it will be possible to perform, and at the same time to keep backlogs in regular work from getting completely out of hand.

### Current Backlogs

However, there are practical limits on the amount of work the Board can handle in a given period of time.

Thus, large backlogs can be expected to carry over into 1969, and provision has been made in our appropriation request for 1969 to reduce these backlogs and to restore service to beneficiaries to acceptable standards of performance.

## ADMINISTRATIVE EXPENSE REQUIREMENTS OF RAILROAD RETIREMENT SYSTEM

For fiscal year 1968, the present limitation on the amounts that may be expended for the administrative expenses of the railroad retirement system is established at $12,850,000.

The President's budget for 1969 forecast the need for a supplemental appropriation request of $974,000 for 1968 to provide $362,000 for increased pay costs and $62,000 for increased postage costs under Public Law 90–206, and to provide $550,000 needed to administer the increased work loads created by the 1967 amendments to the Social Security Act.

Subsequently, the enactment by Congress of the amendments to the Railroad Retirement Act on February 15, 1968, created large new added workloads which increased supplemental appropriation needs for 1968 by an additional $650,000.

Recently, the President transmitted to Congress a supplemental appropriation request of $1,624,000 for 1968, which includes the additional amount needed because of the 1968 amendments to the Railroad

Retirement Act. The enactment of this supplemental request would increase the limitation for 1968 to $14,474,000.

For fiscal year 1969, the Board requests that the limitation on the administrative expenses of the railroad retirement system be established in the amount of $14,490,000.

If related to 1968 total requirements of $14,474,000, the 1969 request represents a minor increase of $16,000 from 1968 to 1969.

The enactment of the appropriation amount of $14,490,000 for 1969 will enable the Board to clear up the large backlogs of regular work, amendment work, and policing work carrying over from 1968 to 1969 and to restore service to proper levels of performance.

Of course, the amounts needed for the administrative expenses of the railroad retirement system are derived from trust funds.

PAYMENTS TO RAILROAD RETIREMENT ACCOUNT FOR MILITARY SERVICE CREDITS

Railroad workers entering military service may have such service credited toward benefits under the railroad retirement system under certain conditions.

An appropriation of $18,446,000 is requested to pay the fifth of 10 yearly installments on the amount due the railroad retirement account for creditable military service for the period through June 30, 1963.

Thank you very much, Mr. Chairman.

Senator HILL. You have a rather tight situation yourself.

Mr. HABERMEYER. We certainly have. There have been so many amendments that cause additional work.

Senator HILL. More and more work and not the funds to push along. It makes it tight, does it not?

Mr. HABERMEYER. Yes, sir.

Senator HILL. How much did you request?

Mr. HABERMEYER. We requested about a quarter of a million dollars more from the Bureau of the Budget than they gave us initially but subsequently we agreed on the figure that we have here now.

Senator HILL. You aren't too happy?

Mr. HABERMEYER. Well, we had our differences but we agreed on the figure in this request.

Senator HILL. Is there anything you gentlement would like to add?

Mr. HABERMEYER. No, sir.

Senator HILL. I want to thank you, sir, for your very kind remarks and kind help and cooperation you have given this committee.

Mr. HABERMEYER. Thank you again for your consideration, sir.

Senator HILL. We deeply appreciate it.

# FEDERAL MEDIATION AND CONCILIATION SERVICE

STATEMENT OF WILLIAM E. SIMKIN, DIRECTOR
ACCOMPANIED BY:
ROBERT H. MOORE, DEPUTY DIRECTOR
WILLOUGHBY ABNER, SPECIAL ASSISTANT TO THE DIRECTOR
L. E. EADY, DIRECTOR, ADMINISTRATIVE MANAGEMENT
JAMES J. DINNENY, ASSOCIATE DIRECTOR, ADMINISTRATIVE MANAGEMENT
GUY MARINO, CHIEF, BUDGET AND FINANCE DIVISION

## Appropriation Estimate

### Federal Mediation and Conciliation Service

#### SALARIES AND EXPENSES

For expenses necessary for the Service to carry out the functions vested in it by the Labor-Management Relations Act, 1947 (29 U.S.C. 171–180, 182), including expenses of the Labor-Management Panel as provided in section 205 of said Act; expenses of boards of inquiry appointed by the President pursuant to section 206 of said Act; temporary employment of arbitrators, conciliators, and mediators on labor relations at rates not in excess of $100 per diem; rental of conference rooms in the District of Columbia; and Government-listed telephones in private residences and private apartments for official use in cities where mediators are officially stationed, but no Federal Mediation and Conciliation Service office is maintained; [$7,425,000.] *$8,090,000.*

COMPARATIVE BUDGET ESTIMATE—FISCAL YEAR 1969 OVER FISCAL YEAR 1968

| Description | Fiscal year 1968 | | Fiscal year 1969 | | Increase (+) or decrease (—) over 1968 estimate | |
|---|---|---|---|---|---|---|
| | Positions | Amount | Positions | Amount | Positions | Amount |
| Personnel compensation: | | | | | | |
| Office of the Director | 4 | $72,385 | 4 | $73,406 | ..... | +$1,021 |
| Office of the Deputy Director | 7 | 115,139 | 9 | 140,884 | +2 | +25,745 |
| Office of Disputes | 11 | 178,756 | 11 | 180,820 | ..... | +2,064 |
| Office of Public Relation and Training | 4 | 56,875 | 4 | 57,734 | ..... | +859 |
| Office of General Counsel | 7 | 65,361 | 7 | 66,304 | ..... | +943 |
| Office of Administrative Management | 38 | 333,830 | 38 | 336,992 | ..... | +3,162 |
| Total departmental | 71 | 822,346 | 73 | 856,140 | +2 | +33,794 |
| Total field | 375 | 5,336,168 | 392 | 5,610,106 | +17 | +273,938 |
| Total permanent | 446 | 6,158,514 | 465 | 6,466,246 | +19 | +307,732 |
| Pay above the stated annual rate | ..... | ..... | ..... | 24,000 | ..... | +24,000 |
| Lapses | −2 | −128,014 | −4 | −111,246 | −2 | +16,768 |
| Net savings due to lower pay scales for part of year | ..... | −66,500 | ..... | ..... | ..... | +66,500 |
| Net permanent | 444 | 5,964,000 | 461 | 6,379,000 | +17 | +415,000 |
| Part time and temporary | ..... | 40,000 | ..... | 86,000 | ..... | +46,000 |
| Payment above basic rates | ..... | 6,000 | ..... | 6,000 | ..... | ..... |
| Total personnel compensation | ..... | 6,010,000 | ..... | 6,471,000 | ..... | +461,000 |

COMPARATIVE BUDGET ESTIMATE—FISCAL YEAR 1969 OVER FISCAL YEAR 1968—Continued

| Description | Fiscal year 1968 | | Fiscal year 1969 | | Increase (+) or decrease (−) over 1968 estimate | |
|---|---|---|---|---|---|---|
| | Positions | Amount | Positions | Amount | Positions | Amount |
| Other objects: | | | | | | |
| Personal benefits | | $471,000 | | $514,000 | | +$43,000 |
| Travel and transportation of persons | | 519,000 | | 600,000 | | +81,000 |
| Transportation of things | | 22,000 | | 25,000 | | +3,000 |
| Rent, communications and utilities | | 312,000 | | 346,000 | | +34,000 |
| Printing and reproduction | | 9,000 | | 10,000 | | +1,000 |
| Other services | | 48,000 | | 60,000 | | 12,000 |
| Supplies and materials | | 34,000 | | 36,000 | | +2,000 |
| Equipment | | 12,000 | | 28,000 | | +16,000 |
| Total other objects | | 1,427,000 | | 1,619,000 | | +192,000 |
| Total obligations | | 7,437,000 | | 8,090,000 | | +653,000 |
| Financing: | | | | | | |
| Appropriation | | 7,425,000 | | 8,090,000 | | +665,000 |
| Transfer to "Operating Expenses, Public Building Service," General Services Administration (80 Stat. 674) | | −14,000 | | | | +14,000 |
| Appropriation (adjusted) | | 7,411,000 | | 8,090,000 | | +679,000 |
| Proposed supplemental for pay increases | | 26,000 | | | | −26,000 |
| Total obligations | | 7,437,000 | | 8,090,000 | | +653,000 |
| Comparative estimate by activities: | | | | | | |
| 1. Mediation and conciliation of labor disputes | | 6,133,000 | | 6,390,000 | | +257,000 |
| 2. Ad hoc boards, panels, mediators, and consultants | | 35,000 | | 125,000 | | +90,000 |
| 3. Administration | | 1,269,000 | | 1,575,000 | | +306,000 |
| Total program costs, funded | | 7,437,000 | | 8,090,000 | | +653,000 |
| Change in selected resources | | | | | | |
| Total obligations | | 7,437,000 | | 8,090,000 | | +653,000 |

PROGRAM AND FINANCING (IN THOUSANDS OF DOLLARS)

| | | 1967 actual | 1968 estimate | 1969 estimate |
|---|---|---|---|---|
| | Program by activities: | | | |
| | 1. Mediation and conciliation of labor disputes | 5,897 | 6,133 | 6,390 |
| | 2. Ad hoc boards, panels, mediators, and consultants | 35 | 35 | 125 |
| | 3. Administration | 1,224 | 1,269 | 1,575 |
| | Total program costs, funded | 7,156 | 7,437 | 8,090 |
| | Change in selected resources [1] | 19 | | |
| 10 | Total obligations | 7,175 | 7,437 | 8,090 |
| | Financing: | | | |
| 25 | Unobligated balance lapsing | 22 | | |
| | New obligational authority | 7,197 | 7,437 | 8,090 |
| | New obligational authority: | | | |
| 40 | Appropriation | 7,210 | 7,425 | 8,090 |
| 41 | Transferred to other accounts | −13 | −14 | |
| 43 | Appropriation (adjusted) | 7,197 | 7,411 | 8,090 |
| 44 | Proposed supplemental for civilian pay act increases | | 26 | |
| | Relation of obligations to expenditures: | | | |
| 71 | Total obligations (affecting expenditures) | 7,175 | 7,437 | 8,090 |
| 72 | Obligated balance, start of year | 327 | 411 | 450 |
| 74 | Obligated balance, end of year | −411 | −450 | −530 |
| 77 | Adjustments in expired accounts | −12 | | |
| 90 | Expenditures excluding pay increase supplemental | 7,079 | 7,373 | 8,009 |
| 91 | Expenditures from civilian pay act supplemental | | 25 | 1 |
| | Expenditures are distributed as follows: | | | |
| 01 | Out of current authorizations | 6,752 | 6,987 | 7,560 |
| 02 | Out of prior authorizations | 327 | 411 | 450 |

[1] Selected resources as of June 30, are as follows: Unpaid undelivered orders, 1966, $16,000 (1967 adjustments, −$12,000); 1967, $23,000; 1968, $23,000; 1969, $23,000.

INTRODUCTION

The primary function of the Service is to minimize industrial conflict and help the parties reach agreement without work stoppages. Three distinct but interrelated activities contribute to this purpose:

A. Dispute mediation;
B. Preventive mediation; and
C. Arbitration service.

*Dispute mediation* is concerned with rendering assistance to the parties, when needed, in connection with the negotiation or renegotiation of a collective bargaining agreement. It is frequently referred to as "crisis" mediation. Usually the mediator does not enter the negotiations unless an impasse appears likely or has been reached and the possibility of a work stoppage looms.

In *preventive mediation* the major purpose of the Service's activity is the long term improvement of the labor-management relationship. The technique is to encourage the parties in discussion of their problems away from and without the tensions of a strike deadline. This continuous dialogue approach is a highly significant development in labor-management relations that has become more prevalent in recent years and will be needed even more in the immediate future. The Service believes strongly that the potential for minimizing industrial tensions through preventive mediation and related programs is a very close second in priority to disputes mediation. *Arbitration* is a widely accepted process utilized by labor and management as a method for solving problems that arise out of the terms and during the life of the collective bargaining agreement. It is the terminal point of the grievance procedure. Its acceptance by the parties results in settlement of grievances and other disputes without resort to work stoppages.

The Service contributes to this process by making available to the parties names of skilled arbitrators from which the parties select individuals to hear and decide the issues in dispute. The parties pay the arbitrator's fee and other related expenses.

SUMMARY OF 1969 ESTIMATE

Throughout the current year and in fiscal year 1969:

(1) The Service will continue to give concentrated priority attention to disputes involving military production and procurement in support of the Vietnam war.

(2) It will work to reduce current tensions in labor-management relations by urging more positive collective bargaining in major negotiations with due recognition of the public interest.

(3) It will, through its preventive mediation activity, continue to assist the parties and to urge on them the need for devising new approaches to meet the complex bargaining problems arising from rapid industrial and technological change.

(4) It will, through its arbitration service, assist in the resolution of grievances and other problems that arise out of the terms of existing collective bargaining agreements.

A total appropriation of $8,090,000 is proposed for the budget year. This estimate will provide funds for:

(a) A national office staff of 73 positions, an increase of 2 over the current year.

(b) Seven regional and seven assistant regional director positions, no change from fiscal 1968.

(c) A mediator complement of 280 positions, an increase of 14 over the current year.

(d) A regional and field office administrative, stenographic, and clerical staff of 98 positions, an increase of 3 over the current year.

(e) An increase in total budgeted permanent positions from 446 in the current fiscal year to 465 in the budget year, a total increase of 19 positions.

IMPACT OF H. J. RESOLUTION 888 (PUBLIC LAW 90–218)

Under the terms of Joint Resolution 888, approved by the President December 18, 1967, the Service was required to reduce its obligations for the current fiscal year (1968) by $185,900. This amount, in effect, had to be saved out of the appropriation of $7,425,000 as passed by Congress.

Subsequently, on instructions from the Budget Bureau the $185,900 was earmarked for and applied to the cost of the federal employee pay increase which became effective retroactively to October 1, 1967 (total cost $211,700). The Budget Bureau, presumably, will seek Congressional authorization for application of this amount to the pay increase cost. Accordingly, the 1968 column of the Service's budget proposal for fiscal year 1969 reflects this situation.

In several discussions with Budget Bureau Officials, it was agreed that there should be no permanent reduction in the level of the Service's mediation function as a result of H. J. Resolution 888. This conclusion was reached because of the general outlook for increasing strife in labor-management relations and the special vital need for prompt and effective mediation of labor disputes in production areas related to the Vietnam conflict.

The 1969 budget proposal, therefore, is premised on two major factors:

1. It restores the mediation program to the 1968 level as approved by Congress *before* the $185,900 reduction took effect under H. J. Resolution 888.

The following areas are affected by this restoration:

| | |
|---|---|
| Personal services and benefits | $77,000 |
| Travel | 62,000 |
| Communications | 17,900 |
| Equipment | 15,000 |
| All other | 14,000 |
| Total | 185,900 |

2. The estimate further provides in 1969 an additional program increase of 15 mediator type positions and 4 secretarial positions over and above the restored program level of 1968.

COMPARISION OF DISPUTES MEDIATION WORKLOAD (NUMBER OF CASES EXCLUSIVE OF PREVENTIVE ACTIVITY)—FISCAL YEARS 1963-67 AND 1ST 6 MONTHS OF FISCAL YEAR 1968

| | 1963 (A) | 1964 (B) | 1965 (C) | 1966 (D) | 1967 (E) | 1968 (F) |
|---|---|---|---|---|---|---|
| A. Case totals: | | | | | | |
| 1. In process start of year | 4,900 | 5,014 | 5,281 | 5,472 | 4,781 | 5,035 |
| 2. Assignments | 19,987 | 20,797 | 21,262 | 20,230 | 19,602 | 9,219 |
| 3. Total workload | 24,887 | 25,811 | 26,543 | 25,702 | 24,383 | 14,254 |
| 4. In process end of year | 5,014 | 5,281 | 5,472 | 4,781 | 5,035 | 4,314 |
| 5. Cases closed | 19,873 | 20,530 | 21,071 | 20,921 | 19,348 | 9,940 |
| B. Analysis by types of mediation activity: | | | | | | |
| 1. Joint conference cases | 7,013 | 7,221 | 7,445 | 7,836 | 7,193 | 3,644 |
| 2. Separate conference cases | 338 | 324 | 316 | 300 | 284 | 116 |
| 3. No conference cases | 10,772 | 11,208 | 11,283 | 11,048 | 9,970 | 5,337 |
| 4. No mediation activity | 1,750 | 1,777 | 2,027 | 1,737 | 1,901 | 843 |
| 5. Cases closed | 19,873 | 20,530 | 21,071 | 20,921 | 19,348 | 9,940 |
| C. Joint meetings conducted | 22,404 | 23,399 | 25,183 | 26,530 | 25,749 | 12,646 |
| D. Separate meetings conducted | 3,019 | 3,097 | 3,268 | 3,713 | 3,631 | 1,967 |

PREVENTIVE MEDIATION—SUMMARY, FISCAL YEAR 1967

| Region | Carry-over fiscal year 1966 | New assign-ments | Total cases, fiscal year 1967 | Can-celed, fiscal year 1967 | Closed, fiscal year 1967 | Carry-over, fiscal year 1968 | Defense | Incidence of types of activity in assigned cases: Joint committee | Train-ing | Cons. liaison |
|---|---|---|---|---|---|---|---|---|---|---|
| 1 | 40 | 102 | 142 | [1] 8 (2) | 77 | 59 | 38 | 64 | 19 | 132 |
| 2 | 41 | 118 | 159 | 5 | 113 | 41 | 58 | 34 | 58 | 147 |
| 3 | 35 | 74 | 109 | ..... | 61 | 48 | 22 | 51 | 13 | 106 |
| 4 | 41 | 101 | 142 | [1] 1 | 103 | 39 | 45 | 43 | 41 | 135 |
| 5 | 45 | 256 | 301 | ..... | 240 | 61 | 78 | 85 | 88 | 295 |
| 6 | 43 | 131 | 174 | 6 | 97 | 71 | 42 | 69 | 57 | 167 |
| 7 | 40 | 108 | 148 | 10 | 91 | 47 | 40 | 58 | 46 | 133 |
| Totals | 285 | 890 | 1,175 | 30 | 782 | 366 | 323 | 404 | 322 | 1,115 |

[1] Case numbers not assigned.

PREVENTIVE MEDIATION—CASE WORKLOAD DATA, FISCAL YEAR 1967

| Region | Number mediators (average) | Number cases assigned | Case average (per mediator) | Activities total time [1] (days) | Man-days average [1] (per mediator) |
|---|---|---|---|---|---|
| 1 | 40.4 | 142 | 3.5 | 585 | 14.5 |
| 2 | 28.7 | 159 | 5.5 | 425 | 14.8 |
| 3 | 26.2 | 109 | 4.1 | 270 | 10.3 |
| 4 | 41.0 | 142 | 3.5 | 491 | 12.0 |
| 5 | 46.1 | 301 | 6.5 | 815 | 17.7 |
| 6 | 33.0 | 174 | 5.3 | 635 | 19.3 |
| 7 | 38.6 | 148 | 3.8 | 651 | 16.9 |
| Total | 254.0 | 1,175 | 4.6 | 3,872 | 15.2 |

[1] These data result from hand tally of all closed cases, which constitute the majority of the fiscal year 1967 workload, and an estimate of the remainder.

Note: Average number of cases per region, 168.

ARBITRATION WORKLOAD—PROCESSING REQUESTS FOR PANELS

| | Fiscal year | | | | | | |
|---|---|---|---|---|---|---|---|
| | 1961 | 1962 | 1963 | 1964 | 1965 | 1966 | 1967 |
| Number of requests received | 3,174 | 3,548 | 4,279 | 4,791 | 5,048 | 5,654 | 6,955 |
| Number of panels issued | 3,347 | 3,808 | 4,497 | 5,172 | 5,453 | 6,255 | 7,623 |
| Number of selections made by the parties | 2,185 | 2,303 | 2,719 | 3,142 | 3,286 | 3,386 | 3,953 |
| Number of direct appointments made by the Service at request of the parties | 46 | 52 | 38 | 40 | 47 | 44 | 42 |

*Disputes mediation* workload does not show a marked statistical increase. The two most significant lines are B.1. (Joint Conference Cases) and C (Joint Meetings Conducted). Both of these totals would have been appreciably higher in fiscal 1967 and for the first half of fiscal 1968 if it were not for the fact that the Service has exercised tighter screening to reduce small cases and grievance cases as part of our program to give ever-increasing priority to defense related and other significant disputes.

A very important fact is that these statistics do not include work performed on a case until it is concluded. On December 31, 1967, our cases in process were *14.6% higher* than on December 31, 1966. Work performed on those pending cases (4,314 in number) in calendar year 1967 will not show up in the data until the cases are closed in calendar 1968.

*Preventive mediation* data are not available for fiscal 1966 and earlier years. However, the extremely significant increase of preventive work is highlighted by the fact of 1,175 cases in fiscal 1967 in contrast to 922 cases in fiscal 1966, *an increase of 27.4%*. Moreover, careful case-by-case analysis shows that the average case is increasingly more meaningful to the parties and to the economy.

Preventive activity for the first half of fiscal 1968 shows a further *11.2% increase* above the comparable figures for the first half of fiscal 1967.

The consistent substantial growth of the *arbitration* workload is readily apparent. This growth continues. The first half of fiscal 1968 (Number of Requests Received) is *18.7% above* the first half of fiscal 1967.

MEDIATOR ACTIVITY

Data now available make it possible to present better "per mediator" work load measures than has been the case in the past.

The data for fiscal year 1967, translated into an *average mediator* year may be summarized as follows:

| | *Days* |
|---|---|
| Days utilized in joint meetings with the parties—active cases only | 110 |
| Days utilized in active participation in preventive mediation cases | 15 |
| Days at FMCS seminars, regional conferences and workshops | 8 |
| Total | 133 |

In short, 133 average working days in the year were accounted for directly by the above items.

Assuming, for the moment, a normal five-day work week and allowing for annual leave, holidays and average sick leave taken, approximately 220 work days are available.

This means that 133 out of 220 works days or about 60 percent of the work year is accounted for by the three items enumerated above.

Time requirements for the following very important tasks must be added:

1. The very considerable amount of travel involved in servicing active dispute and preventive mediation cases in an industrial area.
2. Preparation outside of conferences, and separate consultations in person and by telephone outside the meeting rooms in active (joint meeting) disputes cases.
3. Extensive contacts, in person and by telephone, in assigned disputes cases that do not require joint meeting services of the mediator (these cases exceed the joint meeting cases by a 2–1 ratio).
4. Reporting of both types of disputes cases (2 and 3 above).
5. Frequent necessary "waiting time" between joint meetings in the more important disputes cases where the time intervals are uncertain and/or so short as to prevent "working in" another active joint meeting case.
6. Preparation for preventive mediation cases and consultations in person and by telephone outside the meeting rooms in the active cases as well as in many other cases that do not become active.
7. Reporting of preventive mediation cases.
8. Public relations activities (speeches, conference attendance, etc.) that are not associated with specific disputes or preventive mediation cases.
9. Keeping up with current labor relations developments by reading available literature and reports and by consultation with other mediators and other labor relations personnel, aside from the more formal seminars and other training programs. This is essential if a mediator is to do a competent job.

These nine necessary activities for which specific time accounting is not available more than account for the remaining 40 percent of a normal work year.

In fact, it is not an overstatement to indicate that these non-recorded activities should and often do account for as much time, in total, as the recorded activities.

How is it possible to account for more time than is available in a normal work year?

The answer to that question is in several parts:

1. Especially during the "heavy" portion of the yearly disputes cycle, a typical mediator day on disputes is considerably longer than a normal work day.
2. Much of the preventive mediation work is performed at night after a regular day's work on other cases.
3. Much mediator time is worked on Saturdays, Sundays or holidays.

We can say with assurance that mediator "productivity" cannot seriously be challenged. In fact, since the figures cited are averages, those mediators with the heaviest work loads are being substantially overworked, sometimes to the point of hazard to health. Even with the best of administration and management, it is not possible to distribute the work load equally among 266 men with such a wide geographical dispersion.

### ECONOMIC BENEFITS ACCRUING FROM EFEECTIVE MEDIATION

There are no precise measurements for evaluating mediation effectiveness or for computing the economic benefits which result from a work stoppage that is averted or shortened through mediation. Each year, however, the Service receives hundreds of letters from representatives of both labor and management testifying to the effectiveness, in specific situations, of the assistance given the parties in their negotiations. These letters are acknowledged and filed. They are not made public. In sum, they constitute a reliable but non-statistical measurement of mediation, competently and effectively rendered.

It is possible, however, to make some rough estimates based on available data.

Direct cost benefits to the parties due to effective disputes mediation can be estimated as follows:

*A. Wage Losses Eliminated or Minimized*

1. In fiscal year 1967, strike deadlines were postponed after mediator requests in 1509 instances. In 1201 of these cases, involving 525,343 employees, the addi-

tional time and intensive mediation prevented any strikes from developing. The potential strike time loss avoided in these 1201 cases was 9,928,182 man-days, calculated by use of the BLS average of 18.9 days per strike. Discounting the figure by 50 percent on the basis that some postponements and subsequent settlements would have occurred without a mediator or that strike duration would have been less than the BLS average, a conservative figure of 4,194,491 man-days is estimated.

2. In fiscal year 1967, 4100 additional active cases were closed by FMCS mediators without strikes and without the necessity of postponement of strike deadlines. It is a conservative estimate that strikes would have occurred in 1000 of these cases absent mediator assistance, and that the work time lost would have been at least 4,000,000 man-days.

3. Actual strike time losses are minimized by mediator assistance. Going back to BLS data for 1965 only for purposes of greater accuracy (Bulletin No. 1525), Federal mediators participated in 1,683 strike cases, involving a total of 20,160,000 man-days of idleness.

Assuming that these strikes would have persisted for three working days longer in the absence of mediator assistance (a conservative estimate), 2,634,000 man-days of additional idleness were avoided.

4. Actual strike prevention due to preventive mediation activity is impossible to validate precisely but it is a conservative estimate that "early bird" contracts and the positive effects of the wide variety of FMCS preventive activity saved at least 500,000 man-days of potential strikes.

5. Estimated total yearly strike time avoided is:

| | *Man-days* |
|---|---|
| a. Cases settled without strikes where deadline postponement was involved | 4,964,491 |
| b. Cases settled without strikes prior to deadline | 4,000,000 |
| c. Strike time losses shortened | 2,634,000 |
| d. Results of preventive mediation activity | 500,000 |
| Total | 12,098,491 |

| | |
|---|---|
| At $22 per day (a figure used by BLS in appraising wages lost due to industrial accidents in 1965), the estimated annual wage losses avoided due to mediation are | $266,166,802 |
| "Rounded off" to | 266,000,000 |

*B. Company Profits Saved by Effective Mediation*

As a conservative estimate, company profits preserved by avoidance of strikes and limiting the duration of strikes (items discussed in A above) were at least half the estimated wage losses or $133,000,000.

*C. Offsets*

Some strike time losses are recovered by workers after a strike has terminated—sometimes at overtime rates.

Likewise, some lost company profits are recovered subsequently.

Assuming 50 percent recovery, the total savings to the economy would be about one-half of the sum of $266,000,000 and $133,000,000 or about $200,000,000.

We do believe it is conservative to conclude that the Federal government expenditure of $7,175,000 for fiscal year 1967 for the FMCS budget saved at least $200,000,000 to the parties involved.

*D. Effect on Taxes*

It is also very pertinent to note that taxes accruing to the Federal government (individual worker income taxes and corporate taxes) by reason of the work of the FMCS far exceeded the FMCS budget.

## FUTURE OUTLOOK AND WORK PROGRAM FOR FISCAL YEAR 1969

1. *The Vietnam war.*—The requirements and needs of the military forces in Vietnam make it essential that there be no significant impairment in the flow of arms and supplies to our forces. The closest liaison and working relationship exists between the Service and the military agencies both in the national and regional offices, and priority mediation is given to cases involving military production or procurement.

To date, no labor dispute within FMCS jurisdiction has caused any important impairment of the flow of arms and supplies to the armed forces. This high priority concentration on dispute situations involving defense production marks the mediation program as one of highest priority. It will continue so. The alternative, if a serious breakdown of defense production occurs through work stoppages, is the establishment of machinery comparable to the War Labor Board in World War II. The budgetary cost of such procedures would make the FMCS budget look insignificant. Nor would such procedures be desirable on other counts.

2. *Current labor-management unrest.*—The current turmoil in labor management relations can be explained by a number of factors in combination.

After almost seven years of relative industrial peace disputes increased and became more difficult beginning early in calendar year 1966.

Record profits, the substantial increase in the BLS Consumer Price Index (3.3 percent in 1966 and probably 3.1 percent in 1967), and a tight labor market in many areas for other than lowest level of unskilled worker, created a situation in which labor felt it was being "shortchanged." The reaction has been a show of belligerence by labor unions determined to get "more," to keep pace with or ahead of rising living costs and to increase their relative share of the "economic pie." Further aggravating the situation is the fact that in the highly unionized industrial centers the push for "more" is coming especially from the skilled workers. This group is resentful of some alleged erosion of their preferred status by the leveling effect of years of industrywide across-the-board type pay increases, punctuated by occasional special increases for skilled workers but considered by them to be inadequate.

Employers, meanwhile, concerned by some recent profit downturns and by some slack in several key sectors of the economy (manufacturing plants were operating at only 84 percent of capacity in July 1967—the lowest ratio since 1962), have taken a more hard-boiled stance with the unions and more and more are willing to take strikes rather than capitulate to union demands that the employers consider to be excessive.

Employers, further, are tending more than ever to adopting "united front" strategy, to developing "mutual aid" arrangements, and resorting on occasion to the use of the lockout as a defensive weapon against union efforts to pick off one company at a time.

Unions are increasing their technique of coalition or coordinated bargaining. This procedure is by no means new but it came into prominence in the 1966 contract negotiations involving General Electric and Westinghouse Corporations. The AFL-CIO Industrial Union Department, which is developing the coalition movement, has established more than 70 interunion committees in the past two years. For example, this union bargaining procedure and employer resistance to it is complicating the current copper strike. The coalition process may well become a major bargaining development in the future as large corporations continue to spread and diversify their operations, through mergers and amalgamations, over broader sectors of the economy.

Further complicating the settlement of disputes and contributing to the current turmoil is the rising trend of rank and file revolt against agreements negotiated by union leadership. This tendency for members to reject contract solutions reached in good faith by their leaders is a major problem which is growing. In the past fiscal year, in 14.1 percent of the joint meeting cases closed by the Service, the tentative settlements reached in negotiations were rejected by the union membership. This compares with 11.7 percent in 1966; 10.0 percent in 1965; and 8.7 percent in 1964. Rejections mean that the mediator must again reenter the case. The additional drain on mediator manpower in such cases is obvious.

Both labor and management have an overriding common interest in the reduction of labor unrest and a quick return to more stabilized collective bargaining. Adjustment of their differences can best be accomplished through their own bargaining efforts, and the bargaining process is the best safeguard of their mutual interests. Free collective bargaining, however, carries with it a joint responsibility. A proper regard for the public interest must be a factor in every major negotiation. The alternative to responsible collective bargaining, compulsion, is not palatable to either labor or management.

Mediation is the most important device for promoting peaceful adjustment of disputes.

Against the total labor-relations backdrop, it is clear that there will be a steadily increasing need for mediation for the indefinite future. The continuing growth

of the economy, the increasing number of business establishments, and the steady increase each year in the number of NLRB bargaining certifications, all contribute to this conclusion.

The NLRB is certifying close to 5,000 new bargaining units each year, about 58 percent of which are in manufacturing plants. The Service is notified of these new certifications and,, based on FMCS data, becomes involved in about 15 percent of the first contract negotiations arising out of the certifications. Mediation is especially important in these cases because of lack of bargaining experience on the part of the parties. The trend of certifications is pointing upward, and they constitute a steady increment each year to the potential work load of the Service.

Translating all of the foregoing into precise dispute mediation work load increase is not possible. It will, however, be substantial despite continued rigid screening and consolidation of cases, and despite refraining from entry into cases where the parties are making satisfactory progress on their own. Not only will there be an increase in terms of numbers (a very inadequate criterion) but even more so in terms of mediator time because of the complexity of the hard core issues over which bargaining impasses most frequently develop.

3. *Preventive mediation activity.*—Preventive mediation is geared to the improvement of the labor-management relationship through continuing discussion between the parties of difficult and persistent problems. It is designed to get the parties to try constructively to eliminate sources of friction and trouble in their day-to-day relationships and to minimize the crisis aspect of bargaining.

The Service has been participating to some extent in this type of activity for many years. However, the program has assumed new importance more recently, both in quantity and in types of activity. The number of cases has grown from 202 assignments in 1962 to 1,175 in 1967.

One conclusion seems clear with respect to the current labor-management relationship: If collective bargaining is to perform the task assigned to it as a democratic institution, new approaches and new ways must be devised to meet the complex bargaining problems evolving essentially from the vast technological revolution through which the Nation is passing. "Crisis" bargaining confined to the last few days of the life of the contract is no longer sufficient to do the job; there must be substantial mitigation of the crisis element before the actual bargaining deadline is reached. This concept of preventive mediation is not designed as a substitute for collective bargaining but rather an extension of it during the life of the contract. Issues appropriate for deadline treatment will be handled that way in most instances; but complicated issues that are not suited to crisis bargaining treatment can be handled in better ways.

Endorsement of the continuous dialogue concept and evidence of its actual and potential value are available from many sources. Employer associations, the AFL–CIO, public groups such as the Committee for Economic Development and the American Assembly have all endorsed the basic idea. The National Labor Management Panel, presidentially appointed advisors to the FMCS have publicly approved the FMCS program. Numerous letters in our files from labor and industry representatives who have participated in FMCS sponsored preventive cases are very specific evidence of the values of this program.

4. *Arbitration.*—The number of requests for arbitration panels in fiscal year 1967 totaled 6,955, up some 23 percent from the previous fiscal year. Over the past ten years the arbitration work load, as measured by requests for panels, has increased by 120 percent. All other aspects of the arbitration case load show similar steady increases. The tabulation on page 12 summarizes these data for the past seven fiscal years.

There is a continuing problem of maintaining a roster of a sufficient number of experienced and acceptable arbitrators. The Service is trying to increase this supply by adding new arbitrators to its roster in the hope that the parties will select relatively inexperienced but potentially excellent arbitrators in cases where experience is not a compelling factor.

The Service is also continuing its cooperation with the American Arbitration Association and the National Academy of Arbitrators in developing training programs for new arbitrators. A program has been completed in the Cleveland area, adding to prior programs in the Chicago and Pittsburgh areas. A new program is contemplated for the St. Louis area.

The Service, furthermore, is doing everything possible to keep the cost of arbitration within reasonable bounds, giving due regard to the legitimate interests of the parties and of the arbitrators. The parties pay the arbitrator's fee.

### MISSILE AND SPACE PROGRAM ACTIVITY

During the past fiscal year, the missile and space program of the Nation continued to move forward virtually unhindered by serious labor disputes. In fact, 99.74 percent of all available work time on missile sites was free of work stoppages during this period.

This work record in such a vital phase of our national endeavors is indicative of the success achieved through the voluntary program of labor, management and the government working together.

Executive Order 11374, dated October 11, 1967, transferred the responsibilities of the Missile Sites Labor Commission (created in May 1961 under Executive Order 10946) to the Federal Mediation and Conciliation Service. About the same time the Defense Department announced its intention to construct an anti-ballistic missile (thin line) defense system. These actions will increase the Service's responsibility for mediating and resolving labor difficulties at missile site locations.

Priority will continue to be given to disputes at all missile and space sites. For the first time, the fiscal 1969 FMCS budget will include all costs for handling missle and space sites disputes.

### BOARDS OF INQUIRY AND OTHER AD HOC PANELS AND EXPERTS

Four Boards of Inquiry were appointed under the national emergency provisions of the Taft-Hartley Act during 1967, all attributable to the Vietnam war. These were:

a. *General Electric-United Automobile Workers*, Evendale, Ohio, a plant producing jet engines. This dispute was settled during the injunction period with vigorous mediation assistance provided solely by the FMCS.

b. *Union Carbide-United Steelworkers*, Kokomo, Indiana, a plant producing jet engine component parts. This dispute was also settled during the injunction period with mediation assistance provided solely by the FMCS.

c. *AVCO-United Automobile Workers*, Stratford, Connecticut, a plant producing helicopter engines. This dispute was settled after weeks of FMCS mediation effort plus effective work done by Leo Brown, a special mediator retained by the Service, and assistance during the last week by the Under Secretary of Labor.

d. *Pacific Coast Shipbuilders' Association-IBEW*. This dispute involving all important West Coast shipyards in San Francisco, Portland and Seattle was settled, subject to membership ratification, after months of FMCS mediation followed by mediation by a special board agreed to by the parties at our suggestion and under FMCS auspices.

About fifty-five other potential Taft-Hartley defense cases were settled through intensive mediation efforts.

The Service provided mediatory and administrative assistance to each of the Boards of Inquiry impaneled. Intensive mediation was particularly effective during the "cooling off" periods, and Service mediators cooperated closely with Board members in coordinating and timing the mediation drives. This type of cooperation and assistance will continue with future Boards of Inquiry.

Although no additional Taft-Hartley Boards of Inquiry have yet been appointed in fiscal 1968, the war uncertainties in the Far East suggest that it would be foolhardy to anticipate no actions of this sort between now and July, 1969.

The sum of $125,000 is included each year in the Service's budget for Boards of Inquiry, special boards, panels and outside experts. It is essential that the full amount be made available because of the uncertainty of future needs for boards and panels. Funds not obligated will be returned to the Treasury.

### NATIONAL LABOR-MANAGEMENT PANEL

This advisory group, authorized by the Labor Management Relations Act of 1947, met twice during the past fiscal year. Pressures of serious disputes prevented other meetings from being scheduled.

Meetings of the Panel are held in executive session, thus permitting free and meaningful discussion and interchange of ideas on a variety of industrial relations and collective bargaining problems. These discussions are especially helpful to the Service in assessing labor and management attitudes on specific topics.

Panel activity will continue during this year and during fiscal year 1969.

Close liaison is maintained with the members between the regularly scheduled meetings and the advice and counsel of the panel and its individual members have been of genuine benefit to the Service.

MANPOWER AND FINANCIAL REQUIREMENTS

*1. Mediator Manpower Increases*

The estimate for 1969 proposes an increase of 14 new mediator positions at grade GS–12. This will bring the total non-supervisory mediator staff to 280.

The proposal for 1969 will enable the Service to continue its concentration on all disputes related to the Vietnam war; to encourage labor and management to engage in constructive collective bargaining with fewer stoppages; to service the Nation's missile and space sites; and to continue promoting through its preventive mediation program, a concept which is becoming more and more thoroughly endorsed and accepted, the benefits that can accrue from "continuous dialogue" and other forms of labor-management discussion and cooperation.

With the steady increment each year in NLRB certifications (5000 a year at the current rate), which portend a steady increase in mediation workload; with an economy rapidly expanding to an estimated 845 billion GNP in 1968, and likely over 900 billion by 1970; and despite the rigid screening which the Service applies to its dispute notices, the facts stand clear that there will be a continuing increase in the demand for mediation services in the years ahead. So long as collective bargaining remains the cornerstone of our national labor policy, mediation readily available and competently rendered will continue to be the only major form of third party assistance acceptable to the parties in bridging the gaps to their agreements.

*2. National Office*

Two positions are included in the 1969 estimate for the national office a mediator coordinator (GS–15) for the missile activity and a secretary (GS–6) to the coordinator.

*3. Field Stenographic Positions*

There are three (3) clerk-stenographer positions included in the estimate for location in two-mediator offices which do not at present have any stenographic assistance. There are twenty such locations.

We have reluctantly accepted this token increase of stenographic and clerical help at two-man offices only because of the severe budget restrictions this year and our belief that the increased budget must be concentrated on "fire power" at the mediator level.

*4. Other Nonmanpower Increases*

Excluding restorations of 1968 non-manpower items affected by H. J. Resolution 888 (personnel benefits $7,500; travel $62,000; communications $17,900; printing and reproduction $1,000; other services $12,000; supplies $1,000; equipment $15,000), the 1969 proposal carries non-manpower increases as follows: personnel benefits $35,500; travel $19,000; transportation of things $3,000; communications $16,100; supplies and materials $1,000; and equipment $1,000.

The personnel benefits increase is related to and computed on the basis of additional personnel and total personal services compensation cost for 1969.

The travel increase of $19,000 is related to the new mediator positions.

The communications increase of $16,100 is related to increased Federal Telecommunications System toll and instrument rental charges.

The remaining increases totaling $5,000 are for transportation of things ($3,000), supplies and materials ($1,000), equipment ($1,000), and are related to the proposed staff increases for 1969.

TRIBUTE TO SENATOR HILL

Senator HILL. Now Mr. Simkin, Federal Mediation and Conciliation Service.

You may proceed as you see fit.

Mr. SIMKIN. It may sound repetitious but it is no less sincere to add a comment or two to others that I have heard this morning.

It so happens that this is the eighth year that I have had the privilege of working with you. Others on my staff, as you know, have had that privilege much longer.

It is a matter about which we feel very deeply. We know the hard conscientious work that you have given over many, many years to this part of your job, which is only a part of it, and we are deeply appreciative of the kind of public service that you have rendered and will continue to render, I am sure, in the years ahead even though you regretfully have decided not to run for reelection.

Senator HILL. I thank you very much, sir. I can say this: You have always been very kind and most helpful to this subcommittee.

We are deeply grateful to you. I very much appreciate your most kind and generous words.

PREPARED STATEMENT

Mr. SIMKIN. We submitted, as you know, some time ago, a rather detailed justification. Obviously, I will not refer to that.

We are submitting this morning a written statement. I will not read it but will follow it in outline form.

Senator HILL. We will have your full statement appear in the record and you may proceed as you see fit.

(The statement follows:)

We appreciate this opportunity to present to this Committee justification for the Service's appropriation requested for Fiscal Year 1969.

Our submission, already in your hands, tells the basic story. It will not be repeated except in summary form.

Briefly, for 1969, we seek:

1. Restoration of funds and authorization for expenditure purposes up to the amount originally approved by Congress for Fiscal Year 1968 but reduced subsequently by $185,900 due to H. J. Resolution 888 (Public Law 90–218).

2. Funds for 19 additional positions and related expenses for Fiscal Year 1969. (15 mediator and 4 secretarial positions.)

The total money request is for $8,090,000 (excluding future pay supplement for such pay increases as may become due in Fiscal 1969).

This is an increase of $653,000 above the anticipated Fiscal 1968 appropriation of $7,437,000.

As respects the $185,900 saved during the current Fiscal Year this is being accomplished in three principal ways:

1. Cancellation of our January and February 1968 Seminars.

2. Postponement of EOD dates for hiring additional and replacement mediators in Fiscal 1968.

3. Savings due to lesser employment of outside expert mediators and special boards—made possible by more intensive mediation by our own staff.

During Fiscal 1969, these same savings are not available.

The absence of Seminars this winter makes it ever more imperative to conduct seminars next year. The resultant upgrading of mediator skills is essential in the present labor relations climate.

As of this date and as we close out Fiscal 1968, our field mediator staff is and will be up to approximate authorized strength. It was unwise but necessary to defer EOD dates this year. We cannot afford to run that risk again.

Although we do not use outside experts and special boards unless needed, it is imperative that we have the money available. Taft-Hartley Boards of Inquiry are also paid from the total of $125,000 requested. We cannot predict that it will be possible to avoid Taft-Hartley Boards in the months ahead. For Fiscal 1969, we would expect to revert to prior practice of returning unexpended amounts from this $125,000 authorization to the Treasury.

In our discussions with the Bureau of the Budget this year, agreement was reached on the points noted above.

As respects, the additional 19 positions requested for Fiscal 1969, this is our "bare minimum" estimate real need in the troubled time ahead.

Our own advance predictions of a most difficult future labor-management picture are confirmed with no known exceptions by responsible labor and management representatives, by other government officials and by the press.

Some of the highlights of this picture are:

1. As the Vietnam picture worsens, criticality of hundreds and even thousands of labor negotiations increases. This will require ever increasing priority mediator attention. We are fighting a major war without the special disputes settlement procedures that existed during World War II and the Korean War. This burden is being assumed primarily by the Federal Mediation and Conciliation Service.

2. Strikes in which FMCS mediators were active in the six month period July 1, 1967 thru December 31, 1967 totaled 1,147 in contrast to 1,095 during the comparable six months Fiscal 1966, an increase of 5%.

3. As of December 31, 1967, the pending disputes mediation case load was 14.6% above the comparable figure as of December 31, 1966.

4. In January and February 1968, normally the "slow months" of the calendar year, FMCS mediator involvement in strikes was approximately double the levels for those months in the first seven years of the 1960's, measured both by numbers of strikes and numbers of employees involved.

5. Preventive mediation workload for the first seven months of Fiscal Year 1968 was 12.7% above the comparable months in Fiscal Year 1967.

6. Arbitration case workload (numbers of requests for panels) for the first seven months of Fiscal Year 1968 was 21.0% above the comparable months in Fiscal Year 1967.

7. The FMCS Fiscal Year 1969 budget includes for the first time all special missile and space sites labor relations mediation and related expense. The Missile Sites Labor Commission, supported by funds from Defense and NASA was dissolved as of October 11, 1967 and its functions and responsibilities transferred to the FMCS.

I wish it were possible to predict that Fiscal Year 1969 would be a better labor-relations year than Fiscal Year 1968, or even that it would be no more difficult. Unfortunately, I cannot so predict.

It is my considered judgment that our request, as approved by the Bureau of the Budget after extended negotiations, is the minimum amount needed to fulfill our responsibilities.

### BUDGET REQUEST

Mr. SIMKIN. Our request this year as approved by the Bureau of the Budget is a total of $8,090,000. This is an increase of $653,000 above the amounts that we anticipate receiving for fiscal 1968.

### REDUCTION OF EXPENDITURES, 1968

This breaks down essentially into two parts. We are, as I understand other agencies are, feeling the compelling need in 1969 for doing a few things that we could not do in 1968 as a result of the so-called 2 and 10 percent cut.

We accomplished that reduction in 1968 reluctantly but obviously necessarily in three or perhaps four different areas.

### CANCELLATION OF ANNUAL SEMINARS

We had to cancel our annual seminars. As you know, these seminars for mediators are a 1-week affair in which the mediators follow a very extensive and hard-working week of, in effect, keeping up to date, not only keep up to date but trying to keep ahead of the parade in terms of the kind of problems we are meeting.

This is, if you want to call it, an educational process. It is not only desirable but in my judgment necessary for our staff in order to do the kind of job we have to do.

The fact that we had to cancel it in 1968 in my judgment makes it even more imperative that we go ahead with that program in 1969.

We saved roughly $70,000 out of a total of $185,900 that we had to save by that one move.

### Authorized Strength Reduction

The second way that we saved last year was to defer the dates of entry of new men in order to save money in that fiscal year.

We could not afford, and the Budget Bureau thoroughly understood that and agreed with us, to cut our total authorized strength.

So that we are at the present moment substantially up to our authorized strength and will be by the end of the year within a margin of one or two men.

This means, of course, that we will go into 1969 with a full staff that we will have to have for this rough year ahead.

This means, of course, that for the full year we will have to have the appropriation for the full 1968 staff.

### Restricted Use of Consultants and Special Panels

The third way that we saved was, primarily by a hard-hitting effort by our own staff, we have been able to avoid extensive use of outside experts and special panels for which a total amount is set aside of $125,000.

In view of the troubled times ahead it would not be safe, in our judgment, to anticipate any less next year than that $125,000 amount.

### Equipment and Supplies

If it is not needed, it would, of course, be returned to the Treasury. In addition to these three items we have effected economies in the way of equipment, supplies, and so forth which, of course, cannot be deferred too long.

### Staff Increase

Now, in addition to the restoration of this amount for 1969 of $185,900, our request contemplates an additional staff across the country of 19 more people, tentatively estimated at 14 mediators and five clerical positions.

### BUDGET BUREAU REDUCTION

This is a substantial reduction below our original request of the Bureau of the Budget.

Senator Hill. How much was that reduction?

Mr. Simkin. It is a reduction in terms of money of a quarter of a million dollars.

We had quite a little struggle with the Bureau of the Budget this year, a friendly struggle but nevertheless it was a struggle, and while we are prepared to stand on what the Budget Bureau approved, it is my considered judgment that this is the bare minimum that we will need in order to do the kind of job that we have to do.

### LABOR RELATION DISPUTES

Now what is the labor relations picture ahead? It is a matter of common knowledge to everybody that these are troubled times.

Senator Hill. All you have to do is read your newspapers to see that, isn't that right?

Mr. Simkin. Yes, sir. In addition to what you read in the newspapers there are hundreds of disputes that appear in local newspapers that don't get into the national news.

As a matter of fact, the situation, although it is no surprise to us, the situation, in a very real sense, has worsened since we prepared our 1969 budget.

For example, the number of strikes and the number of people involved in strikes in cases in which our mediators are involved for the first 3 months of this year is roughly double what it has been in the first 3 months of earlier years in this decade.

I am not an outspoken pessimist. I would hope that this trend would not continue throughout the rest of the year but it is somewhat of a hope rather than an expectation.

### Absence of Special War Dispute Settlement Procedure

The one thing that is not widely known, and that I think is especially critical, is that we are fighting this war in Vietnam without the kind of special disputes settlement procedures that we had in World War II and in Korea.

In a very real sense the burden of that falls on us. It falls on our agency. We are necessarily giving high-priority attention to disputes, literally dozens of them, many of which are not discussed in the public press at all for a variety of reasons, but where the critical nature of the defense production item involved necessitates that kind of priority attention.

It is fairly obvious that the kind of money that is involved in our budget is chickenfeed compared to what would be involved if regretfully we should have to go the other route of special procedures.

I am moderately confident that we can avoid excessive special disputes settlement procedures. We always keep our fingers crossed, but I think we can say without patting ourselves on the back too much that we have done a hard-hitting job in these cases. The number of extraordinary efforts that have had to be made, including Taft-Hartley injunctions, is very minimal compared to the magnitude of the problem.

### Preventive Mediation Program

You know very well, from your excellent knowledge, of the work we do, the kind of work that we have attempted to do, particularly in recent years, in our preventive mediation program.

The volume of that work has gone up very drastically.

Senator Hill. It has stepped up quite a bit?

Mr. Simkin. Yes, sir. Even more significantly than the volume—we don't like to play the numbers game—even more significant than the volume the very real importance of this work, I think, is now becoming apparent, not only to us but to the people with whom we work.

### Union Carbide Kokomo Plant Injunction

I might mention just one illustration. It is a little bit dramatic and not completely typical, but it is illustrative of the kind of thing that can be done.

You will recall that there was a Taft-Hartley injunction at the Kokomo, Ind., plant of Union Carbide because that particular plant happened to make vital material for helicopter blades.

That was an especially troubled plant situation over a period of years. There was violence during the strike.

The plant situation was really bad. During the Taft-Hartley injunction one of our mediators by intensive work, was able to achieve a settlement short of the expiration of the 80-day period.

The dispute got settled but we were not satisfied with that because the resulting contract was due to expire this spring.

So by long, hard work with the parties, one of our preventive mediation programs was established. A lot of work was done and with two principal results.

The basic labor climate in the plant has improved drastically. Grievances are down, arbitrations are down. More even, perhaps as a result of that, they negotiated a few months ago what we have come to call an early bird contract. They voluntarily opened up their agreement and negotiated an extension for 3 years so that we are reasonably assured of labor peace in that vital plant.

Now, that sort of thing would not have been done absent our preventive mediation program. This is only one of 1,200 cases in which this kind of effort is being made. I think it would be a tragedy of the first order if economy should require that that program be cut back. It is right now at the point where it is not only off the ground but where it is beginning to produce significant results.

Now, I could add a good bit more but I think that completes all I need to say to you, Mr. Chairman, in view of your great knowledge of the work we do.

We are prepared to stand on what we worked out eventually with the Budget Bureau but any reduction below that level in my judgment would be of serious consequence to the labor-management community.

Senator HILL. Anything else you gentlemen would like to add?

Mr. SIMKIN. No, sir.

Senator HILL. Thank you, sir. You are always most helpful.

Mr. MOORE. I can't help saying, Mr. Chairman, this is my 12th and I am sorry to say the last time I will appear before you but I have considered it a real privilege.

Senator HILL. It has been a privilege to have both of you gentlemen. Thank you.

# U.S. SOLDIERS' HOME

## Operation and Maintenance, Soldiers' Home, Trust Fund

**STATEMENT OF LT. GEN. ALBERT WATSON II, GOVERNOR**
**ACCOMPANIED BY:**
**COL. ERNEST L. JANES, SECRETARY-TREASURER**
**COL. IVAN W. ELLIOTT, QUARTERMASTER**
**RAMOND A. GRITTON, CHIEF, BUDGET DIVISION**

### Appropriations Estimate

#### OPERATION AND MAINTENANCE

For operation and maintenance of the United States Soldiers' Home, to be paid from the Soldiers' Home permanent fund, [$8,024,000] *$8,602,000:* Provided, That this appropriation shall not be available for the payment of hospitalization of members of the Home in United States Army hospitals at rates in excess of those prescribed by the Secretary of the Army upon the recommendation of the Board of Commissioners of the Home and the Surgeon General of the Army.

#### CAPITAL OUTLAY

For construction of buildings and facilities, including plans and specifications, and furnishings, to be paid from the Soldiers' Home permanent fund, [$305,000] *$726,000,* to remain available until expended; *24 U.S.C. 41–60; 31 U.S.C. 711 (12, 725s (a): Departments of Labor, and Health, Education, and Welfare Appropriation Act, 1968*

DISTRIBUTION OF MEMBERSHIP

[All figures are averages]

| | Actual, 1967 | Estimate, 1968 | Estimate, 1969 | Increase |
|---|---|---|---|---|
| Domiciliary: | | | | |
| Present | 1,862 | 1,840 | 1,875 | +35 |
| Absent | 277 | 280 | 290 | +10 |
| Total, domiciliary | 2,139 | 2,120 | 2,165 | +45 |
| Hospital: | | | | |
| Present | 396 | 425 | 435 | +10 |
| Absent | 18 | 20 | 20 | ---------- |
| In contract hospitals | 34 | 38 | 38 | ---------- |
| Total, hospital | 448 | 483 | 493 | +10 |
| Total membership | 2,587 | 2,603 | 2,658 | +55 |

SUMMARY OF DIRECT OBLIGATIONS BY PROJECT

[In thousands of dollars]

| Project number and purpose | Actual 1967 | Estimate 1968 | Estimate 1969 | Increase (+) or decrease (−) |
|---|---|---|---|---|
| Operation and maintenance: | | | | |
| 1. Medical care | $3,512 | $3,857 | $4,013 | +$156 |
| 2. Domiciliary care | 1,637 | 1,702 | 1,742 | +40 |
| 3. Administration and central services | 2,504 | 2,655 | 2,847 | +192 |
| Total direct obligations | 7,653 | 8,214 | 8,602 | +388 |
| Unobligated balance lapsing | 32 | | | |
| New obligatory authority | 7,685 | [1] 8,214 | 8,602 | +388 |
| Capital outlay: | | | | |
| 4. Permanent improvements (total direct obligations) | 3,396 | 644 | 726 | +82 |
| Obligations from prior year appropriations | −160 | −339 | | +339 |
| Unobligated balance carried forward from current year appropriation | 339 | | | |
| New obligational authority | 3,575 | 305 | 726 | +421 |

[1] Includes $190 proposed for later transmittal to cover wage board and civilian pay act increases.

PROJECT 1—MEDICAL CARE

[In thousands of dollars]

| Objects of expenditure | Actual, 1967 | Estimate, 1968 | Estimate, 1969 | Increase (+) or decrease (−) |
|---|---|---|---|---|
| 11 Personnel compensation | $2,691 | $2,896 | $3,062 | +$166 |
| 12 Personnel benefits | 198 | 208 | 224 | +16 |
| 25 Other services | 176 | 188 | 188 | |
| 26 Supplies and materials | 432 | 468 | 476 | +8 |
| 31 Equipment | 45 | 120 | 86 | −34 |
| Deduct quarters, subsistence, and laundry | −30 | −23 | −23 | |
| Total direct obligations | 3,512 | 3,857 | 4,013 | +156 |

EXPLANATION OF CHANGES

*11 Personnel compensation ($166+)*

$82+: Increase non-member employment ceiling from 450 to 465 to provide spaces for 15 more civilian nurses. The program of furnishing a clinical nurse for 11 wards, 24 hours per day, was curtailed in FY 1967 due to a lack of spaces available under the existing ceiling. This situation will become more critical as the average daily patient load increases in FY 1969 to an estimated 39 more than was averaged in FY 1967. The expected increase in patients is based on current trends and the effect of the increased membership resulting from the addition of 387 beds in the domiciliary area in December, 1968.

$69+: Annualize in FY 1969, pay increases granted wage board and civilian pay act employees in FY 1968 ($38+), and annualize in FY 1969, promotions and step increases granted in FY 1968 and pay for promotions and step increases expected to be granted in FY 1969 ($31+).

$15+: One extra day of compensation over the normal 52-week base ($10+); one more holiday (Inauguration Day) ($6+); one less Sunday for which premium pay must be paid ($1−).

*12 Personnel benefits ($16+)*

$16+: Agency contributions to personnel benefit funds (retirement, insurance, health, and social security) amount to approximately 7% of total salaries for this project. The increase in FY 1969 is due to the increase in personnel compensation as outlined above.

*26 Supplies and materials ($8+)*

$8+: To provide additional rations and hospital supplies for the anticipated increase in patients from 425 to 435 per day.

*31 Equipment ($34—)*

$80— : FY 1968 appropriation provided for replacement of an X-Ray machine. This item does not appear in the FY 1969 request.

$46+ : Replacement of more equipment than scheduled for FY 1968 including two large replacement items : 100 Hi-Lo hospital beds and 230 easy chairs. These furnishings were purchased when the Pipes Ward Wing was opened in 1954.

PROJECT 2—DOMICILIARY CARE

[In thousands of dollars]

| Objects of expenditure | Actual, 1967 | Estimate, 1968 | Estimate, 1969 | Increase (+), decrease (—) |
|---|---|---|---|---|
| 11 Personnel compensation | $1,029 | $1,081 | $1,113 | +$32 |
| 12 Personnel benefits | 67 | 71 | 73 | +2 |
| 26 Supplies and materials | 537 | 548 | 558 | +10 |
| 31 Equipment | 35 | 25 | 21 | —4 |
| 41 Grants, subsidies, and contributions | 1 | 1 | 1 | |
| Deduct quarters, subsistence, and laundry | —32 | —24 | —24 | |
| Total direct obligations | 1,637 | 1,702 | 1,742 | +40 |

EXPLANATION OF CHANGES

*11 Personnel compensation ($32+)*

$6+ : Increase member employment to provide a duty sergeant and 3 janitors for minimum staffing of the 2 outer wings of the Sheridan domiciliary building which are expected to be opened in December, 1968; 2 additional attendants to act as arms and legs for the handicapped members housed in the domiciliary area rather than as permanent hospital cases.

$26+ : Annualize in FY 1969, pay increases granted wage board and civilian pay act employees in FY 1968 ($13+) ; annualize in FY 1969, promotions and step increases granted in FY 1968 and pay for promotions and step increases expected to be granted in FY 1969 ($7+) ; one extra day of compensation over the 52-week normal base ($4+) ; and one more holiday (Inauguration Day) ($2+).

*12 Personnel benefits ($2+)*

$2+ : Agency contributions to personnel benefit funds (retirement, insurance, health, and social security) amount to approximately 6% of total salaries for this project. The increase in FY 1969 is due to the increase in personnel compensation as outlined above.

*26 Supplies and materials ($10+)*

$10+ : To provide additional rations and domiciliary supplies for the anticipated increase in members from 1,840 to 1,875.

*31 Equipment ($4—)*

$4— : To replace less equipment than is scheduled for purchase in FY 1968.

PROJECT 3—ADMINISTRATION AND CENTRAL SERVICES

[In thousands of dollars]

| Objects of expenditure | Actual, 1967 | Estimate, 1968 | Estimate, 1969 | Increase (+), decrease (—) |
|---|---|---|---|---|
| 11 Personnel compensation | $1,683 | $1,788 | $1,859 | +$71 |
| 12 Personnel benefits | 125 | 135 | 146 | +11 |
| 21 Travel and transportation of persons | 1 | 1 | 1 | |
| 22 Transportation of things | 2 | 3 | 3 | |
| 23 Rent, communications, and utilities | 134 | 137 | 153 | +16 |
| 24 Printing and reproduction | 6 | 5 | 5 | |
| 25 Other services | 186 | 214 | 187 | —27 |
| 26 Supplies and materials | 214 | 222 | 271 | +49 |
| 31 Equipment | 112 | 98 | 110 | +12 |
| 32 Lands and structures | 59 | 70 | 130 | +60 |
| Deduct quarters, subsistence, and laundry | —18 | —18 | —18 | |
| Total direct obligations | 2,504 | 2,655 | 2,847 | +192 |

EXPLANATION OF CHANGES

*11 Personnel compensation ($71+)*

$10+: Increase the member employment to provide spaces for 5 more guards (to increase all three guard shifts to 5 guards each to increase the security around the Home.)

$61+: Annualize in FY 1969, pay increases granted wage board and civilian pay act employees in FY 1968 ($31+); annualize in FY 1969, promotions and step increases granted in FY 1968 and pay for promotions and step increases expected to be granted in FY 1969 ($23+); one extra day of compensation over the normal 52-week base ($7+).

*12 Personnel benefits ($11+)*

$8+: Each year the appropriation request carries the amount *actually* paid during the past year for employees' compensation benefits. The FY 1969 request is greater than FY 1968 based on these actual payments in FY 1967.

$3+: Experience has shown that agency contributions to personnel benefit funds (retirement, insurance, health, and social security) amount to approximately 7% of total salaries for this project. The amount of the increase in FY 1969 is due to the increase in personnel compensation.

*23 Rent, communication, and utilities ($16+)*

$16+: The increase is due entirely to the additional electricity required for the expanded Sheridan Building, plus additional current required for the proposed extension of the Pipes Ward Wing.

*25 Other services ($27—)*

$26—: Following established schedules for painting, roof repairs, and similar recurring items, the maintenance scheduled for FY 1969 is less than FY 1968 due to the fact that the 1968 program includes painting the interior of the largest domiciliary building plus the introduction of the second largest domiciliary building into the painting schedule for the first time since constructed.

$38—: The cost of nonrecurring and phased maintenance jobs scheduled for FY 1968 which will not recur in FY 1969.

$37+: The cost of the following nonrecurring and phased maintenance jobs which are included in the FY 1969 program which are not included in the FY 1968 program:

Replacement of the ventilator filters and heating coils in two large domiciliary buildings and the hospital ward wing. These elements are in constant need of repair, are almost 15 years old, and can no longer be repaired effectively. ($13+)

Complete the program of replacing old incandescent street lights with mercury vapor lamps, primarily for safety and security reasons. ($7+)

Replacement and transistorizing the 4-channel internal radio system throughout the Scott and Pipes buildings. Parts are difficult to obtain for the 13-year old system and it requires considerable maintenance with less than satisfactory results. ($12+)

Miscellaneous repairs including replacement of amplifier in the exterior loudspeaker system in the domiciliary area; installation of a panel ceiling in the vegetable room in the Sisters Quarters which is peeling due to excessive dampness, repairs to several porches. ($5+)

*26 Supplies and materials ($49+)*

$45+: To provide 2 cents more per gallon for fuel oil with a lower sulphur content in furtherance of the President's air pollution program, and for additional fuel oil required to furnish heat to the expanded Sheridan domiciliary building.

$4+: For spare part kits to overhaul 270 flush valves in toilets in the Scott domiciliary building and for additional maintenance supplies caused by the expanded facilities.

*31 Equipment ($12+)*

$12+: Equipment replacement for maintenance of buildings and facilities varies each year both in price and item. Increases in FY 1969 include $18 for cars and trucks, $6 for additional shop equipment, and $3 for more office equipment. Decreases include $5 for miscellaneous equipment, and $10 for one time purchase in FY 1968 of bookkeeping machine.

*32 Lands and structures ($60+)*

$123+: To replace 2,400 feet of terra cotta sanitary sewer line over 55 years old with cast iron pipe. These sewers are clogged with roots and the terra cotta is deteriorating.

$7+: To replace water pipes of undetermined age which service Quarters No. 3, 4, and 5. They are clogged with rust to the point where pressure is markedly lessening each year.

$70—: The cost of items accomplished in FY 1968 which will not recur in FY 1969.

PROJECT 4—PERMANENT IMPROVEMENTS

[In thousands of dollars]

| Objects of expenditure | Actual, 1967 | Estimate, 1968 | Estimate, 1969 | Increase (+) or decrease (—) |
|---|---|---|---|---|
| 25 Other services | | 14 | 8 | —6 |
| 31 Equipment | | 195 | 96 | —99 |
| 32 Lands and structures | 3,396 | 435 | 622 | +187 |
| Total direct obligations | 3,396 | 644 | 726 | +82 |

EXPLANATION OF CHANGES

*25 Other services ($6—)*

$14—: This FY 1968 item is to correct a fault in the proscenium arch in Stanley Hall Chapel. It is being financed by reprogramming surplus balances of prior year appropriations no longer needed.

$8+: To provide for installation of furniture and equipment in the outer wings of the Sheridan Building now under construction and scheduled for completion in December, 1968.

*31 Equipment ($99—)*

$195—: This FY 1968 item provides for the purchase of furniture and equipment for the outer wings of the Sheridan Building.

$96+: This FY 1969 item provides for the purchase of furniture and equipment for the south extension of the hospital ward wing.

*32 Lands and structures ($187+)*

FISCAL YEAR 1968 ITEMS

$90—: Revising the Home's Master Plan.

$10—: Planning for the extension of the Pipes Building.

$10—: Planning for the installation of an improved emergency electrical system at the hospital.

$325—: Completion of construction of the outer wings on the Sheridan Building.

FISCAL YEAR 1969 ITEMS

$591+: Extension of the south side of the hospital ward wing (Pipes Building) to provide 55 additional beds including a 10-bed intensive care unit. At present, hospital capacity is 492 beds, average patient load expected in FY 1969, 435. In order to provide for the increase in patients resulting from the expanded domiciliary facilities, peak loads caused by seasonal ailments, normal flexibility required by attrition and movement of patients, the hospital ward wing, expanded northward in 1962, must now have a south expansion.

$18+: The older hospital buildings do not have a system whereby patients in a lavatory, washroom, or toilet can obtain emergency help. It is proposed to install a system of panic buttons to correct this situation.

$13+: There are certain areas where shower stalls should be made available to patients who bathe themselves. The cost of this project includes replacement of 9 bath tubs with 15 showers, throughout the hospital. The project is desired as a safety precaution.

STANDARD CLASSIFICATION SCHEDULE FOR DIRECT OBLIGATIONS

[In thousands of dollars]

| Objects of expenditure | Actual, 1967 | Estimate, 1968 | Estimate, 1969 | Increase (+) or decrease (−) |
|---|---|---|---|---|
| Operation and maintenance: | | | | |
| 11 Personnel compensation | $5,403 | $5,765 | $6,034 | +$269 |
| 12 Personnel benefits | 390 | 414 | 443 | +29 |
| 21 Travel and transportation of persons | 1 | 1 | 1 | |
| 22 Transportation of things | 2 | 3 | 3 | |
| 23 Rent, communications, and utilities | 134 | 137 | 153 | +16 |
| 24 Printing and reproduction | 6 | 5 | 5 | |
| 25 Other services | 362 | 402 | 375 | −27 |
| 26 Supplies and materials | 1,183 | 1,238 | 1,305 | +67 |
| 31 Equipment | 192 | 243 | 217 | −26 |
| 32 Lands and structures | 59 | 70 | 130 | +60 |
| 41 Grants, subsidies, and contributions | 1 | 1 | 1 | |
| Deduct quarters, subsistence, and laundry | −80 | −65 | −65 | |
| Total direct obligations | 7,653 | [1] 8,214 | 8,602 | +388 |
| Capital outlay: | | | | |
| 25 Other services | | 14 | 8 | −6 |
| 31 Equipment | | 195 | 96 | −99 |
| 32 Lands and structures | 3,396 | 435 | 622 | +187 |
| Total direct obligations | 3,396 | 644 | 726 | +82 |

[1] Includes $190 proposed for later transmittal to cover wage board and civilian pay act increases.

NONAPPROPRIATED FUNDING

Senator HILL. General Watson, you are the only person that appears before the Appropriation Subcommittee that does not ask for any money out of the Federal Treasury.

We will be happy to have you proceed in your own way, General.

General WATSON. Thank you, sir. I would like to express the greetings of General Haislip who preceded me in my position.

Senator HILL. How is he getting along?

General WATSON. Fine, sir. I will be seeing him this afternoon.

Senator HILL. Will you give him my warmest and best?

General WATSON. I will, sir. I know he wants to have his warmth expressed to you as do the members of the soldiers' home, myself, and the employees there.

Through the years, since the first time our representatives appeared before you in May of 1955, the warmth and courtesy of your attitude and the air of the hearings here has certainly been much appreciated by all of us who have had any contact with you and your staff.

Senator HILL. It has been a privilege to have you here, sir, I assure you. It is great to have someone here who didn't want any money out of the Treasury.

General WATSON. I have a short statement.

Senator HILL. All right, you may proceed.

General WATSON. I am pleased to appear before the committee to justify the home's budget requirement for fiscal year 1969.

The appropriation request is forwarded to Congress with the President's budget, but the amount is not charged to the taxpayer. The home is supported from a trust fund, not from the general revenues of the U.S. Treasury.

PURPOSE OF THE HOME

The Soldiers' Home was established by Congress in 1851 for the relief and support of old, invalid, or disabled soldiers of the Regular Army. While basic eligibility criteria for admission have remained unchanged, they have been extended to include airmen and enlisted women of both services.

On June 30, 1967, there were a minimum of 264,000 identifiable former Army and Air Force personnel entitled to membership in the home.

This large pool has developed primarily from the mass of enlistments in the early 1940's and the large number of volunteers since that time.

While only a small percentage apply for admission, applications for membership are expected to increase. The home is a place where members can spend their remaining days independent of public assistance.

Their self-respect is served by the knowledge that their personal contributions have helped make the home possible. This permanent residence has been provided for over a century without cost to the taxpayer.

Senator HILL. You have never asked for any money from the taxpayers.

General WATSON. We had one small appropriation to buy some land for one of the other asylums that was established many years ago.

Senator HILL. That was many years ago?

General WATSON. Yes, sir. It has since been abandoned.

ADMISSION CRITERIA

Membership is a terminal benefit for former warrant officers and enlisted personnel of the Regular Army and Air Force with the following qualifications:

1. Honest and faithful service for 20 years or more as warrant officers or enlisted personnel; or
2. Service-connected disabilities rendering them unable to earn a livelihood; or
3. Non-service-connected disabilities rendering them unable to earn a livelihood, provided they have had service during a war.

These criteria perpetuate the home's fundamental mission of caring for the professional or career soldier and airman, and recognize and reward service to country.

I might interpolate here the point that approximately 75 percent of our members are those who have been admitted because of 20 years or more service; the remaining 25 percent are in the disability categories.

ADMINISTRATION

General supervision and financial administration of the home was placed by Congress in a board of commissioners, now consisting of the Governor of the home, six Army officers, ex officio, and three Air Force officers.

Subject to approval by the Secretary of the Army and the Secretary of the Air Force, this Board has authority to establish regulations for

the general and internal direction of the home. I am responsible to this Board for the administration of the home.

ANNUAL REPORT

The law provides for an annual report on the home to be submitted to Congress, including a report on his inspection of the home by the Inspector General of the Army.

It is gratifying to state that for many years, no significant changes have been suggested and no serious deficiencies have been found in either the management or the operation of the home.

FINANCES

The act of 1851 provided for the home to be financed from a trust fund rather than from the general revenues of the U.S. Treasury.

Thus, we are not a burden on the taxpayer. The balance in this fund at the end of January 1968, was $103.7 million.

Income to this fund as prescribed by law, is from the following principal sources:

1. A contribution at the rate of 10 cents per month from each enlisted member and warrant officer of the Regular Army and Regular Air Force;
2. Fines and forfeitures imposed upon these personnel by sentence of courts-martial; and
3. Interest of 3 percent per annum on the fund balance in the U.S. Treasury.

In recent years, there has been a decline in receipts. Initially, this reduction resulted from both services raising their standards of enlistment which reduced the number of undesirables and misfits.

FORFEITURES OF PAY AS NONJUDICIAL PUNISHMENT: COMPTROLLER GENERAL OPINION

Then, in 1963, the Uniform Code of Military Justice was amended to authorize commanding officers to impose forfeitures of pay as nonjudicial punishment.

The Comptroller General decided that this type forfeiture would not accrue to the home's trust fund.

Senator HILL. Do you have a copy of that opinion that you can let us have?

General WATSON. Yes, sir; I will provide it.

(The opinion follows:)

COMPTROLLER GENERAL OF THE UNITED STATES,
*Washington, D.C., August 6, 1963.*

B–151708.

The Honorable Secretary of the Army.

DEAR MR. SECRETARY: Reference is made to letter dated May 29, 1963, from the Assistant Secretary of the Army (Financial Management), requesting decision as to the proper disposition of nonjudicial forfeitures of pay imposed by commanding officers upon regular Army warrant officers and regular Army enlisted members. The request was assigned submission No. SS–A–706 by the Department of Defense Military Pay and Allowance Committee.

Section 7 of the act of March 3, 1851, ch. 25, 9 Stat. 596 (24 U.S.C. 44) provides that for the support of the military asylum (now Soldiers' Home) established by the act that, among other funds there designated, "all stoppages

or fines adjudged against soldiers by sentence of courts martial, over and above any amount that may be due for the reimbursement of government, or individuals; all forfeitures on account of desertion * * *" shall be set apart and are appropriated.

By Executive Order No. 11081, dated January 29, 1963, prescribing various amendments of the Manual for Courts-Martial, United States 1951, certain commanding officers are authorized to impose nonjudicial forfeitures of pay upon warrant officers and enlisted personnel of their commands. Under that authority it is now possible for commanding officers to impose forfeitures of pay without a court-martial and question is raised as to whether these forfeitures of pay should be set apart and transferred to the Soldiers' Home Permanent Fund.

The conditions which prevailed at the time of the establishment of the Soldiers' Home were such that the Congress deemed it desirable to provide a means for caring for disabled and aged soldiers without imposing any new burden upon the Treasury, such as the allowance of extraordinary pensions. Thus, provision was made that funds appropriated for pay of the Army which were not otherwise payable because of court-martial fines and forfeitures and all forfeitures on account of desertion, which would not be available for any other use, should be set apart in partial support of the Home. This is borne out by the statement appearing in Report of Committee No. 227, 31st Congress, 2d session, of January 3, 1851, made by Mr. Davis of Mississippi which stated—in part that "The other resources relied on are the hospital and post funds, the fines, forfeitures, reversions, and voluntary contributions of the army."

The Assistant Secretary's letter stated that the implication of Mr. Davis' report is that *all forfeitures* will be used to bear the cost of operating the Soldiers' Home since the term "court-martial" did not precede the word "forfeiture" in the report. The Department of the Army apparently is of the view that no distinction should be made with respect to forfeitures of pay regardless of whether the forfeiture was imposed by the member's commanding officer or by court-martial.

At the time the March 3, 1851, act was enacted there was no law in existence which authorized a commanding officer to impose nonjudicial punishment upon persons under his command. Thus, no inference may be drawn from the absence of the term "court-martial" in the report on the bill as explaining or enlarging the plain terms of the statute. The statute clearly specifies the amounts which are set apart for the Soldiers' Home and it is our view, in the absence of a further expression of intention by the Congress, that only those forfeitures of pay imposed by "sentence of courts-martial" are properly for credit to the Soldiers' Home Permanent Fund. *Nonjudicial forfeitures of pay imposed by commanding officers should remain in the appropriation.*

Sincerely yours,

JOSEPH CAMPBELL,
*Comptroller General of the United States.*

### INCREASES IN MEMBERSHIP AND COSTS

General WATSON. The loss to the home's capital and income has been considerable. Increasing membership, rising prices, and higher salaries will force expenses to exceed income in the near future.

Studies are being conducted to determine appropriate measures required to keep the home financially solvent.

Senator HILL. Prices have certainly gone up.

General WATSON. Yes, sir; they are increasing. We find the cost of maintaining our individual member has gone up about 5 percent per year. We are now at about $3,200 per member, per year.

Senator HILL. $3,200 per member, per year?

General WATSON. Yes, sir.

PHYSICAL PLANT

The permanent capacity of the domiciliary area is 2,015 beds.

On March 31, 1968, 1,975 were assigned. Two wings are being added to the Sheridan domiciliary building increasing capacity by 387 beds.

This construction is expected to be completed in December 1968.

Hospital capacity is 492 beds and on March 31, 1968, 408 were assigned.

The fiscal year 1969 budget provides for a 55-bed extension to the newest hospital building.

LOSSES RESULTING FROM COMPTROLLER GENERAL OPINION

Senator HILL. Go back to that Comptroller General's ruling, how much did the home lose by that ruling?

General WATSON. Sir, going back in our figures there has been a decline starting in 1963. There is an order of magnitude figure of about 20 percent. Our income in 1963 from courts-martial fines amounted to $5,308,000. It dropped in 1964 to $4 million; in 1965 to $3.78 million; in 1966, to $3.6 million and then it went up in 1967 to $4.3 million.

We estimate that it will be that in this current year and next year as well. It is not possible to get an exact total dollar effect, because the change in the courts-martial manual took place during a decline due to the fact that the services were getting rid of misfits and undesirables.

So we cannot really give a specific dollar figure. These two conditions make it difficult. Getting rid of misfits and undesirables, and changes in the courts-martial manual happened simultaneously.

As we go down the years I have mentioned we have in effect two changes rather than just one.

It is rather difficult to give an exact figure.

Senator HILL. I understand. It presents a problem though, does it not?

General WATSON. It is a problem, sir.

AVAILABILITY OF OTHER SOURCES OF INCOME

Senator HILL. If that ruling were set aside, do you have need of the additional revenues that you would derive thereby?

General WATSON. Yes, sir. On the other hand, sir, there are some other sources which we have not yet tapped.

WITHHOLDING INCREASE

The studies that I alluded to are bringing these out. No. 1 and most direct is the increase in the amount of monthly withholding from each man in active services of the Regular Army and Air Force from 10 to 25 cents which is the maximum authorized by the Congress without coming to Congress for further authority.

Senator HILL. The services now have the authority for 25 cents?

TRUST FUND INTEREST INCREASE

General WATSON. Yes, sir, without change in law.

Another possibility is the interest on our trust fund. It has been 3 percent since 1883. This is a very low rate of return on an investment. Everything else has gone up. We are among the lowest of any trust funds in the point of income from our deposit in the Treasury.

Senator HILL. I would say so.

NONJUDICIAL WITHHOLDINGS: FINES AND FORFEITURES

General WATSON. That would help. Finally, and this is one that I am not quite so sanguine about proposing. In fact, I am not making any proposal here now, sir, but there is one about which I am not quite so confident and that is this matter of nonjudicial type of withholding of fines and forfeiture.

There is the possibility of opposition to such a proposal from the executive part of the Government.

I simply point out there is some question yet and I have doubt in my own mind whether I should ask my superiors to go forward with such a request. But they all would help considerably.

Our figures indicate now in a study which is not quite completed—this is what the draft now looks like, "The Future of the Soldiers' Home," indicate that sometime, even as early as 1971, we will need to have an increase in our current income.

Senator HILL. That looks to me like it is going to be inevitable.

General WATSON. I think so, sir. I see no way out of it. I believe the Lord helps those that help themselves, and I believe that first we should help ourselves by going to 25 cents.

I will propose it, when the times comes, to my superiors.

TAKING OF LAND BY NATIONAL CAPITAL PLANNING COMMISSION

Senator HILL. Is the National Capital Planning Commission attempting to take a portion of your land out there?

General WATSON. Sir, they are. I might amplify this just a little bit.

They prepared studies in recent years, one of which is called Proposed Physical Development Policies for Washington, D.C., dated September 1965; and the latest one which is called the Proposed Comprehensive Plan for the National Capital, dated February 1967. In each of these two they propose to take two tracts of land from the land now held by the Soldiers' Home.

Senator HILL. How much land would that be?

General WATSON. The land adds up to a total of approximately 65 acres; 45 in one tract, sir, and about 20 in the other tract.

The one that they want in higher priority is the smaller of the two. It is the land which, of course, would be the land which is more valuable to us.

Senator HILL. What do they propose to use the land for?

General WATSON. They want to use the land, the smaller tract, for two schools and a playground facility adjacent thereto.

The other land in the document is listed as probably for a college. We took this to mean the Federal college which you know, sir, is now under consideration.

On the other hand, I informally have heard that that is no longer the purpose for this larger plot but they have some other possible uses in mind.

### Study on Revision of Home Master Plan

Senator Hill. Now in the report last year, we stated, "It is the view of the conferees," the House and the Senate, "that no land should be taken from the Soldiers' Home pending completion of a study on the revision of the U.S. Soldiers' Home master plan provided for in the bill."

It has not been finished yet, has it?

General Watson. Correct, sir. It is now underway. There is $90,000 appropriated for this year for the purpose of conducting that master plan. It has not been finished yet.

We believe, for that and for other reasons I would like to mention, the consideration by the National Capital Planning Commission of their proposed comprehensive plan, latest issue, has been, as far as our land is concerned, suspended. The other reason I believe to be the fact that the District government has been reorganized, that contacts between the Planning Commission and comparable authorities within the District government have to be reestablished. Of course, the District has to make up its mind how many more schools they want and where they want to put them.

We have no indication as to whether or not the District is favorably inclined toward the use of either of these two tracts of land.

Senator Hill. Certainly that land should not be taken from the Soldiers' Home until this study has been fully completed.

Isn't that right?

General Watson. That is right, sir.

I might point out, sir, that Chairman Rivers in extending his remarks in the record last December 15, did state his view that this would be most undesirable and he would be prepared to submit legislation in case it appeared to be imminent.

We thank this committee for its interest and also Chairman Rivers' committee for their interest.

I took action because this might have gone very fast indeed, and they might have gotten out this edition of the document without something being said about it. I am fighting for the land for the home.

Senator Hill. You have to be alert, look ahead or else they will get your land before you know it.

### Effect of National Planning Commission Action

General Watson. Yes, sir. We may never know what happened until it is too late.

I would like to make one remark, sir. I know that we are not bound by any action of the National Capital Planning Commission. They can propose to us, they can comment to us and when they see our master plan they may not like it at all or they might like every word.

We are not bound to accept their recommendation. Although we are not required to do it, we must consider and give them our comments pro or con and then they reconsider and after that they finalize their recommendations. When that is done we may proceed according to our directives from our own superior authorities in conducting our operations.

So that they do not have, really, the final leverage on us with regard to our master plan.

On the other hand, I might say, they might choose to use other types of influence rather than direct legal influence and I hope we have laid the groundwork to combat that in case they try to do so.

Senator HILL. I think you are absolutely right in the policy you are pursuing. You are absolutely right. You need that land.

General WATSON. It is about 20 percent of what we have.

Senator HILL. I think you should be very careful and be on guard and not let that land get away from you.

Is there anything else?

MEMBERSHIP

General WATSON. There were 2,586 members on the rolls on March 31, 1968, not all of whom required beds. Some were away on extended leave or in special hospitals serving the home on a reimbursable basis.

The average membership during fiscal year 1967 was 2,587. Fiscal year 1968 membership is expected to average 2,603.

The fiscal year 1969 budget is based on an estimated average of 2,658. The small increase is based on recent trends plus the effect of opening the two outer wings of the domiciliary building during the last half of fiscal year 1969.

OPERATION AND MAINTENANCE

The budget request for fiscal year 1969 of $8,602,000 is $388,000 greater than the adjusted fiscal year 1968 appropriation. This increase is the net result of the following additions and reductions:

ADDITIONS

$167,000 plus for nonrecurring maintenance items including replacement of an old sewerline, replacement of rusted water supply pipes, and other building and facility repairs.

$98,000 plus for 15 additional nursing spaces to fulfill the minimum requirement that each ward be under the direction of a nurse for 24 hours a day, and for 11 more member jobs for minimal staffing of the new domiciliary wings and increasing security around the home.

$82,000 plus to pay for the full year 1969, pay increases granted wage board and civilian Pay Act employees in fiscal year 1968.

$61,000 plus to pay for the full year 1969, promotions and step increases granted employees in fiscal year 1968 and for payment during fiscal year 1969 of promotions and step increases expected to be granted.

$45,000 plus to buy a more expensive fuel oil with a lower sulphur content designed to reduce air pollution, and for additional fuel oil required for the expanded domiciliary building.

$28,000 plus for an extra holiday (Inauguration Day), and for one extra day of salaries over the normal 52-week base used in computing salaries.

$21,000 plus for agency contributions to retirement, insurance, health, and social security funds. This additional requirement is based on the increased cost of salaries as outlined above.

$22,000 for additional rations and supplies for the expected increase in members and patients, and for additional maintenance supplies.

$24,000 for additional electric current required for the expanded domiciliary building and for additional payment into the Employees' Compensation Benefits Fund based on actual costs during fiscal year 1967.

REDUCTIONS

$108,000 minus, which is the cost of nonrecurring maintenance items included in the fiscal year 1968 appropriation which will not recur in fiscal year 1969.

$26,000 minus, for less recurring maintenance. The fiscal year 1968 painting program included the largest domiciliary building, plus the initial introduction into the painting program of the second largest domciliary building.

$26,000 minus, for replacement of less equipment. The fiscal year 1968 apropriation included funds for replacing an X-ray machine. The fiscal year 1969 request does not include such an expensive item.

CAPITAL OUTLAY APPROPRIATION

The budget request for fiscal year 1969 of $726,000 is $421,000 greater than the amount appropriated for fiscal year 1968.

The 1968 appropriation provided $195,000 for purchase of furniture and equipment for the expanded domiciliary building, $90,000 to revise the home's master plan, and $20,000 for plans to expand the hospital ward wing and for plans to increase the emergency electrical system at the hospital.

The fiscal year 1969 request includes $96,000 for furniture and equipment for the proposed expansion of the hospital, $8,000 for installation of furniture and equipment in the domiciliary building new wings, $591,000 for a 55-bed extension of the hospital ward wing, $18,000 for a system of panic buttons in lavatories, washrooms, and toilets at the hospital to enable patients to obtain emergency help, and $13,000 to replace some bathtubs with showers for patients who bathe themselves.

The members of the home are grateful for the interest taken in their welfare and future by this committee. I am happy to represent them here today.

WALTER REED HOSPITAL COOPERATION

Senator HILL. I realize a hospital built a few years ago might be out of date today. You have to have modern equipment. You have to keep that hospital right up to date.

I think you ought to have a coronary-care unit in your hospital.

General WATSON. We now have an emergency coronary unit. An intensive-care unit is included in the proposed hospital expansion. We are also assisted in case of a real emergency by the Walter Reed Hospital.

If we get to the point where we can't take care of our own, they are willing, in fact eager, to help us. We have had the most wonderful cooperation from the Walter Reed Hospital.

Senator HILL. That is encouraging. But you hold onto your land now.

General WATSON. I take that to be an order, Mr. Chairman.

Senator HILL. Yes, sir. You hold onto your land. There is no reason why you should surrender, sir.

General WATSON. I want to fight to the last acre, Mr. Chairman.

Senator HILL. Is there anything you would like to add, sir?

General WATSON. No, sir.

Senator HILL. We want to thank you very much, sir. It is fine to have you here.

General WATSON. Thank you, sir. We wish you all the best of luck, sir.

Senator HILL. Thank you. Glad to have you here.

# FEDERAL RADIATION COUNCIL

## STATEMENT OF PAUL C. TOMPKINS, EXECUTIVE DIRECTOR

APPROPRIATION ESTIMATE

"FEDERAL RADIATION COUNCIL

"SALARIES AND EXPENSES

"For expenses necessary for the Federal Radiation Council, [$131,000] *$127,000.*"

*Justification of estimates for fiscal year 1969*

| | |
|---|---|
| 1968 appropriation | $131,000 |
| 1969 estimate | 127,000 |

The purpose of the Federal Radiation Council is to advise the President with respect to radiation matters, directly or indirectly affecting health, including guidance for all Federal agencies in the formulation of radiation standards, and in the establishment and execution of programs of cooperation with the States. The Council was established by Executive Order 10831, August 14, 1959—Public Law 86–373 (sec. 274h).

The Council membership consists of the Secretaries of Health, Education, and Welfare (chairman); Agriculture; Commerce; Defense; Interior; Labor; and the chairman of the Atomic Energy Commission.

The Council recommends basic guides for radiation protection. When approved by the President, these guides become the basis for the promulgation of operational procedures and regulations by Federal agencies. The Council's activities in radiation protection and evaluation of health effects of radioactive materials have resulted in a number of memorandums and reports to the President, to agencies of the executive branch, and to the public.

Staff work of the Council is carried on by a professional staff responsible for developing recommendations and proposals for the consideration of the Council. At the present time the staff of the Council consists of two professional positions and two secretarial positions.

The funds requested provide for the salaries of the permanent staff; personnel benefits; travel and transportation; communications; printing and reproduction; supplies and materials; and the services as shown in the accompanying object classification schedules. It includes provisions for obtaining consultant services which are required from time to time on different projects and funds for contracts with the National Academy of Sciences—National Research Council and National Council on Radiation Protection and Measurements to maintain a continuing review of the current status of information regarding knowledge of biological risks associated with exposure to ionizing radiation.

ANALYSIS OF OBJECTS, FISCAL YEAR 1969

| | Object class | Amount |
|---|---|---|
| 11 | Personnel compensation: | |
| | Professional staff (2) | $47,900 |
| | Clerical staff (2) | 13,400 |
| | Consultants fees (35 days at $85) | 3,000 |
| | Subtotal | 64,300 |
| 12 | Personnel benefits: health benefits, retirement, FICA, life insurance | 4,900 |
| 21 | Travel and transportation of persons: | |
| | Professional staff | 4,000 |
| | Consultants | 6,000 |
| | Subtotal | 10,000 |
| 23 | Communications | 1,000 |
| 24 | Printing and reproduction | 4,000 |
| 25.1 | Contractual services: Studies by advisory committees (non-governmental) | 30,000 |
| 25.2 | Reimbursements to other agencies, including $6,600 to GSA for administrative support and $4,400 for travel of personnel assigned to FRC projects | 11,000 |
| | | 41,000 |
| 26 | Supplies and materials | 1,000 |
| 31 | Equipment | 800 |
| | Total | 127,000 |

SALARIES AND EXPENSES

PROGRAM AND FINANCING

[In thousands of dollars]

| | 1967 actual | 1968 estimate | 1969 estimate |
|---|---|---|---|
| Program by activities: | | | |
| Executive direction and administrative costs (program costs funded) [1] | 99 | 123 | 127 |
| Change in selected resources [2] | 15 | | |
| 10 Total obligations | 114 | 123 | 127 |
| Financing: | | | |
| 25 Unobligated balance lapsing | 17 | 8 | |
| 40 New obligational authority (appropriation) | 131 | 131 | 127 |
| Relation of obligations to expenditures: | | | |
| 71 Total obligations (affecting expenditures) | 114 | 123 | 127 |
| 72 Obligated balance, start of year [3] | 44 | 49 | 50 |
| 74 Obligated balance, end of year [3] | −49 | −50 | −56 |
| 77 Adjustments in expired accounts | −2 | | |
| 90 Expenditures [3] | 107 | 122 | 121 |
| Expenditures are distributed as follows: | | | |
| Out of current authorizations | 65 | 73 | 71 |
| Out of prior authorizations | 42 | 49 | 50 |

[1] Includes capital outlay as follows: 1967, $1,000; 1968, 0; 1969, $1,000.

[2] Selected resources as of June 30 are as follows: Unpaid undelivered orders, 1966, $6,000; 1967, $21,000; 1968, $21,000; 1969, $21,000.

[3] Obligated balance, start of year includes advances and reimbursements of $30,000 for 1967 and $25,000 for 1968. Obligated balance end of 1967 includes advances and reimbursements of −$25,000. Expenditures include advances and reimbursements of $5,000 for 1967 and $25,000 for 1968.

OBJECT CLASSIFICATION

[In thousands of dollars]

| | | 1967 actual | 1968 estimate | 1969 estimate |
|---|---|---|---|---|
| | Personnel compensation: | | | |
| 11.0 | Permanent positions | 60 | 61 | 61 |
| 11.3 | Positions other than permanent | 1 | 3 | 3 |
| | Total, personnel compensation | 61 | 64 | 64 |
| 12.0 | Personnel benefits | 4 | 5 | 5 |
| 21.0 | Travel and transportation of persons | 6 | 8 | 10 |
| 23.0 | Rent, communications, and utilities | 1 | 1 | 1 |
| 24.0 | Printing and reproduction | 3 | 4 | 4 |
| 25.1 | Other services | 29 | 30 | 30 |
| 25.2 | Services of other agencies | 8 | 10 | 11 |
| 26.0 | Supplies and materials | 1 | 1 | 1 |
| 31.0 | Equipment | 1 | | 1 |
| 99.0 | Total obligations | 114 | 123 | 127 |

PERSONNEL SUMMARY

| | 1967 actual | 1968 estimate | 1969 estimate |
|---|---|---|---|
| Total number of permanent positions | 4 | 4 | 4 |
| Average number of all employees | 4 | 4 | 4 |
| Average GS grade | 11.3 | 11.3 | 11.3 |
| Average GS salary | $15,017 | $15,933 | $15,933 |

DETAIL OF PERMANENT POSITIONS

| | 1967 actual | | 1968 estimate | | 1969 estimate | |
|---|---|---|---|---|---|---|
| | Number | Total salary | Number | Total salary | Number | Total salary |
| Grades and ranges: | | | | | | |
| GS–18, $27,055 | 1 | | 1 | | 1 | |
| GS–15, $18,404 to $23,921 | 1 | | 1 | | 1 | |
| GS–7, $6,734 to $8,759 | 1 | | 1 | | 1 | |
| GS–5, $5,565 to $7,239 | 1 | | 1 | | 1 | |
| Total | 4 | | 4 | | 4 | |
| High level positions: GS–18, $27,055: | | | | | | |
| Executive director | 1 | | 1 | | 1 | |

COUNCIL FORMULATION

Senator HILL. Dr. Tompkins of the Federal Radiation Council. We are glad to have you here. You may proceed, sir.

Dr. TOMPKINS. Mr. Chairman, with your permission, my opening statement will summarize the background of the Federal Radiation Council to indicate for you what the Council is and what it does.

The creation of the Federal Radiation Council resulted directly from a Government-wide review of radiation hazards and radiation protection responsibilities conducted in 1959 by the Director of the Bureau of the Budget, the Chairman of the Atomic Energy Commission, and the Secretary of the Department of Health, Education, and Welfare.

The desirability of such a review was stimulated by the public confusion and concern over fallout hazards associated with atmospheric testing of nuclear weapons, and the fact that there was no single agency within the executive branch responsible for the formulation of radiation protection guidance.

The study group concluded that, under the prevailing scientific assumption which states that any exposure to ionizing radiation is associated with some risk of causing harmful biological effects, the derivation of basic guidelines for radiation protection involved health, economic, social, and ethical considerations of such a nature that the person or persons making the decisions represented by that guidance should be publicly accountable.

### Advice to the President

Since no single agency could be found with the appropriate breadth of responsibility and jurisdiction, it was recommended that the President be advised by a Federal Radiation Council on radiation matters directly or indirectly affecting health, including guidance for Federal agencies in the promulgation of operating radiation protection standards, and in the establishment of programs of cooperation with the States.

### Statutory Authority

The President accepted this recommendation and created the Federal Radiation Council by Executive Order 10831, August 14, 1959. The Council was made statutory later that year by an amendment to the Atomic Energy Act of 1954—Public Law 86–373 (sec. 274(h)).

## COUNCIL MEMBERSHIP

The membership of the Council as established by Executive Order 10831 consisted of the Secretaries of Health, Education, and Welfare; Defense; Commerce; and the Chairman of the Atomic Energy Commission.

The Secretary of Labor was added at the time the Council was made statutory by Public Law 86–373 (sec. 274(h)).

The Secretary of Agriculture was appointed to the Council by the President on August 16, 1962. The Secretary of the Interior was added to the Council by the President on January 16, 1968.

Administratively, the Federal Radiation Council is considered to be an independent agency. It requests its own budget, and has its own staff.

As Executive Director of the FRC staff, I am accountable directly to the Secretary of Health, Education, and Welfare designated by the President as Chairman of the FRC.

## COUNCIL WORKING GROUP

The resources of the Federal agencies whose heads are members of the Council are applied to the work of the Council through a group known as the working group of the FRC. The working group is comprised of senior technical people appointed by each agency to make information available on the agencies' interests and viewpoints to the FRC staff.

It is the work of this group that makes the Federal Radiation Council productive and responsive to new requirements.

The Federal Radiation Council is an advisory body and has no direct regulatory function. Its recommendations are necessarily broadly worded and require interpretation for application to specific cases.

DEVELOPMENT OF NATIONAL POLICY

The Council is concerned primarily with the developments of a general framework of national policy in those problems where considerations of radiation protection impinge on other facets of national policy.

APPROPRIATION COMPONENTS

The funds requested by the FRC are those required for the direct operation of the Council office. They provide for the salaries of the personnel of the Council staff which consists of four people; two professional personnel and two secretarial. It also provides for the necessary personnel benefits; travel and per diem for the staff, consultants, and participants in FRC study groups; printing and reproduction; supplies and materials; and the services as shown in the object classification schedule.

Public Law 86–373 requires the FRC to seek the advice of the National Academy of Sciences and the National Council on Radiation Protection and Measurements (NCRP) in formulation of its basic guidance.

Contractual arrangements have been made with these two organizations to provide such advisory services, and the supporting funds are included in the appropriation request.

COUNCIL REPORTS

Fallout Levels

Since its formation the FRC has issued eight reports. Three of these reported on fallout levels occurring in the United States, predicted the future levels that were anticipated, gave estimates of the magnitude of the radiation risks that might be associated with those levels, and concluded that the risks would be too small to justify the introduction of measures to limit the intake of radionuclides in fallout by modification of the diet or altering the normal distribution and use of food.

Guidance for Radiation Protection

Five reports provided guidance for radiation protection activities under different conditions. Report 1 developed the general philosophy that derivatives of basic radiation protection guidelines involved reaching a balance between the risk of radiation exposure and the benefits derived from the activities causing the exposure.

It introduced the term "Radiation Protection Guide" (RPG) which was defined as the radiation dose that should not be exceeded without careful consideration of the reasons for doing so, and noted that there could be different RPG's with different numerical values, depending on the circumstances.

Report 1 gave numerical values for RPG's applicable to the control of occupational exposure of workers, and different numerical values applicable to the general public.

These RPG's were considered to represent a reasonable balance between the benefits of normal peacetime operations in which possible exposure to radiation is necessarily a factor, and possible radiation risks associated with those operations.

### Planned Release of Radionuclides

FRC Report 2 considered general guidance related to the planned release of certain radionuclides to the environment and the radiation exposure to the public that could result.

The exposure conditions envisaged involved a continuous intake of radionuclides through the diet over a lifetime that would give a radiation dose from this source alone equal to the appropriate numerical value for the RPG's of the selected organs in which the radionuclides would concentrate.

The general guidance was expressed in terms of the equivalent daily intake which, when averaged over a year, could be equated with estimates of the actual annual intake.

Numerical values were given for iodine 131 which is selectively concentrated in the thyroid gland, and for strontium 89, strontium 90, and radium 226 which are selectively concentrated in mineral bone.

The programs of atmospheric testing of thermonuclear devices conducted in 1961 and 1962 resulted in the appearance of enough iodine 131 in the United States so that possible annual population exposures in some sectors of the country were approaching the annual value shown in FRC Report 2.

One interpretation placed on that report was that public health authorities should act to remove food from the market as necessary to prevent annual exposures from exceeding the quantities shown in FRC Report 2.

The Council did not concur in the philosophy of that interpretation, and in 1963 committed itself to the Joint Committee on Atomic Energy to produce recommendations to deal with that area of public policy.

Recommendations applicable to the problem of initiating public health action after iodine 131 was already in the environment were proposed by the Council and approved by the President in 1964.

Similar proposals to deal with the presence of the radio-nuclides strontium 89, strontium 90, and cesium 137 in foods were submitted by the Council and approved by the President in 1965.

### Radiation Protection Guidance Respecting Inhalation of Short-Lived Radioactive Decay Products

The last report was directed to the provision of radiation protection guidance for the control of the radiation hazards associated with inhalation of short-lived radioactive decay products of radon 222 in underground mines generally but with specific reference to uranium mining.

This report was released in preliminary form for discussion in the Joint Committee on Atomic Energy hearings on radiation exposure of uranium miners held during May, June, July, and August 1967.

It was released in final form in September 1967. While the hearings were in progress, the Council submitted recommendations to the President which he approved on July 27, 1967, regarding the reduction of radiation exposure of uranium miners.

## COUNCIL REVIEW OF RECOMMENDATIONS

The memorandum for the President stated that the Council would review its recommendations in approximately 1 year. The FRC staff

and working group are now reviewing the progress being made in reducing exposure to radon daughters in uranium mining for the information of the Council at the time its guidance is reexamined.

### 1968 APPROPRIATION AND 1969 BUDGET REQUEST

In accordance with the President's desire to curtail Federal expenditures, the Council's estimates for both fiscal years 1968 and 1969 were reduced. Of the $131,000 appropriated by the Congress for 1968, only $123,000 will be required for obligation and expenditure.

In addition, the initial estimate for 1969 of $131,000 has been reduced to $127,000. The reduction for both years, as shown in the request before you, was achieved by a cutback in nonpermanent employment—consultants for proposed FRC studies—and in contractual services such as those obtained from NAS and NCRP.

Mr. Chairman, if you have any questions about the Council or our request for funds I will do my best to answer them.

Senator Hill. What is this reduction in funds going to mean as far as the effectiveness of your work is concerned?

Dr. Tompkins. It hurts but is not crucial.

### RADIATION FROM TELEVISION SETS

Senator Hill. We read so much in the papers about radiation from television sets.

Have you checked that pretty carefully?

Dr. Tompkins. Yes, sir. In conjunction with the working group and the National Center for Radiological Health, we are examining the survey data, the emission rates.

We have made some estimates on how serious a public hazard it might be. The question of what form and what intensities, which cannot be reduced to zero but which can be considered acceptable, is at the present time under study.

Senator Hill. When do you think you will get the results of that study?

Dr. Tompkins. I would hope within 3 months. Our general impression, Mr. Chairman, I think I should say, is that there is not really much hazard from modern television sets.

My best estimate is probably 1 percent of what one would find of natural background.

Senator Hill. Would that be confined largely to colored television?

Dr. Tompkins. Yes, primarily because of the higher accelerated voltages.

Senator Hill. But you are pursuing this study?

Dr. Tompkins. Yes, sir.

Senator Hill. I want to thank you very much, sir.

Dr. Tompkins. Thank you, Mr. Chairman.

### SUBCOMMITTEE RECESS

Senator Hill. The committee will recess until Monday morning at 10:30.

(Whereupon, at 11:30 a.m., Friday, April 5, the subcommittee was recessed, to reconvene at 10:30 a.m., Monday, April 8.)

# DEPARTMENTS OF LABOR, AND HEALTH, EDUCATION, AND WELFARE, AND RELATED AGENCIES APPROPRIATIONS FOR FISCAL YEAR 1969

MONDAY, APRIL 8, 1968

U.S. SENATE,
SUBCOMMITTEE OF THE COMMITTEE ON APPROPRIATIONS,
*Washington, D.C.*

The subcommittee met at 10:30 a.m. in room 1224, New Senate Office Building, Hon. Lister Hill (chairman) presiding.

Present: Senators Hill, Chairman Hayden, and Bartlett.

## DEPARTMENT OF HEALTH, EDUCATION, AND WELFARE

**STATEMENT OF HON. WILBUR J. COHEN, ACTING SECRETARY**
**ACCOMPANIED BY:**
**JAMES F. KELLY, ASSISTANT SECRETARY, COMPTROLLER**
**JAMES B. CARDWELL, DEPUTY ASSISTANT SECRETARY, BUDGET**

### INTRODUCTION OF ASSOCIATES

Senator HILL. The subcommittee will kindly come to order.

Mr. Secretary, we are glad to have you here with us. We will be glad to have you proceed in your own way, sir.

Acting Secretary COHEN. Good morning, Mr. Chairman. I have with me gentlemen you know quite well, Mr. Kelly and Mr. Cardwell, my colleagues.

### PREPARED STATEMENT

Mr. Chairman, I have a rather long statement. I would suggest, if it meets with your approval, to put the entire statement in the record. Perhaps I can make some general comments on some points if that might interest you.

Senator HILL. All right, sir; we will have your statement appear in full in the record.

(The statement follows:)

Mr. Chairman and Members of the Committee, it is a pleasure to appear before you as you consider appropriations for the Department of Health, Education, and Welfare for fiscal year 1969.

I have appeared before this distinguished Committee many times, sometimes as a witness on a given program or appropriation, and more recently as a support witness accompanying the Secretary. But this is the first time I have testified on behalf of the entire Department of Health, Education, and Welfare. For me, a man who began his career in a predecessor agency to the Department in 1934, it is an honor and a privilege.

With your permission, Mr. Chairman, I would like to direct my remarks toward some of the major trends and issues facing the Nation and the Department in

the fields of health, education, and welfare. I believe this will provide a backdrop for the more detailed discussions of individual items in the budget which will follow when the agency heads and their staff appear before you later during these hearings. I have prepared for the Committee a highlight and summary statement of the budget which I would like to insert in the record at the end of my remarks.

## An Overall View

A Federal budget represents a proposed allocation of resources to serve national objectives, the allocation of limited resources among competing demands within the public sector as well as between the private and public sectors. It identifies priorities for dealing with unmet needs. Hence, it is important to look at the total national picture of health, education, and welfare expenditures—public and private—in evaluating the Federal role in any year or over a period of time.

Total expenditures for health, education, and welfare—public and private—amounted to $146 billion in the fiscal year 1967 or about 19 percent of the gross national product. In 1950, comparable expenditures amounted to only 12.7 percent of the gross national product; in 1960 they represented 15.6 percent. These comparisons are shown in Chart 1.

Of the total expenditures in 1967, approximately $100 billion—or about two-thirds—were public expenditures and about $46 billion—about one-third—were in the private sector. In the public sector, $54 billion were Federal expenditures, and $46 billion State and local.

It is interesting to note that private expenditures and State and local expenditures are approximately equal. As Chart 2 shows, the private expenditures are primarily for medical care while the State and local expenditures are concentrated on elementary and secondary education.

Funds from all three sectors have been increasing. The Federal share increased about $8.5 billion from fiscal year 1966 to 1967; the State and local share $3.6 billion; the voluntary sector increased about $1.2 billion even though there was a transfer of over $3 billion in health insurance expenditures for the aged from the private to the public sector due to the inauguration of Medicare.

The three-way cooperative approach we have in our country to meeting health, education, and welfare needs is not a simple, clearcut way of handling our problems. It is a constantly evolving partnership which brings with it all the complexities involved in cooperation, competition, and compromise. But, in my opinion, it is an arrangement which brings with it great potentialities for continued progress, improvement, and widespread participation and innovation by many persons, institutions, and agencies.

The most important observation to be drawn from these figures is that these expenditures have been growing rapidly and seem likely to continue to grow during the coming decade, both in terms of the total amount spent, and as a percentage of the GNP. I personally look upon them as an *investment* in the future growth and vitality of our Nation.

## Reasons for Growing Expenditures

There are a number of reasons for the growth in expenditures for health, education, and welfare. First, the population is steadily increasing. The elderly population and the young population, those groups requiring the most services, have shown the largest increases. These groups have increased by more than 20 percent over the past 10 years and now constitute nearly 46 percent of the population.

Second, America is a Nation on the move. People are moving from East to West, South to North, from city to suburb, from farm to city. During the 6-year period 1960–66, the farm population had an annual average net loss of 804,000, an annual loss rate of 5.9 percent.

The number of people living in urban areas has increased more than 25 percent in the past 10 years and now makes up about 70 percent of the population. By the year 2000 all but 20 percent of the population may be living in these concentrated areas. This population trend has had, and will continue to have, a direct bearing on expenditures. New services must be provided in areas where none existed and existing services must be expanded to accommodate growing numbers of persons. Also, the social problems—illegitimacy, alcoholism, mental illness, and broken families—that are generated, at least

partially, as a result of this mobility, have come to be recognized as community responsibilities requiring community action.

Prices, too, have increased, pushing up the cost of the services purchased. For example, the cost of medical care in February 1968 went up 0.5 percent over the January 1968 level, bringing the index to 41.9 percent above the 1957–59 level.

Added to the above factors is the rising level of aspirations of people. They want better health care. They want better schools and more education for their children. They want to retire and live in dignity.

Let us take one illustration of what has been happening. Within a single generation the proportion of pupils who graduate from high school has risen by nearly 60 percent. For every 1,000 children in the fifth grade in 1959–60, there were an estimated 721 high school graduates in 1967. This may be compared with 621 graduates in 1960 and with 455 graduates in 1940 for each 1,000 pupils in the fifth grade 8 years earlier.

There is no question in my mind that the investment in health, education, and social security will grow and must continue to grow.

### The Paradox of Plenty and Poverty

Although both the Nation's GNP and HEW expenditures have been increasing and much social progress has been made, we are all acutely aware of the many needs which are still unmet. An important aspect of our recent history is the growing awareness of these unmet needs and the concern about dealing more effectively and promptly with them.

The paradox of poverty amidst plenty is one which has been receiving considerable attention.

The good life enjoyed today by the Average American goes beyond the fondest dreams of our grandfathers. Yet, in the face of all this Nation has accomplished—the highest standard of living in the world—the greatest educational and job opportunity for the most people of any nation on earth—the elimination of dread disease and a greater life expectancy—we are beset by problems associated with poverty—social unrest, rising welfare costs, inadequate education and training of some groups, and inadequate health care for many of our people.

As we have brought the fruits of progress to more and more of our people, the disparity between those who have gained the most and those who have gained the least has grown.

As we have raised our standard of living, so have we widened the gap between the poor and economically secure.

As we have provided an elementary and secondary education to more and more of our people, so have we increased their thirst for greater knowledge and for more education.

As we have broadened medical knowledge, so have we created a demand to extend the miracles of modern medicine to every corner of the land.

Thus, the United States today is faced with the difficult task of eliminating the disparities that exist—

Between the affluent and the poor;

Between those who have the skills and motivations for a job and those who do not;

Between those who have full opportunity for adequate health care and those who do not;

Between those who are receiving an adequate education and those who do not have full educational opportunity;

Between those who live in the ghetto and those who have become free to live where they choose.

Let's take a brief look at some facts about poverty.

The Social Security Administration in the Department of Health, Education, and Welfare makes annual estimates derived from data from the Bureau of the Census on the extent and characteristics of poverty.

The basic income levels used to determine the poverty line for the year 1966 are as follows: for a non-farm family of four, $3,335; for a single person, $1,635. These are adjusted for size of family, age, and for farm and non-farm residence. The more detailed figures are shown in table 1.

From 1959 to 1967 the number of persons in poverty fell from about 39 million to about 27.4 million, or from 22.1 percent to about 14 percent of the population. We estimate that on March 1 the number of persons in poverty declined an

additional million by virtue of the increase in social security benefits. I would estimate that today there are about 26 million persons in the poverty group—a decline of 13 million since 1959.

It is highly significant that Federal programs aiding the poor have undergone substantial changes in the past eight years. During this period the country has greatly increased both the size of this aid and the proportion of it that is provided through what I would like to call the human investment programs. Total funding of programs directly aiding the poor has more than doubled, from $9.5 billion in fiscal year 1960 to an estimated $24.6 in fiscal year 1968 and $27.7 billion in 1969. About two-thirds of these total estimated expenditures in aid to the poor for fiscal years 1968 and 1969 are provided through programs administered by the Department of Health, Education, and Welfare.

Significant yet often unnoticed changes have occurred in the nature of the aid provided. In the fiscal year 1960, over 87 percent of this aid to the poor was provided through cash benefit payments. By fiscal year 1968 (and for fiscal year 1969), cash benefit payments are estimated to account for 59 percent of Federal aid to the poor. Human investment programs providing education, work and training, health and other social services were greatly accelerated during this period. (Source: *The Budget for FY 1969*, p. 36.)

When President Johnson signed the Social Security Amendments of 1967, he named a presidential commission, under the Chairmanship of Mr. Ben W. Heineman, the Chairman and Executive Officer of the Chicago and Northwestern Railway, to review welfare and income maintenance programs. There have been many proposals for improvements in social security, for a guaranteed annual income, the negative income tax, for family allowances, and for governmental work and training programs. I think it is very timely that a top-level commission have an opportunity to review all of these proposals, as well as many other suggestions for innovation and change, and to try to find a wider and more comprehensive income maintenance system which is more adequate and more generally acceptable. The Commission consists of 24 members from varied walks of life. I am a member of the Commission. Our staff is working intensively on these problems and proposals.

## Public Assistance

Although 26 million persons are living in poverty, only about 8 million are receiving public assistance. This fact should be kept in mind when the question is asked why welfare rolls are rising when unemployment is declining and social security and other income maintenance and economic opportunity programs are expanding.

But first let me say that a number of factors such as social security and employment opportunities, decreased mortality rates, safer working conditions, higher wages, home ownership, and life insurance have reduced the need of some groups to rely on public assistance. Largely as the result of the effectiveness of the social security program, the proportion of the aged on public assistance, in spite of a large increase in the total aged population, declined from 22.5 percent in 1950 to 11 percent in 1967. There would be about 2½ million more aged persons on welfare today if the proportion had remained at 22.5 percent. Chart 3 shows the change in the composition of the public assistance caseload which has occurred.

Secondly, the number of children receiving assistance under the AFDC program because of the death of a father has markedly declined. The problems of economic dependency of fatherless children which was one of our major social and economic problems at the beginning of this century has largely disappeared in the past 60–70 years. The combination of a number of factors, primarily declining mortality rates and the social security program have virtually eliminated the economic problems of orphanhood. If we had the same mortality rates today as we had in 1910, there would be about 5 million more children without one or more parents than there are today.

However, to answer the original question of why the public assistance rolls continue to increase, estimates suggest, as chart 4 indicates, that for every person receiving public assistance in June 1965, there was another person who was "categorically eligible" under the public assistance titles of the Social Security Act but who was not receiving public assistance. That is, there was a large group who might be called potential public assistance recipients; persons who meet all the categorical eligibility requirements of Federal law and who might become public assistance recipients depending upon such factors as the addi-

tional eligibility requirements of the State in which they live, their knowledge of public assistance programs, or their personal desire or lack of desire to apply for public aid. In other words, somewhat less than half of the poor persons who meet all the Federal categorical eligibility requirements were receiving public assistance in June 1965. Up to the present time, such factors as residence requirements, man-in-the-house rules, lack of knowledge, unwillingness to apply for welfare, and lack of financial participation by the States are factors which have kept the welfare rolls from rising even faster than they have.

It is true, however, that the number of AFDC recipients increased more than 3 times as rapidly in 1967 as it had in most preceding years. There is the possibility that poverty programs under the Economic Opportunity Act may have made more people aware of their eligibility. There are, too, the migration trends of persons from rural areas to the cities where money is an urgent necessity. There is the possibility that the availability of medical assistance under Title XIX has increased the number of persons who were referred and found eligible for cash assistance payments.

The complex problems of illegitimacy and family breakup which are reflected in the growing AFDC rolls greatly concern all of us. Illegitimacy has been rising among both white and non-white families.

There are over 300,000 births out of wedlock each year. While about 17 percent of the children on the AFDC rolls are there because they were born out of wedlock, it should also be remembered that about 80 percent of all illegitimate children are *not* on the welfare rolls.

As a result of its concern, the Congress in the Social Security Amendments of 1967 took a number of steps to deal with the problems of illegitimacy, family instability and to protect children. The Amendments provide that:

1. State welfare programs establish and implement both a program of "preventing or reducing the incidence of births out of wedlock and otherwise strengthening family life" and a program of family planning services.
2. Paternity be established and support secured from such parent for children born out of wedlock.
3. A work incentive program be established permitting welfare recipients who work to retain the first $30 a month of earnings and 30 percent of any additional amount without any reduction in assistance payments. All earnings of a full-time student may be retained.
4. Day care services be provided for the children of working mothers with the requirement that such day care services must provide "for the development and implementation of arrangements for the more effective involvement of the parent or parents in the appropriate care of the child and the improvement of the health and development of the child." This new provision is the outgrowth of a great deal of consideration growing out of the Head Start program about the need for building into the programs strong provisions that relate to working with the parents and developing the motivation of the child.
5. Welfare agencies refer to the courts or law enforcement agencies any condition where a home is unsuitable for the child because of neglect, abuse or exploitation of such child.
6. Cooperative arrangements be made among welfare agencies, courts and law enforcement officials (including making Federal and State financial arrangements) to effectively carry out the new programs.
7. Emergency assistance can be given for 30 days on a flexible and simplified basis and payments may be made in the form of loans, grants, payments in kind, or in services.
8. Payments for foster care of children and the authorization for child welfare services be increased and protective services for children be expanded.

The net effect of all these provisions is an increase in both the Federal and State cost over the next few years. The Congressional Committees which acted on this legislation did not wish to see children hurt but rather directed their attention to constructive measures to improve the conditions for children under welfare. But it is clear that the costs of welfare will continue to rise although more of the costs will be for services such as day care for children, work, training and related activities.

### AFDC Referral and Freeze Provisions

One of the controversial features of the new legislation has been the extent to which mothers would be required to accept employment contrary to their wishes or what they might regard as the best interest of their children. When Secretary Gardner and I appeared before the Senate Committee on Finance we emphasized the Department's conviction that there were more mothers who wanted employment and training than there would be opportunities for under these programs.

A recent study made in New York City showed that 70 percent of the mothers on assistance wanted to work. The available evidence indicates that there is and will be in the foreseeable future ample opportunity to fill available work and training positions by mothers who wish such training and work on a voluntary basis.

The President has directed us to work with the States to see that the mandatory referral to work provision is administered compassionately, and we are doing so.

With respect to the AFDC freeze, the law says that for the last half of 1968 no larger proportion of the child population under the age of 18 shall receive Federal aid because of the absence of a parent than the average proportion in the first quarter of the year. By relating the number to the child population under 18 on January 1 of each year, provision is made to permit an annual adjustment to give effect to any changes in the child population. But if present trends continue, most, if not all, States will be faced with financial problems as the result of this provision.

Chairman Mills, when he presented the Ways and Means Committee's bill to the House, stated that the purpose of the freeze was to apply pressures to the States which would assure that they move promptly and vigorously to put the new work programs and other features of the legislation into effect. We certainly cannot expect work programs or family planning services will have much effect on AFDC rolls before July 1. As you know, the Senate has adopted an amendment to repeal the AFDC freeze. The issue is now in conference.

We have been asked whether States may use waiting lists so as to limit recipients of AFDC to the number for which Federal financial participation is available under the freeze. In our proposed policy statement on the freeze, we have maintained our long-standing position that States may not maintain waiting lists. The Congress did not change the requirement in the Federal law that State plans must provide "that aid to families with dependent children shall be furnished with reasonable promptness to all eligible individuals."

Some of the States have indicated that they disagree with this interpretation and, if necessary, they will seek administrative hearing and court review to test our position. While we are acutely aware of the fiscal problems which the freeze presents for the States, we believe we have no alternative, under the law and in the interest of children, to requiring that aid must be furnished promptly to all eligible individuals, without waiting lists.

### Medicaid and Medicare

I have mentioned some of the factors which lead me to believe welfare costs will continue to rise. One of the reasons for this is the Medicaid program and the rising cost of medical care.

It is estimated that 5.2 million persons received care under Medicaid in the fiscal year 1967, 7.3 million will receive care in 1968, and that about 8.5 million will be served in 1969.

In 1950, payments for medical services were only an infinitesimal fraction of welfare costs. As shown on chart 5, we estimate that medical care will represent over 40 percent of all welfare costs in 1969.

There is still a wide variation in income limits and scope of medical coverage under the State Medicaid programs. This is not desirable. One of our big challenges ahead is whether the States and the interested groups can work together to narrow these variations to provide essential services for medically needy persons and at the same time improve voluntary health insurance coverage.

I believe that the Medicaid program meets a basic need in our society because there are many persons with incomes too low to finance adequate health insurance coverage. Our voluntary health insurance system has many gaps. I recently outlined to representatives of non-profit and commercial insurers a number of improvements needed in voluntary insurance if Medicaid costs are to be kept

within reasonable limits. However, until medical insurance coverage is more comprehensive—and covers all of the low income families—there will continue to be a compelling need for more funds under Medicaid. For instance, one of the important areas in which voluntary insurance must expand its coverage is in the area of mental illness. Outpatient care, home health services, and nursing home care are other important areas in which voluntary insurance should expand.

One area in which I believe we can extend Medicare insurance is to the over one million persons who have been determined to be disabled under the social security program. This proposal was considered by the Congress last year and a special study was authorized as was the entire question of coverage of prescription drugs under the Medicare program. Recommendations from this study are to be submitted to the Congress before the end of this year.

## Rising Medical Costs

Today, there are indications that many Americans are simply not getting the health care they need.

One of the most formidable barriers to high quality health care is the steady rise in medical costs. A day in the hospital, which cost $14.40 in 1950, now exceeds $55.00. Other health costs, including drug prices and doctors' bills, have risen during the same period. In the past 12 months alone medical care prices have increased 7 percent.

This rising spiral of costs seriously threatens our ability to make health care more widely accessible and more readily available to the people who need it.

To explore this problem, the Department called a Conference on Medical Costs last summer, in which leading physicians, hospital administrators and others from all over the Nation participated. The group was in general agreement that one of the reasons for the rapid rise in costs is that we have an antiquated and inefficient system of health care. As a Nation, we are simply not well enough organized today to provide all of our people with the health services they want and need on an economical and efficient basis.

This conference was followed with several more—on private health insurance, on the group practice of medicine, and on hospital architecture and design. In addition, former Secretary Gardner established a Committee on Hospital Effectiveness to study the entire system of hospital and related services. And recently President Johnson created a National Advisory Commission on Health Facilities under the chairmanship of Boisfeuillet Jones to recommend this year new directions in the Hill-Burton and related hospital legislation. I look forward to the recommendations of this important Commission so that the Hill-Burton program which now expires on June 30, 1969 may be continued, improved, and expanded as a continuing reminder of the remarkable contributions of our distinguished Chairman.

We need intensive experimentation in the years ahead. We need to devise and test new patterns for delivering high quality health services.

For example, we have to find a mechanism for channeling people away from large and costly institutions when institutional care is not necessary and warranted. We need systematically to employ less expensive facilities. We need to broaden the reach of physicians' services with the use of new communications techniques and computer technology. We need to develop better emergency medical services.

We're also faced with the task of conserving scarce health manpower by making better use of highly trained professional people and by developing new types of health workers.

We need, in brief, to expand our research and development effort in health services. That is the purpose of our new National Center for Health Services Research and Development. It will enable physicians, clinics and communities around the country to experiment in new ways of providing and delivering health care. It will help us find new patterns, new models, new directions.

Our purpose in this and other new approaches is to insure the best possible health care, provided in the most efficient manner and at the lowest possible costs, for all Americans.

The Congress last year recognized that more must be done to control rising medical prices.

First, they wrote into the Medicaid program a new requirement that States must—"provide such methods and procedures relating to the utilization of and the payment for care and services available under the plan as may be necessary

to safeguard against unnecessary utilization of such care and services and to assure that payments (including payments for any drugs provided under the plan) are not in excess of reasonable charges consistent with efficiency, economy, and quality of care."

In addition, Chairman Mills sponsored an amendment applying to Medicare, Medicaid, and the child health program which authorizes experiments with existing charge or cost reimbursements to include specific incentive payments "to have the effect of increasing the efficiency and economy of health services through the creation of additional incentives to these ends without adversely affecting the quality of such services."

In this year's health message, President Johnson asked Congress to authorize the Secretary of Health, Education, and Welfare to employ new methods of payment in these programs as soon as the experiments prove effective. This will help combat health care cost increases by accelerating the introduction of more economical methods.

Much more, however, remains to be done if we are to extend the quality of care, restrain costs, and promote efficiency and economy. This will be a continuing and difficult responsibility for some time to come. We are far from knowing all the answers. We must find answers which do not restrict the private practice of medicine or the doctor-patient relationship.

I cannot let this opportunity pass without referring to the constructive and cooperative relationships which have developed between the health professions and our programs in the past 2½ years, especially in the Medicare program. The recent article by Dr. David Jay Scott, entitled, "We Doctors Were Wrong About Medicare", in the Saturday Evening Post issue of February 24, is worth reading. He reports that to his amazement "even the government forms are less complicated" than those used under other doctor-approved insurance programs. He points out how "Medicare is helping to improve the entire standard of health in the U.S."

## Child Health

One area which calls for redoubled effort is child health. Our infant death rate declined some 6 percent last year, but it is a shocking fact that at least 12 other nations have rates lower than ours. The reason is apparent: the extreme disparity between the health services available to the poverty-stricken and to the more affluent segment of society. The benefits of modern medical knowledge have barely begun to reach the children of the poor in our inner city and rural slums, and particularly our non-white population.

The contrasting death and illness rates of our white and non-white populations confirm the inequality of services. The death rate for non-white infants is 87 percent higher than that of white infants. A white child who survives infancy can expect to live from 5 to 6 years longer than a non-white child of the same age. The poor and non-white still suffer from a wide variety of handicapping conditions that could be prevented or corrected by early medical attention.

Often, however, the medical care they get is too little and too late—fragmented, impersonal, inaccessible. The result is sickness that need not happen and death that could be averted.

We need new approaches and new resources for expanded child health services—in neighborhood centers, parent and child centers, and comprehensive maternity and infant care projects in low-income areas. In some areas where such projects have been launched, the infant death rate has dropped by as much as 40 percent. This is an auspicious beginning, but we need to reach many more mothers and children if we are to bring our health standards to the levels of which we are capable in this country.

We made substantial progress last year in expanding and consolidating the child health provisions into the Child Health Act of 1967. The 1969 budget contains an increase of $58 million for these purposes.

In addition, we are proposing additional legislation this year to extend over a five-year period maternity care to all mothers in low-income families, and medical services to children under the age of one year in such families.

## Family Planning

I believe that one of the most significant legislative achievements of the Congress last year was the statutory recognition of the importance of family planning services. Specific language was added by the Congress to both the Child Health and dependent children (AFDC) laws incorporating family planning

services in these two programs. In the Child Health program, there is a specific earmarking for family planning services of six percent of the total funds. All such services are provided on a voluntary basis with freedom from coercion and freedom in choice of method utilized.

Family planning should be an intrinsic part of Medicaid, maternal and child health and AFDC programs. There is a close association between poverty, illness, and large family size. Studies have shown that most people at all income levels prefer small families, but the poor have less freedom of choice because they lack the knowledge of and availability to family planning services.

I would like to report to the Committee one of the conclusions of a study we made last year. This study showed that, of the 8.2 million low-income women in the child bearing age, there were 451,000 unwanted pregnancies. This study may be of interest to your Committee and I should be glad to make it available for your review.

Last year, a new position of Deputy Assistant Secretary for Family Planning and Population was established in the Department to coordinate the Department's programs of medical and social services, education and research in this field, and Mrs. Katherine Oettinger was named to this important post.

In a memorandum to the heads of HEW's operating agencies, former Secretary Gardner said, "The immediate objective is to extend family planning services to all those desiring such services who would not otherwise have access to them. Family planning is an integral part of our overall health program directed at the reduction of infant and maternal mortality and improving the health of the family."

The policy emphasized freedom from coercion and freedom of choice in method to be used.

The Department also plans to step up its research in human reproduction and fertility, to continue to test the safety and effectiveness of contraceptive devices, and to increase public understanding of family life and sex education.

The budget places greatly increased emphasis on family planning. The $56 million in the budget for 1969 compares with $28 million budgeted in 1968 and $20 million in 1967.

## Health Research

All of our progress in health depends on a sound foundation of biomedical research. Thanks to the interest and support of this Committee, our health research effort has grown steadily over the years.

In its report to the President last year, the National Institutes of Health noted that as a result of Federal support of research, 65,000 senior investigators are now at work in some 2,000 academic and research institutions. In addition, some 30,000 individuals are getting advanced training in scientific and clinical specialties.

This vast effort has reovlutionized the range of medical capability; has improved the outlook for people suffering from heart disease, cancer, and a number of other serious ailments; and has opened new insights into the functioning of biological systems, the ways in which we develop and age, and into the nature of life itself. The investments in biomedical research have yielded many dividends in the last year alone. This must continue.

Within the past year, we witnessed new and dramatic potentialities of medical research, particularly in organ transplantation, in the development of the artificial heart and the artificial kidney, in new knowledge of the mechanisms of human heredity, and in the realization that measles can now be completely prevented. These recent achievements were the result of careful work over a period of years—work made possible by the Federal Government's continuing and increasing investment in basic research. The importance of this investment can hardly be overemphasized. Such specific, target-oriented research should be continued and encouraged, and we intend to give this kind of work a high priority. At the same time, we need to pursue new knowledge along a broad and varied front—knowledge that will yield new techniques to prevent diseases, ease suffering, and promote longevity for as many people as possible.

I think this is an appropriate place to mention that we are proceeding with plans for the establishment of the International Center for Advanced Study in the Health Sciences, which will bear the name of the late John E. Fogarty, former Chairman of the House Appropriations Subcommittee on Labor-HEW. The initial function of the Fogarty Center will be to create the environment and to provide the means to assemble scholars and scientists for the advanced study of science as it relates to health.

Our investment in medical research is a contribution to the improved health not only to the people of our Nation but to all the people of the world. We share this knowledge for the peace and happiness of everyone.

### Manpower and Womanpower Shortages

All of our social programs depend on an adequate supply of well trained professional and supporting manpower. At present, the Nation's manpower shortage is grave, and it is likely to remain so for some time to come.

The recent report of the National Advisory Commission on Health Manpower underscored the great need for health workers of all types. The need is equally serious in the fields of social work, education, and rehabilitation.

We need to increase the output of trained people in all these fields. We need to devise patterns of organization and administration that will make the most efficient use of professional personnel. And we need to develop and train new categories of workers—aides, auxiliaries, technicians—to provide essential services as part of a team effort and to stretch our limited supply of manpower. To do so, we have to re-evaluate the skills required for various types of services and tailor these skills to different categories of need.

The manpower problem is a challenge to almost every element of society—business and industry, the education community, professional groups, and government at all levels. We have made a start in various training programs and in our efforts at coordination among governmental agencies. But we need to be both more imaginative and more aggressive if we are to come anywhere near our manpower needs in the decade ahead. Chart #6 gives some indication of the manpower problems in the health field.

### Environmental Problems and Consumer Protection

Americans continue to foul their environment at a phenomenal rate. Each year we dump 125 million tons of pollutants in the air. Our landscape is littered with junk and wastes, part of the 165 million tons of solid waste we produce annually. We are buffeted by crowding, harried by noise, endangered by radiation. We know relatively little about the more than 500,000 synthetic chemicals and other compounds on the market today or about their effect on human beings.

The rising tide of pollution threatens not only our health but the very quality of our lives.

The Air Quality Act of 1967 gave us new tools to help restore the Nation's air to an acceptable quality. It will enable us to expand our research and development efforts in this field. It authorizes the establishment of air quality control regions which should lead to the development of desirable air quality criteria. It encourages planning and control activities on a regional basis.

As a result, we are accelerating our efforts to clean up the air. But we are not nearly as advanced in other environmental areas. Nor have we as yet begun to develop a total, comprehensive approach toward conserving our environment or refashioning it where necessary.

The increasing complexity of the products and services we live with makes it necessary to take protective measures in common. The individual is simply not up to judging the safety or efficacy of a new drug or plastic or synthetic. He is asked to choose wisely under conditions which baffle the experts. We must devise new safeguards to protect the American consumer from fraudulent or potentially hazardous substances and products.

### Vocational Education

A useful and rewarding job is the surest road to independent living. But the disadvantaged face almost insurmountable barriers in getting and holding a job. They lack skills, work experience and normal work habits. Seeing no way out for themselves, they often lack motivation and self-respect. They need education to live as well as to learn.

Vocational education and job training are crucial to our efforts at salvaging human beings. Much greater attention must be given to vocational education within the framework of our school system. Too often, vocational education has been outside that system or has occupied an inferior place within it. Children enrolled in vocational education courses often sense this second-class status and drop out early.

Moreover, vocational education in many communities has not been as responsive to the needs of our society as it might be. The emphasis has been on occupations bypassed by our advancing technology.

Vocational education should be part of a total program that prepares the individual to live in society. Our young people and our adults have the right to a total rather than a fragmented education, including preparation for the world of work. Occupational education, planned work experience, and job and career counseling should be offered as part of the general education program in all schools. And to help serve the multiple and changing needs of individuals, the school should link itself to family, employer, and community.

We need new and innovative approaches to vocational education and manpower training. We need to build a sound system that will motivate young people to stay in school, that will be preventive and constructive instead of palliative. And we need to do a much better job of coordinating the various job training programs at the local level.

We recently transmitted to the Congress the report of the Advisory Committee on Vocational Education appointed under the 1963 Amendments. The Committee headed by Martin Essex made a number of recommendations which should be reviewed by both the substantive legislative Committees and the appropriations Committees. There will also shortly be transmitted the report of the special Committee which was authorized by the Congress last year.

We still have a long way to go before we have a satisfactory and adequate program of vocational education in this country.

### HIGHER EDUCATION

Our society is committed to the goal that every American receive all the education he needs to properly develop his abilities. In today's world, this means higher education. For millions of Americans, higher education used to be only a dream. Today, it is a necessity and more and more students are aspiring to an education beyond the high school.

They are doing so in increasing numbers. College and university enrollment last fall was at a record high of nearly 7 million, an increase of 8 percent over the previous fall and 45 percent over four years ago. In another four years the enrollment total is expected to rise another 25 percent.

At the beginning of this Century only 4 percent of Americans from 18 to 21 were enrolled in higher education; by 1960 this proportion had increased to 23 percent. Today it is over 33 percent. For the first time in our history, education beyond the high school is becoming the norm rather than the exception in America. Table 2 is an indication of the remarkable progress made in recent years and the growth expected in the next 7 years.

One of the most significant developments which is occurring is the increase in enrollment in two year community colleges. Enrollment has increased from about 850,000 in the fall of 1963 to 1,440,000 in the fall of 1967. This is a most important step in making post-high school education more easily accessible to additional students.

Yet millions of youngsters still do not share in this opportunity. The cost of higher education has soared in recent years. For too many high school graduates going on to college still depends far more upon the ability to pay than the ability to learn. We have to strike down all the barriers—financial, racial, social, and geographical—to a college education. We also have to make sure that our colleges and universities have the teachers, facilities, and resources they need to accommodate the flood of new students. Finally, we have to maintain and improve the quality of higher education and to strengthen its services to our communities and States.

The growth in expenditures for higher education is shown in Table 3. We can expect these expenditures to grow in both amount and relative to the GNP.

A major issue will be how to organize and finance student financial aid so that all students from low-income families who have the ability and interest in attending college can do so.

Chart #7 indicates that in 1967, 48 percent of all undergraduates came from the 25 percent of families with the highest incomes, while only 7 percent came from the 25 percent of the families with the lowest incomes.

I believe we must begin to develop a plan by which we make it possible for every boy or girl with ability and purpose to attend college.

## Elementary and Secondary Education

Any adequate discussion of the needs in elementary and secondary education would require an entire volume by itself.

The Elementary and Secondary Education Act of 1965 has enabled the Nation to make important progress, but it is still premature to know in substantial detail exactly what the results will be until we have had a longer period of experience.

I am glad that the Congress extended the ESEA for two years last year and I hope that advance funding for Title I will be enacted this year. School districts need this kind of longer-range provisions to enable them to plan wisely and well for the use of the Federal funds.

There are many unsolved problems in elementary and secondary education which will take us a number of years to deal with properly. As Chart #8 shows, while the average annual current expenditure per pupil in 1967 was $569 for the Nation, State annual per pupil expenditures ranged from $912 in New York to $335 in Mississippi. Fifteen States expended over $600 and five States expended under $400 per pupil.

The *relative* difference between the State with the highest per pupil expenditure (N.Y.) and the State with the lowest per pupil expenditure (Miss.) has decreased somewhat in recent years. In school year 1963–64, for example, New York's per pupil expenditure ($744) was triple that of Mississippi ($249). By the 1966–67 school year, New York's per pupil expenditure ($912) was 2.7 times as large as Mississippi's ($335). But the gap is increasing in terms of *absolute* dollar differences ($495 difference in 1963–64, as compared to $577 in 1966–67).

There are still many localities in which children cannot attend kindergarten. In the year 1966, about 25% of all 5-year old children did not attend kindergarten or school. 80% of all 4-year olds were not enrolled in any kindergarten or nursery school.

The major responsibility for financing elementary and secondary education falls on the localities, and financial problems today plague practically every city school system. No one would question that elementary and secondary education in the inner-city must be strengthened greatly in financial resources and in quality of teachers if the children in these areas are to have high quality education. Yet a study of the Advisory Commission on Intergovernmental Relations, covering 37 largest Standard Metropolitan Statistical Areas in the country, showed that State financial aid to local schools tended to favor suburban schools over central city schools. The Commission's studies show that the schools serving low income central city children are receiving less per pupil as well as per capita than those serving the more affluent suburbs. Another study of 35 cities showed that cities averaged $124.92 per pupil in State aid in 1964–65, while suburban districts got an average of $165.54 per student—$40.62 more. We need to reconsider local and State methods of financing elementary and secondary education and the role of Federal financial help in the three way partnership if these imbalances are to be corrected.

The need for effective, competent teachers grows each day. Allowing for enrollment increases, teacher turnover and some replacement of teachers with substandard certificates we foresee a need for well over 900,000 new teachers in the next five years. Teachers salaries in 1967–68 range from an average of $4,611 in Mississippi to $8,900 in California, with a national average of $7,296. An increase in the salaries of elementary and secondary school teachers is mandatory to attract and hold capable, imaginative and enthusiastic individuals as teachers. The success of our educational programs will depend on the quality of our teachers. More effort must be made to provide adequate numbers of trained educational manpower. Teacher training and retraining and the use of teacher aides should be emphasized and additional measures taken to attract qualified people into teaching and to strengthen teacher education.

## Urban Crisis

Many of the problems I have been discussing converge with special severity in our cities. The cities are in deep crisis, a crisis that is both physical and social. The physical crisis is visible in the terrible overcrowding, contaminated air, choked streets and highways, and deteriorating neighborhoods. But the social crisis—the rising welfare loads, high unemployment among the young and untrained, high rates of crime and delinquency, and unrest and alienation in the inner city ghettos—is even more corrosive.

The reasons for the crisis are familiar. The concentration within the cities of racial minorities has created ghettos which reflect not only poverty but also the multiple ills of economic and racial segregation. The flight of the upper and middle income groups to the suburbs has eroded the local tax base, while the costs of public services—police and fire protection, education, sanitation, welfare, health—have soared in the inner city.

Within the last few years we have begun to face the urban problem realistically and with a renewed sense of dedication. Recent legislation has given us a variety of new tools and resources. But we are still groping for solutions. We have a long way to go before we apply ourselves to the total problems of the city in a coordinated way. This we must do, and the Department of Health, Education, and Welfare must play an important role in that endeavor.

The overriding challenge of our time is to rebuild our cities so that they are not only more livable but so that they are once more the centers for jobs, education, culture, and leadership in today's world.

## Responding to the Problems

Many other problems are also before us—mental illness and mental retardation, alcoholism, drug addiction, and juvenile delinquency, to name but a few. In my presentation, I have limited myself to but some of the issues as we view them today.

We are, I believe, responding to all of these problems. We certainly don't have all the solutions. And the pace of progress has been understandably uneven. We are confronted with matters of incredible complexity, involving institutional change as well as the reordering of human resources.

Nonetheless, we can report encouraging progress on a broad series of fronts.

Before doing so, however, I should like to describe some of the organization and management improvements we have made in HEW. These actions have two important purposes: (1) to discourage our own responsibilities, our share in the national effort, in a more efficient manner; and (2) to improve our relationships with the agencies and institutions, both public and private, with which we work.

## Organization and Management

We have given considerable attention to modernizing the Department's administrative machinery and revitalizing its organizational structure. Since we last reported to this Committee, we have made two major organizational realignments.

The first occurred last August when three major agencies—the Welfare Administration, the Vocational Rehabilitation Administration, and the Administration on Aging—were combined in a new Social and Rehabilitation Service. This reorganization was designed to:

Bring together the various HEW services that deal with special groups, such as the aged, the handicapped, and children;

Encourage the concept of preventive and rehabilitative social services for all the disadvantaged, including the poverty-stricken;

Separate cash payments for welfare recipients from programs of services, thus making better use of scarce, highly skilled personnel; and

Help improve the delivery of services by establishing simplified and clearer channels at the regional level to the States and communities.

This move is already helping to encourage a combination of services—counseling, medical diagnosis and treatment, income support, day care, homemaker services, adult basic education—delivered in a coordinated way and tailored to the specific needs of disadvantaged individuals and families.

The second major organizational change is designed to strengthen and improve the coordination of the Department's scattered health programs.

Two steps have been taken so far to accomplish this. First, the direction of the Food and Drug Administration and the Public Health Service was unified under the Assistant Secretary for Health and Scientific Affairs, Dr. Philip R. Lee. Second, the bureaus of the Public Health Service were reorganized into two new health agencies: an enlarged National Institutes of Health and the Health Services and Mental Health Administration. The new NIH is made up of the previous institutes and divisions, the Bureau of Health Manpower, and the National Library of Medicine. In the new agency educational activities will have equal status with research activities. The Health Services and Mental Health Administration brings together the Bureau of Health Services, the National Institute of Mental Health, the Bureau of Disease Prevention and Environmental

Control, and the National Center for Health Statistics. The Surgeon General, Dr. William H. Stewart, will function as the Assistant Secretary's principal deputy. Dr. Shannon continues as Director of NIH and Dr. Marston becomes head of the Health Services and Mental Health Administration.

This new arrangement will give us greater flexibility in dealing with States and communities, hospitals and universities, and the health professions. We hope, too, that it will serve to improve the delivery of health services to the people who are most in need of health care.

In another action last year, Saint Elizabeth's Hospital, heretofore a separate agency within HEW, was transferred to the National Institute of Mental Health. The purpose is to transform it, under NIMH tutelage, into a modern, community-based mental health center for the District of Columbia.

I would like to point out to the Committee a very significant reorganization step that has recently been taken by several States. This reorganization concerns the creation of a combined State Department for Health and Welfare. Ten jurisdictions now have a Health and Welfare, or a Health and Social Services Department. While the State of Maine created its Department over 35 years ago, six of these Departments have been created in the last six years.

The creation of these combined health and welfare departments indicates, I believe, a recognition of the interrelationship between the problems of poverty and ill-health, and a realization of the necessity to better coordinate the services in these fields. I am very pleased to see this trend taking place. I am hopeful that it will facilitate improved program coordination at both the State level, and between all levels of government—Federal, State, and local.

In addition to organizational steps, a number of improvements were made in the Department's management systems. To cite just one example, the Food and Drug Administration was able to eliminate a two-year backlog in processing new drug applications.

One of the most significant management reforms had to do with HEW assistance to State and local agencies. As you know, more than 90 percent of the funds appropriated to this Department are allocated to these agencies in the form of grants. The improvements included delegating more decision-making authority to regional offices; eliminating duplicative requirements, and streamlining the technical review procedure. These reforms are expected to cut the time devoted to the processing of grants by 50 percent, and should enable the Department to respond much more quickly to State and local needs.

### WORKING WITH OTHERS

All of these administrative and organizational measures are part of the Department's continuing effort to strengthen State and local agencies and to improve our relationships with them.

This effort has taken two forms: (1) legislation to encourage greater initiative and flexibility on the part of State and local agencies and institutions; and (2) the creation of mechanisms to foster closer ties between the Federal and non-Federal partners.

A major legislative breakthrough was the Partnership for Health Act which freed the States and communities from categorical restraints. It enabled them to approach their own health needs more rationally, to plan comprehensively, and to set their own priorities.

Another step in this direction was the Educational Professions Development Act which provided greater flexibility in Federal support for the training of faculty and staff members.

The late funding of Federal programs in support of education has been a continuing source of frustration to the school community. School officials had to hire teachers and plan their activities before they knew how Federal authorizations would affect these activities. After studying this problem, we proposed a system of advance funding and the Congress enacted an amendment to this effect last year. Advance funding should remove many of the uncertainties faced by the Nation's school officials and enable them to plan their programs more realistically.

We are looking into the matter of grants from several angles—financial arrangements, procedures, and relationships. We are giving intensive study to the difficult and controversial question of block versus categorical grants. We are exploring new ideas and alternatives that might help us arrive at more flexible arrangements.

Finally, we are focusing resources throughout the Department on urban problems. We established a new base for this effort in the Center for Community Planning, which was set up within the Office of the Secretary last year. The Center enables HEW to address itself directly to the problems of the central cities. It serves as a resource for city officials and a primary point of contact with the Department of Housing and Urban Development on model cities plans and programs. It works closely with HUD and other Federal agencies to coordinate multi-purpose projects involving education, land use, recreation, housing, health care, and social services.

ACCOMPLISHMENTS

Now let me highlight just a sampling of accomplishments under some major HEW programs which you have made possible.

On March 1 more than 23.5 million people—one out of every nine Americans—received an increased monthly social security check. In 1967, social security benefits helped keep 5.7 million aged people out of poverty. As I pointed out before, a million more people are expected to escape poverty as a result of the 1967 Amendments to the Social Security Act. An additional million would have been taken out of poverty if the benefits had been increased to a $70 minimum as the Administration recommended.

In its first 18 months, Medicare has paid out benefits totaling $5.5 billion. Virtually all older people are now protected against hospital costs and some 93 percent are signed up for voluntary medical insurance—a tremendous response for a voluntary program.

About 9 million disadvantaged children—in over 18,000 school districts in all the States—were helped last year by special projects under the Elementary and Secondary Education Act of 1965.

Nearly one and a quarter million young Americans are continuing their education beyond high school with the help of Federal financial aid programs.

Some 10 million adults have participated in Federally assisted vocational education programs since 1965.

More than 200,000 mothers and their infants have received special medical care in 54 low-income areas over the past four years. In some of these areas, infant mortality has dropped by as much as 40 percent.

This year more than 200,000 disabled people will be rehabilitated for useful work, almost 50 percent more than three years ago. More than one out of every 10 of these people were on public welfare.

Close to 300 community mental health centers are being built or staffed with Federal help. They are located in areas where 47 million Americans live.

The foregoing are merely illustrative of the vast effort you are supporting in every field related to human well-being. It is a shared effort, which depends on participation and leadership among a variety of groups and at all levels of Government. We appreciate the support you have given to making it possible to make continued progress in these important programs.

This completes my opening statement, Mr. Chairman. Mr. Kelly and Mr. Cardwell are here to explain our 1968 and 1969 budget proposals. Mr Huitt is also here to discuss our legislative program for this session of Congress. We stand ready to give you any information you want and to answer any questions you may have.

WITNESS PRIOR SERVICE AND NEW STATUS

Acting Secretary COHEN. Mr. Chairman and members of the committee, it is a pleasure to appear before you as you consider appropriations for the Department of Health, Education, and Welfare for fiscal year 1969.

I have appeared before this distinguished committee many times, sometimes as a witness on a given program or appropriation, and more recently as a support witness accompanying the Secretary. But this is the first time I have testified on behalf of the entire Department of Health, Education, and Welfare.

Senator HILL. You are now the Secretary.

Acting Secretary COHEN. Well, I am the Acting Secretary until

the Senate Finance Committee has acted on my nomination, Mr. Chairman.

Senator HILL. Have they had any hearings on your nomination?

Acting Secretary COHEN. Not that I am aware of. They may have but I don't know about them if they did.

For me, a man who began his career in a predecessor agency of the Department in 1934, it is an honor and a privilege.

Senator HILL. What year did you come with the Department of Health, Education, and Welfare?

Acting Secretary COHEN. 1953.

### MAJOR HEALTH, EDUCATION, AND WELFARE TRENDS

With your permission, Mr. Chairman, I would like to direct my remarks toward some of the major trends and issues facing the Nation and the Department in the fields of health, education, and welfare.

I believe this will provide a backdrop for the more detailed discussions of individual items in the budget which will follow when the agency heads and their staff appear before you later during these hearings.

I have prepared for the committee a highlight and summary statement of the budget which I would like to insert in the record at the end of my remarks.

Senator HILL. Without objection, that may be done.

### TOTAL NATIONAL PICTURE: PUBLIC AND PRIVATE

Acting Secretary COHEN. An overall view: A Federal budget represents a proposed allocation of resources to serve national objectives, the allocation of limited resources among competing demands within the public sector as well as between the private and public sectors.

It identifies priorities for dealing with unmet needs.

Hence, it is important to look at the total national picture of health, education, and welfare expenditures—public and private—in evaluating the Federal role in any year or over a period of time.

The charts in my statement have been made into large charts for the benefit of your committee.

If you will look at chart No. 1, total expenditures for health, education, and welfare—public and private—amounted to $146 billion in the fiscal year 1967 or about 19 percent of the gross national product.

In 1950, comparable expenditures amounted to only 12.7 percent of the gross national product; in 1960, they represented 15.6 percent.

Keep in mind, Mr. Chairman, what I am talking about here is total expenditures, public and private, Federal, State, and local, from insurance, from people's private pockets, from the taxpayer, and from the private citizen through philanthropy.

This is an attempt to measure the total impact of health, education, and welfare in our total society and economy.

Now of the total expenditures in 1967, approximately $100 billion—or about two-thirds—were public expenditures and about $46 billion—about one-third—were in the private sector.

In the public sector, $54 billion were Federal expenditures, and $46 billion State and local.

It is interesting to note that private expenditures and State and local expenditures are approximately equal.

Chart 1

## Total Expenditures for Health, Education and Social Welfare

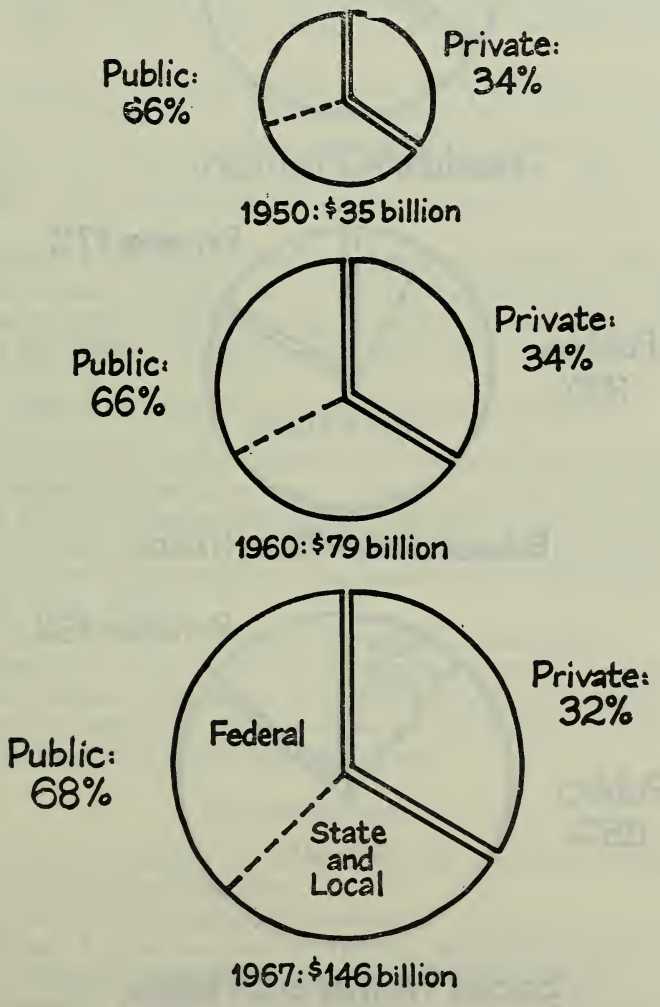
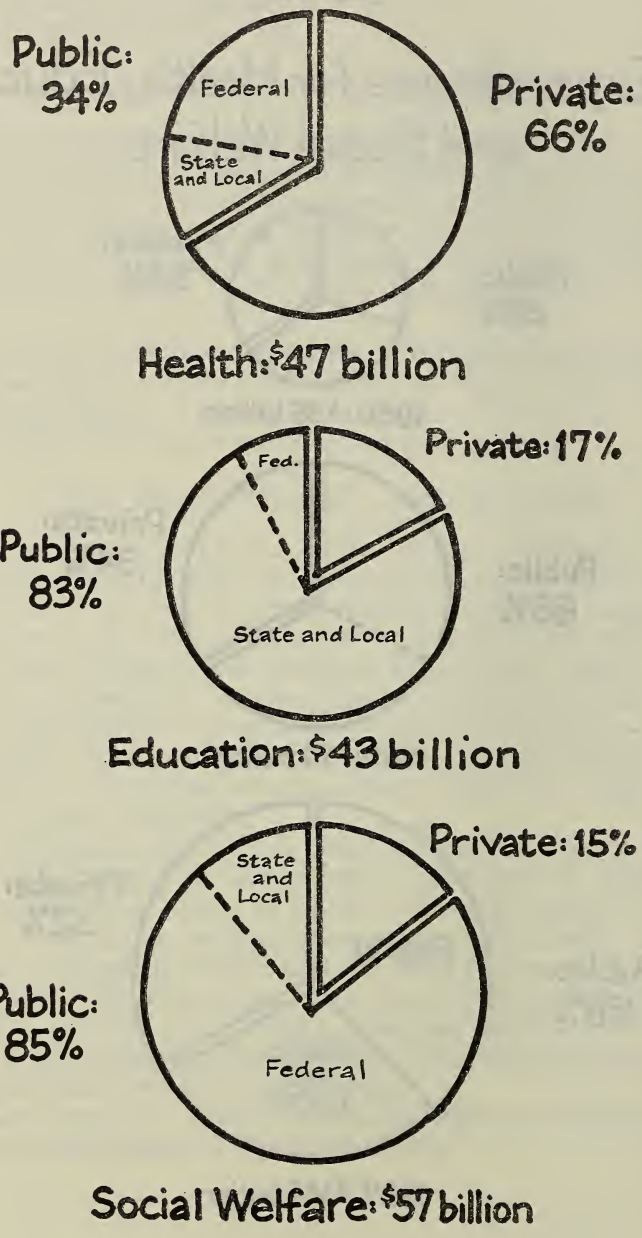


Chart 2

# Public and Private Expenditures, 1967



### Private Expenditure

As chart 2 shows, the private expenditures are primarily for medical care while the State and local expenditures are concentrated on elementary and secondary education.

Funds from all three sectors have been increasing. The Federal share increased about $8.5 billion from fiscal year 1966 to 1967; the State and local share $3.6 billion; the voluntary sector increased about $1.2 billion even though there was a transfer of over $3 billion in health insurance expenditures for the aged from the private to the public sector due to the inauguration of medicare.

### Three-Way Cooperative Potential

Now I conclude from this analysis, Mr. Chairman, that the three-way cooperative approach we have in our country to meeting health, education, and welfare needs is not a simple, clear-cut way of handling our problems.

It is a constantly evolving partnership which brings with it all the complexities involved in cooperation, competition, and compromise.

But, in my opinion, it is an arrangement which brings with it great potentialities for continued progress, improvement, and widespread participation and innovation by many persons, institutions, and agencies.

I think that is an example of the most significant thing that we have in this country, what I know the political scientists call pluralism, the use of many different groups and individuals in our society to improve the health, education, and welfare of our country.

### Past and Continuing Expenditure Increases

The most important observation to be drawn from these figures is that these expenditures have been growing rapidly and seem likely to continue to grow during the coming decades, both in terms of the total amount spent, and as a percentage of the gross national product.

I personally look upon them as an investment in the future growth and vitality of our Nation.

Senator Hill. You would say it is a sound investment?

Acting Secretary Cohen. Yes. I think you cannot find better investment in this Nation than when you spend money on people's health, their education, and give them a sense of protection for the future through social security and welfare program.

### Population Growth

Now there are a number of reasons for the growth in expenditures for health, education, and welfare.

First, the population is steadily increasing.

Senator Hill. In that connection, do you recall how much our population has increased since the beginning of this century?

Acting Secretary Cohen. At the present time our population is growing about 2½ million a year. We are over 200 million. Our population since the beginning of this century has more than doubled, from about 76 million in 1900 to over 200 million today.

Mr. Chairman, this is the key point which I am sure some citizens, school boards, county councils, legislatures and even sometimes officials at the Federal level do not realize, how much more we need to expend because of this tremendous increase in population.

### Elderly and Young Populations

But the important thing is that the elderly population and the young population, those groups requiring the most services, have shown the largest increases in those years.

Senator Hill. A child born at the beginning of this century had a life expectancy of 47 years, whereas today a child born would have a life expectancy of the biblical three score and 10 or 70 years.

Acting Secretary Cohen. That is correct. Of course, the largest improvement of that came in the reduction in infant mortality.

Senator Hill. That is right.

Acting Secretary Cohen. I think that is an indication of the tremendous value of investment of funds in good health and in prenatal care, the saving in life and the saving in anxiety and frustration of parents.

It cannot be measured in dollars.

### Infant Mortality Rate

Senator Bartlett. At the same time, is it not true, Mr. Secretary, that the infant mortality rate in the United States far surpasses that of many other countries?

Acting Secretary Cohen. Yes, sir. It is somewhere between the 12th and 15th in the world. I will say, as I touch on this later, there is absolutely no reason why we could not reduce that dramatically.

Every effort indicates that with comprehensive prenatal care and family planning services we could again assert our leadership in the world in that area.

These groups, the elderly population and the young population, those groups requiring the most services, have shown the largest increases. These groups have increased by more than 20 percent over the past 10 years and now constitute nearly 46 percent of the population.

### Transmigrations

Second, America is a nation on the move. People are moving from east to west, south to north, from city to suburb, from farm to city.

During the 6-year period 1960–66, the farm population had an annual average net loss of 804,000, an annual loss rate of 5.9 percent.

The number of people living in urban areas has increased more than 25 percent in the past 10 years and now make up about 70 percent of the population.

By the year 2000, all but 20 percent of the population may be living in these concentrated areas.

### Effect of Population Growth on HEW Expenditures

This population trend has had, and will continue to have a direct bearing on expenditures in Health, Education, and Welfare.

New services must be provided in areas where none existed and existing services must be expanded to accommodate growing numbers of persons.

### Social Problems Are Community Responsibilities

Also, the pervasive social problems: illegitimacy, alcoholism, mental illness, and broken families, that are generated, at least partially, as a result of this mobility, have come to be recognized as community responsibilities requiring community action.

### Reasons Welfare Costs Increased

Prices, too, have increased, pushing up the cost of the services purchased. For example, the cost of medical care in February 1968 went up 0.5 percent over the January 1968 level, bringing the index to 41.9 percent above the 1957–59 level.

Senator Hill. To what do you ascribe this tremendous increase?

Acting Secretary Cohen. I believe first that you have a tremendous shortage of personnel and facilities in the health field.

At the same time, over the last 10 or 15 years, you have had a growing demand. So that speaking as an economist, I would say that when you have an increase in demand and a shortage in supply, it is very natural for the price to go up.

But there is a third factor that I think is even more important. That is people's aspirations for good health have become, I would say, almost unlimited.

When you can see Dr. De Bakey's contributions on the television——

Senator Hill. Did you see him last night?

Acting Secretary Cohen. No, sir, I didn't.

Senator Hill. Last night he was on Walter Cronkite's program.

Acting Secretary Cohen. I am sorry, I did not see it.

When you can see organ transplants being done, when you can see kidney transplants, when you can see a transplant of eyes, when you can see children's lives being saved by open heart surgery, as this becomes more understood through the press and the television, naturally a mother or a father is going to say, "Well, I would like to have that for myself, too, or my child, or my mother, or father."

Aspirations of people for good health, I think, are what is pushing the demand and I think all of us, both in the legislative and in the executive branch, would like to accommodate that as rapidly as possible, but it cannot all be done overnight.

I would say another factor is that a great deal of credit goes to this committee for its contribution toward the expansion of the National Institutes of Health, which has made medical research so much more generally available and has made people feel that they ought to have the benefits of this research.

### Great Need for Medical Care Personnel

I must say in answer to your question, I do not see any end to the miracles of medical science that can happen. I do not see any end to the demand for medical care.

I see a great need for manpower and womanpower in this field. I think this is going to be a continuing problem for the next two decades, at least.

Senator HILL. Getting the necessary personnel?

Acting Secretary COHEN. Yes, sir.

As you know so well, if you said to me today, "Secretary Cohen, develop all the doctors in the country that you think you need," it would probably be 10 to 12 years before one could develop these doctors when you consider the need to build schools, get the faculty and the facilities.

### DESIRE FOR BETTER HEALTH AND EDUCATION

This discussion of rising aspirations relates directly to the explanation I was giving about the reasons for growing expenditures in health, education and welfare. Added to the above factors is the rising level of aspirations of people. They want better health care. They want better schools and more education for their children. They want to retire and live in dignity.

Let us take one illustration of what has been happening. Within a single generation the proportion of pupils who graduate from high school has risen by nearly 60 percent.

### INCREASE AND POTENTIAL PERCENTAGE OF HIGH SCHOOL GRADUATES

For every 1,000 children in the fifth grade in 1959–60, there were an estimated 721 high school graduates in 1967. This may be compared with 621 graduates in 1960 and with 455 graduates in 1946 for each 1,000 pupils in the fifth grade 8 years earlier.

Senator HILL. A pretty definite increase.

Acting Secretary COHEN. Yes, sir. I would say from everything we know that this is going to increase still further in the future.

Senator HILL. Everything points to that, does it not?

Acting Secretary COHEN. I would expect so.

And let me say I would hope that we would get to the point where 999 out of every thousand children in the fifth grade will be high school graduates.

I do not see any reason in the world in which we live, considering the advancement in technology and the need for trained personnel and intelligent people to grapple with the problems of the world, why everybody should not be a high school graduate.

Senator HILL. Look how our colleges and universities have grown.

Acting Secretary COHEN. Yes, sir. That will put a heavier strain on our colleges and universities.

There is no question in my mind that the investment in health, education, and social security will grow and must continue to grow.

### PARADOX OF PLENTY AND POVERTY

Although both the Nation's gross national product and HEW expenditures have been increasing and much social progress has been made, we are all acutely aware of the many needs which are still unmet.

An important aspect of our recent history is the growing awareness of these unmet needs and the concern about dealing more effectively and promptly with them.

The paradox of poverty amidst plenty is one which has been receiving considerable attention.

The good life enjoyed today by the average American goes beyond the fondest dreams of our grandfathers. Yet, in the face of all this Nation has accomplished—the highest standard of living in the world—the greatest educational and job opportunity for the most people of any nation on earth—the elimination of dread disease and a greater life expectancy—we are beset by problems associated with poverty: Social unrest, rising welfare costs, inadequate education and training of some groups, and inadequate health care for many of our people.

As we have brought the fruits of progress to more and more of our people, the disparity between those who have gained the most and those who have gained the least has grown.

As we have raised our standard of living, so have we widened the gap between the poor and economically secure.

As we have provided an elementary and secondary education to more and more of our people, so have we increased their thirst for greater knowledge and for more education.

As we have broadened medical knowledge, so have we created a demand to extend the miracles of modern medicine to every corner of the land.

Thus, the United States today is faced with the very difficult task of eliminating the disparities that exist—

Between the affluent and the poor;

Between those who have the skills and motivations for a job and those who do not;

Between those who have full opportunity for adequate health care and those who do not;

Between those who are receiving an adequate education and those who do not have full educational opportunity;

Between those who live in the ghetto and those who have become free to live where they choose.

## FACTS ABOUT POVERTY

Let's take a brief look at some facts about poverty.

The Social Security Administration in the Department of Health, Education, and Welfare makes annual estimates derived from data from the Bureau of the Census on the extent and characteristics of poverty.

### Basic Income Levels

The basic income levels used to determine the poverty line for the year 1966 are as follows: for a nonfarm family of four, $3,335; for a single person, $1,635. These are adjusted for size of family, age, and for farm and nonfarm residence. The more detailed figures are shown in table 1.

(The table follows:)

TABLE 1.—WEIGHTED AVERAGE OF POVERTY AND LOW-INCOME CRITERIA [1] FOR FAMILIES OF DIFFERENT COMPOSITION BY HOUSEHOLD SIZE, SEX OF HEAD, AND FARM OR NONFARM RESIDENCE

| Number of family members | Weighted average of incomes at poverty level | | | | | | Weighted average of incomes at low-income level | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | Nonfarm | | | Farm | | | Nonfarm | | | Farm | | |
| | Total | Male head | Female head | Total | Male head | Female head | Total | Male head | Female head | Total | Male head | Female head |
| 1 member | $1,635 | $1,710 | $1,595 | $1,145 | $1,180 | $1,110 | $1,985 | $2,080 | $1,930 | $1,390 | $1,440 | $1,340 |
| Head under age 65 | 1,685 | 1,760 | 1,625 | 1,195 | 1,230 | 1,140 | 2,045 | 2,140 | 1,975 | 1,450 | 1,495 | 1,380 |
| Head aged 65 or over | 1,565 | 1,580 | 1,560 | 1,095 | 1,105 | 1,090 | 1,890 | 1,925 | 1,880 | 1,330 | 1,350 | 1,315 |
| 2 members | 2,115 | 2,130 | 2,055 | 1,475 | 1,480 | 1,400 | 2,855 | 2,875 | 2,735 | 1,990 | 2,000 | 1,870 |
| Head under age 65 | 2,185 | 2,200 | 2,105 | 1,535 | 1,540 | 1,465 | 2,945 | 2,970 | 2,790 | 2,075 | 2,080 | 1,945 |
| Head aged 65 or over | 1,970 | 1,975 | 1,955 | 1,380 | 1,380 | 1,370 | 2,665 | 2,675 | 2,615 | 1,870 | 1,875 | 1,835 |
| 3 members | 2,600 | 2,610 | 2,515 | 1,815 | 1,820 | 1,725 | 3,425 | 3,440 | 3,330 | 2,400 | 2,400 | 2,325 |
| 4 members | 3,335 | 3,335 | 3,320 | 2,345 | 2,345 | 2,320 | 4,345 | 4,355 | 4,255 | 3,060 | 3,060 | 3,000 |
| 5 members | 3,930 | 3,930 | 3,895 | 2,755 | 2,755 | 2,775 | 5,080 | 5,085 | 4,970 | 3,565 | 3,565 | 3,560 |
| 6 members | 4,410 | 4,410 | 4,395 | 3,090 | 3,090 | 3,075 | 5,700 | 5,710 | 5,600 | 3,995 | 4,000 | 3,920 |
| 7 or more members | 5,430 | 5,440 | 5,310 | 3,790 | 3,795 | 3,760 | 6,945 | 6,960 | 6,780 | 4,850 | 4,850 | 4,815 |

[1] Required income in 1966 according to Social Security Administration poverty or low-income index for a family of a given size and composition. Family income criteria weighted together in accordance with percentage distribution of total units by number of related children and sex of head, as of Current Population Survey, March 1967.

Note: For detailed description of the Social Security Administration measures of poverty and low income and their rationale, see the Social Security Bulletin for January 1965 (pp. 5–11) and July 1965 (pp. 3–10).

### Decline in Persons in Poverty Group

From 1959 to 1967, the number of persons in poverty fell from about 39 million to about 27.4 million, or from 22.1 percent to about 14 percent of the population—certainly a most remarkable achievement in that short period of time.

We estimate that on March 1 the number of persons in poverty declined an additional million by virtue of the increase in social security benefits.

I would estimate that today there are about 26 million persons in the poverty group—a decline of 13 million since 1959.

It is highly significant that Federal programs aiding the poor have undergone substantial changes in the past 8 years.

During this period, the country has greatly increased both the size of this aid and the proportion of it that is provided through what I would like to call the human investment programs.

### HEW Poverty Funding

Total funding of programs directly aiding the poor—that is, from Federal funding—has more than doubled, from $9.5 billion in fiscal year 1960 to an estimated $24.6 billion in fiscal year 1968 and $27.7 billion in 1969.

About two-thirds of these total estimated expenditures in aid to the poor for fiscal years 1968 and 1969 are provided through programs administered by the Department of Health, Education, and Welfare.

### Other Federal Funding

Senator Hill. Where would the other third come from, for the sake of the record?

Acting Secretary Cohen. Some of it comes from the Office of Economic Opportunity and some of it comes from the Department of Labor.

I will be glad to put into the record a little table that I have here that indicates what the sources of that total are.

Senator Hill. Very good. Without objection, we will have that table appear at this point in the record.

(The table follows:)

Estimated Federal Agency Funds for Programs Assisting the Poor, Fiscal Years 1960–69

ADMINISTRATIVE BUDGET AND TRUST FUNDS

[In billions of dollars]

| Agency | 1960 actual | 1963 actual | 1967 actual | 1968 actual | 1969 actual |
|---|---|---|---|---|---|
| Agriculture | 0.2 | 0.4 | 0.4 | 0.6 | 0.7 |
| Commerce | | .1 | .2 | .2 | .2 |
| Health, Education, and Welfare | 6.2 | 8.2 | 14.1 | 17.0 | 18.9 |
| Housing and Urban Development | .1 | .1 | .2 | .3 | .6 |
| Interior | .2 | .3 | .5 | .4 | .4 |
| Labor | .5 | .6 | .6 | .8 | .9 |
| Office of Economic Opportunity | | | 1.6 | 1.7 | 2.3 |
| Railroad Retirement Board | .4 | .3 | .3 | .4 | .4 |
| Veterans' Administration | 1.9 | 2.4 | 2.8 | 3.0 | 3.1 |
| Total[1] | 9.5 | 12.5 | 21.1 | 24.6 | 27.7 |

[1] May not add due to rounding.

### Changes in Nature of Aid Provided

Acting Secretary Cohen. Significant, yet often unnoticed, changes have occurred in the nature of the aid provided.

In the fiscal year 1960, over 87 percent of this aid to the poor was provided through cash benefit payments such as social security.

By fiscal year 1968 (and for fiscal year 1969), cash benefit payments are estimated to account for 59 percent of Federal aid to the poor.

Human investment programs providing education, work and training, health and other social services were greatly accelerated during this period. (Source: The budget for fiscal year 1969, page 36.)

### Presidential Commission To Review Welfare and Income Maintenance Programs

When President Johnson signed the Social Security Amendments of 1967, he named a Presidential Commission, under the chairmanship of Mr. Ben W. Heineman, the chairman and executive officer of the Chicago & Northwestern Railway, to review welfare and income maintenance programs.

There have been many proposals for improvements in social security, for a guaranteed annual income, the negative income tax, for family allowances, and for governmental work and training programs.

I think it is very timely that a top-level Commission have an opportunity to review all of these proposals, as well as many other suggestions for innovation and change, and to try to find a wider and more comprehensive income maintenance system which is more adequate and more generally acceptable than what we have at the present time.

The Commission consists of 24 members from varied walks of life. I am a member of the Commission. Our staff is working intensively on these problems and proposals.

Senator Hill. Do you have any idea when you will have a report from this Commission?

Acting Secretary Cohen. The President originally suggested that the Commission take 18 months to 2 years to study this problem.

It is my hope that under present circumstances we can step up our work and at least make some kind of interim report.

I have directed my own staff to give every help in coming up with ideas that might be helpful, particularly in those areas that might bring some changes in our welfare programs, because I think it is correct to say that there is no program in the country in which there is more dissatisfaction from everybody, whether it is the people who are on welfare, the local taxpayer, the Federal officials, or the legislators, than there is with our welfare program.

But nobody has a good substitute so far. I hope this Commission can come up with something.

Senator Hill. You are working on it now?

Acting Secretary Cohen. Yes, Mr. Chairman.

### Public Assistance

Although 26 million persons are living in poverty, only about 8 million are receiving public assistance.

This fact should be kept in mind when the question is asked why welfare rolls are rising when unemployment is declining and social security and other income maintenance and economic opportunity programs are expanding.

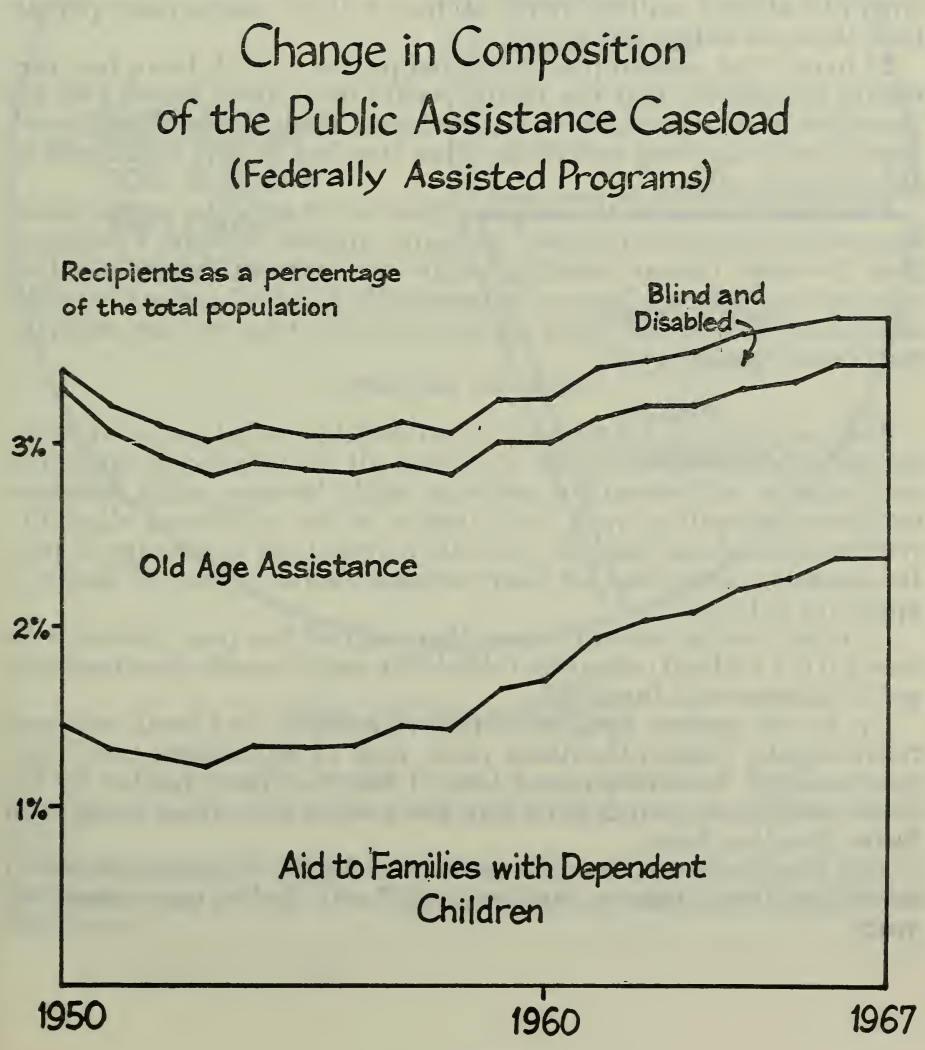
But first let me say that a number of factors such as social security and employment opportunities, decreased mortality rates, safer working conditions, higher wages, home ownership, and life insurance have reduced the need of some groups to rely on public assistance.

Largely as the result of the effectiveness of the social security program, the proportion of the aged on public assistance, in spite of a large increase in the total aged population, declined from 22.5 percent in 1950 to 11 percent in 1967.

There would be about 2½ million more aged persons on welfare today if the proportion had remained at 22.5 percent as it was in 1950.

Chart 3 shows the change in the composition of the public assistance caseload which has occurred.

Chart 3



As you can see there, the old-age assistance load has become smaller and the families with dependent children have become proportionately larger.

That is the problem that we are faced with at the present time.

### Aid to Fatherless Children

Secondly, the number of children receiving assistance under the AFDC program because of the death of a father has markedly declined. The problems of economic dependency of fatherless children which was one of our major social and economic problems at the beginning of this century has largely disappeared in the past 60–70 years.

I would like to mention this because there are so many problems that are unsolved it is good once in a while to tell you about something where we have had some success. I think this is one of the most notable ones.

The combination of a number of factors, primarily declining mortality rates and the social security program have virtually eliminated the economic problems of orphanhood.

If we had the same mortality rates today as we had in 1910, there would be about 5 million more children without one or more parents than there are today.

If today that catastrophe should happen to a child, there is a very strong probability that the family would have social security or life insurance, maybe partially own their home. With scholarships for college, there is a strong probability that that boy or girl would still be able to finish college.

However, to answer the original question of why the public assistance rolls continue to increase, estimates suggest, as chart 4 indicates, that for every person receiving public assistance in June 1965, there was another person who was "categorically eligible" under the public assistance titles of the Social Security Act but who was not receiving public assistance.

### Potential Recipients

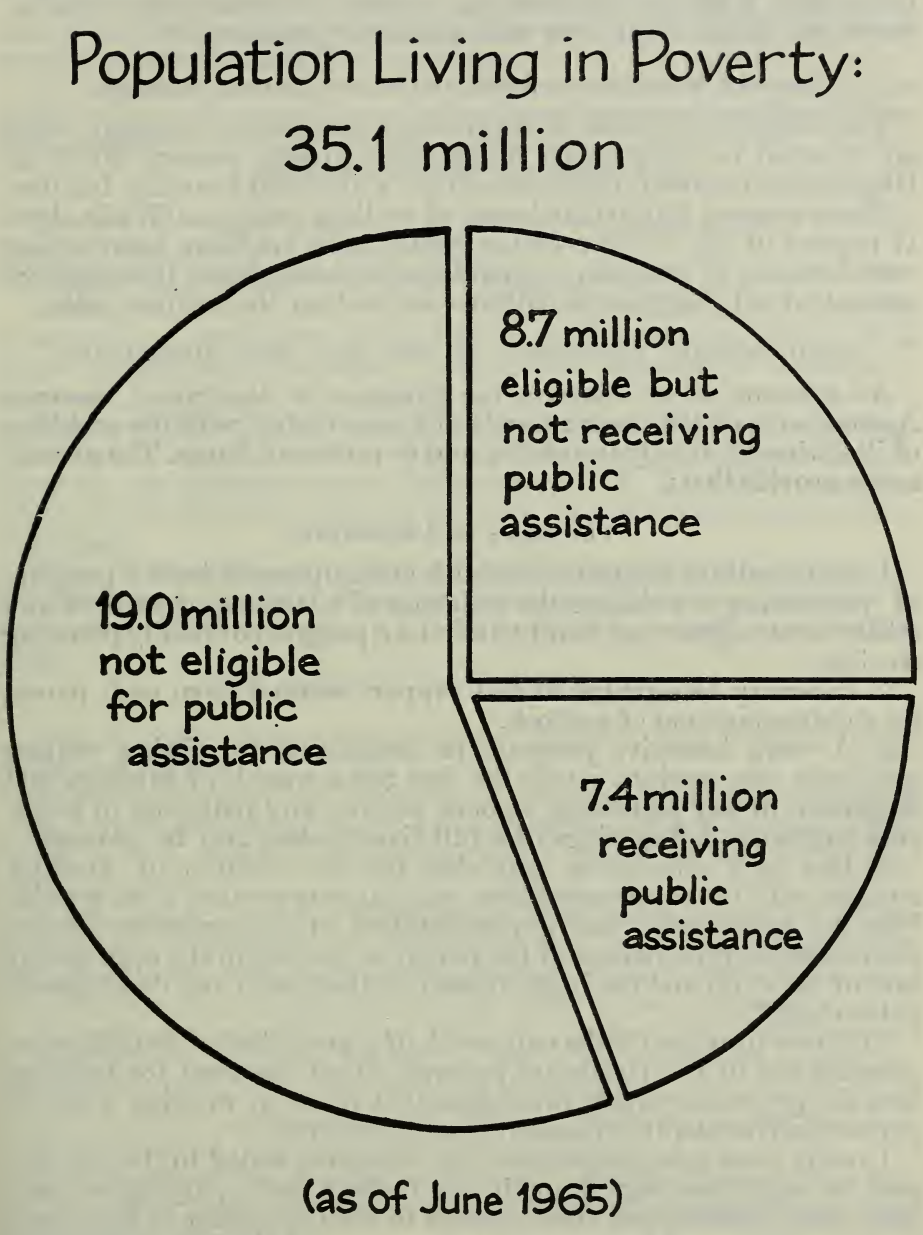
That is, there was a large group who might be called potential public assistance recipients; persons who meet all the categorical eligibility requirements of Federal law and who might become public assistance recipients depending upon such factors as the additional eligibility requirements of the State in which they lived, their knowledge of public assistance programs, or their personal desire or lack of desire to apply for public aid.

In other words, somewhat less than half of the poor persons who meet all the Federal categorical eligibility requirements were receiving public assistance in June 1965.

Up to the present time, such factors as State and local residence requirements, man-in-the-house rules, lack of knowledge, unwillingness to apply for welfare, and lack of financial participation by the States are factors which have kept the welfare rolls from rising even faster than they have.

It is true, however, that the number of AFDC recipients increased more than three times as rapidly in 1967 as it had in most preceding years.

Chart 4




There is the possibility that poverty programs under the Economic Opportunity Act may have made more people aware of their eligibility.

There are, too, the migration trends of persons from rural areas to the cities where money is an urgent necessity, so they have to apply for assistance.

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### Medical Assistance

There is the possibility that the availability of medical assistance under title XIX has increased the number of persons who were referred and found eligible for cash assistance payments.

### Complex Problems of Illegitimacy and Family Breakup

The complex problems of illegitimacy and family breakup which are reflected in the growing AFDC rolls greatly concern all of us. Illegitimacy has been rising among both whites and nonwhite families. There are over 300,000 births out of wedlock each year. While about 17 percent of the children on the AFDC rolls are there because they were born out of wedlock, it should also be remembered that about 80 percent of all illegitimate children are not on the welfare rolls.

### Social Security Amendments of 1967 Deal With Illegitimacy

As a result of its concern, the Congress in the Social Security Amendments of 1967 took a number of steps to deal with the problems of illegitimacy, family instability and to protect children. The amendments provide that:

### Provisions of Amendments

1. State welfare programs establish and implement both a program of "preventing or reducing the incidence of births out of wedlock and otherwise strengthening family life" and a program of family planning services.

2. Paternity be established and support secured from such parent for children born out of wedlock.

3. A work incentive program be established permitting welfare recipients who work to retain the first $30 a month of earnings and 30 percent of any additional amount without any reduction in assistance payments. All earnings of a full-time student may be retained.

4. Day care services be provided for the children of working mothers with the requirement that such day care services must provide "for the development and implementation of arrangements for the more effective involvement of the parent or parents in the appropriate care of the child and the improvement of the health and development of the child."

This new provision is the outgrowth of a great deal of consideration growing out of the Headstart program about the need for building into the programs strong provisions that relate to working with the parents and developing the motivation of the child.

I really view that amendment that Congress added to the law this year as being very significant in the future; that is, trying to work with these children and their parents to motivate them to have good work habits, to achieve, to try to become contributing members of society.

5. Welfare agencies refer to the courts of law or enforcement agencies any condition where a home is unsuitable for the child because of neglect, abuse, or exploitation of such child.

6. Cooperative arrangements be made among welfare, agencies, courts, and law enforcement officials—including making Federal

and State financial arrangements—to effectively carry out the new programs.

7. Emergency assistance can be given for 30 days on a flexible and simplified basis and payments may be made in the form of loans, grants, payments in kind, or in services.

8. Payments for foster care of children and the authorization for child welfare services be increased and protective services for children be expanded.

INCREASE IN FEDERAL AND STATE COST

The net effect of all these provisions is an increase in both the Federal and State cost over the next few years.

Senator HILL. The cost is bound to go up, is it not?

Acting Secretary COHEN. Cost is bound to go up because I think the congressional committees which acted on this legislation did not wish to see children hurt but rather directed their attention to constructive measures to improve the conditions for children under welfare.

They recognized that that might have some constructive advantage in the years ahead. But it is clear that the costs of welfare will continue to rise although more of the costs will be for services such as day care for children, work and training for their parents, and related activities.

When I say work and training for their parents, I would also add for the young people. I would concentrate some of our activities on the young people, ages 15, 16, 17, 18, to give them work opportunities also.

AFDC REFERRAL AND FREEZE PROVISIONS

Now I would like to deal with the so-called AFDC referral and freeze provisions.

One of the controversial features of the new legislation has been the extent to which mothers would be required to accept employment contrary to their wishes or what they might regard as the best interest of their children.

When former Secretary Gardner and I appeared before the Senate Committee on Finance we emphasized the Department's conviction that there were more mothers who wanted employment and training than there would be opportunities for under these programs.

A recent study made in New York City showed that 70 percent of the mothers on assistance wanted to work. The available evidence indicates that there is and will be in the foreseeable future ample opportunity to fill available work and training positions by mothers who wish such training and work on a voluntary basis.

The President has directed us to work with the States to see that the mandatory referral-to-work provision is administered compassionately, and we are doing so.

With respect to the AFDC freeze, the law says that for the last half of 1968 no larger proportion of the child population under the age of 18 shall receive Federal aid because of the absence of a parent than the average proportion in the first quarter of the year.

By relating the number to the child population under 18 on January 1 of each year, provision is made to permit an annual adjustment to give effect to any changes in the child population.

But if present trends continue, most, if not all, States will be faced with financial problems as the result of this provision.

Chairman Mills, when he presented the Ways and Means Committee's bill to the House, stated that the purpose of the freeze was to apply pressures to the States which would assure that they move promptly and vigorously to put the new work programs and other features of the legislation into effect.

We certainly cannot expect work programs or family planning services will have much effect on AFDC rolls before July 1.

### Senate Amendment To Repeal AFDC Freeze

As you know, the Senate has adopted an amendment to repeal the AFDC freeze. The issue is now in conference.

### Policy on States Maintaining Waiting Lists

We have been asked whether States may use waiting lists so as to limit recipients of AFDC to the number for which Federal financial participation is available under the freeze.

In our policy statement on the freeze, we have maintained our long-standing position that States may not maintain waiting lists. The Congress did not change the requirement in the Federal law that State plans must provide "that aid to families with dependent children shall be furnished with reasonable promptness to all eligible individuals."

Some of the States have indicated that they disagree with this interpretation and, if necessary, they will seek administrative hearing and court review to test our position.

While we are acutely aware of the fiscal problems which the freeze presents for the States, we believe we have no alternative, under the law and in the interest of children, to requiring that aid must be furnished promptly to all eligible individuals, without waiting lists.

## MEDICAID AND MEDICARE

I have mentioned some of the factors which lead me to believe welfare costs will continue to rise. One of the reasons for this is the medicaid program and the rising cost of medical care.

It is estimated that 5.2 million persons received care under medicaid in the fiscal year 1967, 7.3 million will receive care in 1968, and that about 8.5 million will be served in 1969.

I would like to show you on chart 5 something which I think is very significant. If you look at 1950, payments for medical services were only an infinitestimal fraction of welfare costs.

The chart shows that in 1950 total welfare costs were $2.1 billion and medical costs were so small that we can't even show them on the pie chart. That was when vendor payments for medical care first began. They were first authorized in 1950.

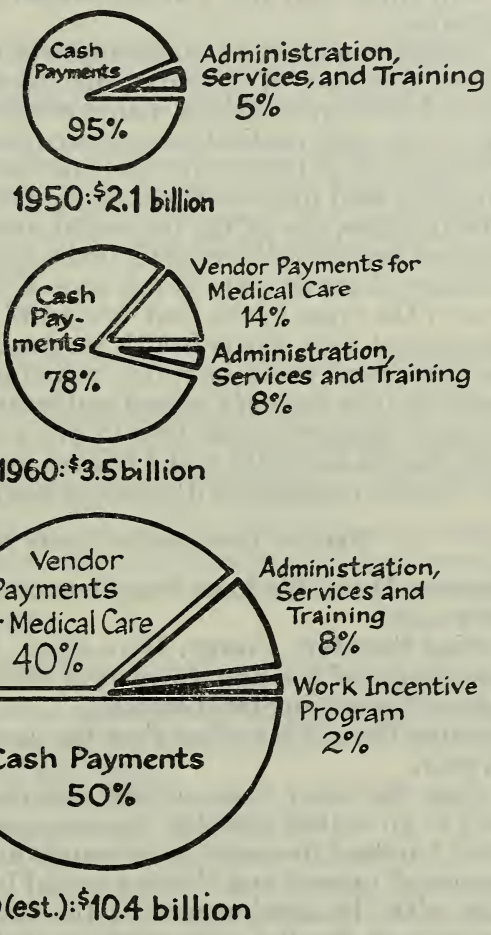
If you look at 1960, you will find total welfare costs were $3½ billion but by that time 14 percent of the total payments were vendor payments for medical care.

Now let us look at our estimate for 1969. We estimate that $10.4 billion will be the total estimated Federal, State, and local costs. Forty percent of that is for medical care costs.

Chart 5

# Change in Distribution of Public Assistance Costs

## (Federal, State, and Local Funds)




To put it another way, if the medical care were not a problem, the welfare costs now would only be $6 billion in 1969 rather than $10 billion.

There is still a wide variation in income limits and scope of medical coverage under the State medicaid programs. This is not desirable.

### Improvements Needed in Voluntary Health Insurance Coverage

One of our big challenges ahead is whether the States and the interested groups can work together to narrow these variations to provide essential services for medically needy persons and at the same time improve voluntary health insurance coverage.

I believe that the medicaid program meets a basic need in our society because there are many persons with incomes too low to finance adequate health insurance coverage. Our voluntary health insurance system has many gaps.

Mr. Chairman, if a bill I recall you introduced in 1945 or 1946 had been passed before 1950, I think we would not be faced exactly with this problem now because we would have had more people, especially the low-income people, covered by voluntary health insurance and they would have had a broader scope of protection.

I still think that bill you introduced some 20 years ago has merit even today.

I recently outlined to representatives of nonprofit and commercial insurers a number of improvements needed in voluntary insurance if medicaid costs are to be kept within reasonable limits.

However, until medical insurance coverage is more comprehensive—and covers all of the low-income families—there will continue to be a compelling need for more funds under medicaid.

For instance, one of the important areas in which voluntary insurance must expand its coverage is in the area of mental illness.

I believe it can do more in this area. I think it is trying. I think that is one of the areas in the next few years where coverage is expanded.

Outpatient care, home health services, and nursing home care are other important areas in which voluntary insurance should expand, in order to take some of the load and burden off inpatient hospital care. Too much pressure exists now to put a person in a hospital bed for longer than is necessary and I believe we have to try to make hospital stays shorter, consistent with medical need.

### Patient Reduction in State Mental Hospitals

Senator Hill. We have done that some in the mental health field, have we not?

Acting Secretary Cohen. Here again, I would say one of the great achievements of the past 12 years is the tremendous reduction in the number of people in State hospitals.

Senator Hill. Up to that time the demand for beds kept going up each year.

Acting Secretary Cohen. 1955 was the peak year; if we had continued to go at that rate that we were going then, there now would be several hundred thousand more people in State mental hospitals than there are at present and the cost would be much greater.

But with the development of the tranquilizers at that time and your support for the community mental health program I still believe as Dr. Felix said some years ago—that we could get to a point where the patient load in State mental hospitals was cut in half—is a real possibility.

Senator Hill. It is moving in that direction, certainly.

Acting Secretary Cohen. It is moving in that direction and moving very strikingly. Here again, I think it is one of the tremendous changes in public attitude that has occurred.

Previously, you know, people who had an episode of mental illness were treated with some disdain and I would say were maybe even hidden in the backroom in some families.

We have brought them out in the open now, we have community mental health services. Many of these people can be put back to work, can be given their rightful place in society and they are not a drain on either their families or the taxpayer.

### Effects of Tranquilizers

Senator Bartlett. Have the tranquilizers, Secretary Cohen, met the great hopes spelled out for them in the days of their early use?

Acting Secretary Cohen. Dr. Goddard is here. He might like to comment.

Dr. Goddard. I believe in general they have, not without problems, of course, as any medication has. They have made it possible to open the wards up in mental hospitals from maximum security to open wards.

They have changed the mode of treatment and have made possible a greater percentage of patients to be treated on an outpatient basis.

All of these tranquilizers, in fact, the range of drugs available for the care of mentally ill, have had a significant impact on the cost and the nature of the treatment.

Senator Bartlett. Thank you.

### Improved Patient Attitude Increases Treatment Success

Acting Secretary Cohen. I think the significant change which has occurred in four areas that I can think of, veneral disease, mental illness and mental retardation, and family planning services, all have come about because there has been a change in attitude.

It may well be that you have had medical discoveries and they are important but medical discoveries and therapy and treatment and facilities are not successful if the mind of the individual is not receptive to taking advantage of them.

### Child Mental Retardation and Mental Illness

Let us review each one. Mental retardation. Up until a few years ago if a family had a mentally retarded child they did not want to tell anybody, they kept him in the back room.

Today, many mentally retarded children and adults are employed. We can find jobs for them consistent with their abilities.

Senator Hill. They are leading useful, productive lives?

Acting Secretary Cohen. Yes, sir. And through the development of the test for phenylketonuria and through prenatal care you can reduce the incident of mental retardation.

But the important point was to get families to be willing to discuss their problem and to seek help. The same thing is true of mental illness.

### Venereal Disease

Then, of course, the great contribution that Dr. Paran, who, as you know, just died this year, made when he brought venereal disease out into the public.

That was a term that prior to 1936 no one would discuss in polite company, and we still have a big problem, you might say, in that area. We should not underestimate the problem that remains.

### Family Planning Service

Finally, the one which has occurred most recently is family planning services.

I doubt that 2 or 3 or 5 years ago I could have come before this committee and publicly discussed funds for family planning services. I probably would have been severely criticized.

But last year Congress enacted legislation requiring me to spend 6 percent of the funds for maternal and child health for family planning services.

I think that is a great step forward.

I use those examples because, quite frankly, Mr. Chairman, it always gives me hope for the future to see how attitudes have changed on problems that were once very controversial.

Senator Hill. There have been very great changes; isn't that right?

Acting Secretary Cohen. As I say, once you get a change in the mind of man, then it is possible for these scientific discoveries and the expenditures and the personnel that you give us to work their wonders. But you have to have that change in the mind of man or, otherwise, all of this won't work.

### Possible Extension of Medicare Insurance

One area in which I believe we can extend medicare insurance is to the over 1 million persons who have been determined to be disabled under the social security program.

This proposal was considered by the Congress last year and a special study was authorized as was the entire question of coverage of prescription drugs under the medicare program.

Recommendations from this study are to be submitted to the Congress before the end of this year.

I will do everything I can, Mr. Chairman, to push those studies to an early conclusion.

Senator Hill. Your Department is making these studies now, isn't it?

Acting Secretary Cohen. Yes, sir.

### rising medical costs

Today, there are indications that many Americans are simply not getting the health care they need.

One of the most formidable barriers to high quality health care is the steady rise in medical costs. A day in the hospital, which cost $14.40 in 1950, now exceeds $55.

Other health costs, including drug prices and doctors' bills, have risen during the same period. In the past 12 months alone medical care prices have increased 7 percent.

This rising spiral of costs seriously threatens our ability to make health care more widely accessible and more readily available to the people who need it.

### Conference on Medical Costs: Antiquated and Inefficient System

To explore this problem, the Department called a conference on medical costs last summer, in which leading physicians, hospital administrators and others from all over the Nation participated.

The group was in general agreement that one of the reasons for the rapid rise in costs is that we have an antiquated and inefficient system of health care. As a nation, we are simply not well enough organized today to provide all of our people with the health services they want and need on an economical and efficient basis.

Senator HILL. The cost of hospital care has really plummeted up, has it not?

Acting Secretary COHEN. During the period from 1946 to 1965, hospital costs increased about 7 percent per year.

Seven percent per year means a 100 percent increase during a decade on that basis.

Now that was simply tremendous. But in the last couple of years, hospital costs instead of going up about 7 percent each year, have been going up about 14 percent each year, roughly double.

### ADDITIONAL CONFERENCES AND COMMITTEES

Now if that continues for any appreciable time, we are in the area of hospital care costing $100 per day in the near future.

I think this would be a tremendous problem and I would also say, as I said earlier, that I am convinced that many people who are in a hospital don't need to be in a hospital. I think we have to find another way to handle this.

This conference was followed with several more—on private health insurance, on the group practice of medicine, and on hospital architecture and design.

In addition, former Secretary Gardner established a Committee on Hospital Effectiveness to study the entire system of hospital and related services.

And recently, President Johnson created a National Advisory Commission on Health Facilities under the chairmanship of Boisfeuillet Jones to recommend this year new directions in the Hill-Burton and related hospital legislation.

Senator HILL. Nobody wants to reduce the medical care.

### SEARCH FOR NEW AND BETTER METHODS AND PROCEDURES

Acting Secretary COHEN. Nobody wants to reduce the care.

The question is, Is there a better way to organize it? Is there a better way to use our scarce resources? Is there a better way to get people into nursing homes, to use nursing care so that we don't have to use all of this high-cost care?

I look forward to the recommendations of this important Commission so that the Hill-Burton program which now expires on June 30, 1969, may be continued, improved, and expanded as a continuing reminder of the remarkable contributions of our distinguished chairman.

We need intensive experimentation in the years ahead. We need to devise and test new patterns for delivering high quality health services.

For example, we have to find a mechanism for channeling people away from large and costly institutions when institutional care is not necessary and warranted. We need, systematically, to employ less expensive facilities.

We need to broaden the reach of physicians' services with the use of new communications techniques and computer technology.

We need to develop better emergency medical services on an outpatient basis.

We are also faced with the task of conserving scarce health manpower by making better use of highly trained professional people and by developing new types of health workers.

We need, in brief, to expand our research and development effort in health services. That is the purpose of our new National Center for Health Services Research and Development.

It will enable physicians, clinics, and communities around the country to experiment in new ways of providing and delivering health care. It will help us find new patterns, new models, new directions.

Our purpose in this and other new approaches is to insure the best possible health care, provided in the most efficient manner and at the lowest possible costs, for all Americans.

### Medicaid Program Amendment

The Congress last year recognized that more must be done to control rising medical prices.

First, they wrote into the medicaid program a new requirement that States must—

> Provide such methods and procedures relating to the utilization of and the payment for care and services available under the plan as may be necessary to safeguard against unnecessary utilization of such care and services and to assure that payments (including payments for any drugs provided under the plan) are not in excess of reasonable charges consistent with efficiency, economy, and quality of care.

### Mills Amendment

In addition, Chairman Mills sponsored an amendment applying to medicare, medicaid, and the child health program which authorizes experiments with existing charge or cost reimbursements to include specific incentive payments—

> To have the effect of increasing the efficiency and economy of health services through the creation of additional incentives to these ends without adversely affecting the quality of such services.

### President's Message

In this year's health message, President Johnson asked Congress to authorize the Secretary of Health, Education, and Welfare to employ new methods of payment in these programs as soon as the experiments prove effective. This will help combat health care cost increases by accelerating the introduction of more economical methods.

### Cooperative Economy and Efficiency Demonstrations

I have, Mr. Chairman, asked our staff to invite the attention of everybody in the health field—physicians, hospitals, and nursing homes—to propose experiments in the economy and efficiency of medical care.

I hope that by developing with some of these demonstrations and experiments, with the cooperation of the health professions—I know you can't do it unilaterally, it has to be a cooperative effort—we might find ways in which we can help deal with the problem of economy and efficiency.

Much more, however, remains to be done if we are to extend the quality of care, restrain costs, and promote efficiency and economy. This will be a continuing and difficult responsibility for some time to come.

We are far from knowing all the answers. We must find answers which do not restrict the private practice of medicine or the doctor-patient relationship.

### CONSTRUCTIVE AND COOPERATIVE RELATIONSHIPS WITH HEALTH PROFESSIONS

I cannot let this opportunity pass without referring to the constructive and cooperative relationships which have developed between the health professions and our programs in the past 2½ years, especially in the medicare program.

The recent article by Dr. David Jay Scott, entitled, "We Doctors Were Wrong About Medicare," in the Saturday Evening Post, issue of February 24, is worth reading.

He reports that to his amazement, "even the Government forms are less complicated" than those used under other doctor-approved insurance programs.

I guess that is the ultimate compliment, Mr. Chairman.

Senator HILL. He means programs under private insurance rather than Government insurance.

Acting Secretary COHEN. Yes, sir. I think that is one of the areas in which we made a great contribution.

We worked hard, consulted with doctors, and we developed a payment form that I think is relatively simple. If all the other insurance companies in the country would adopt this form, I think it would save the time of their nurses and doctors immensely.

Of course, we do not have any authority to enforce that on them but I would hope they might do that voluntarily.

Senator HILL. Follow your example?

Acting Secretary COHEN. Yes, sir. It is not merely our example in the sense that we did it by ourselves. We brought in all the doctors and we worked it out cooperatively.

Dr. Scott points out how medicare is helping to improve the entire standard of health in the United States.

Considering the strong words and ideological controversy that existed on medicare prior to 1965, I think this new cooperation between the doctors and all of the health professions is the most important step—again in changing the attitudes of people like I have been discussing—toward good health care in the future.

Because if government and the private sector in the health field can work together despite the difficulty of the problems, I think we can make progress faster and better that way than any other way.

### CHILD HEALTH

#### INFANT MORTALITY

One area which calls for redoubled effort is child health. Our infant death rate declined some 6 percent last year, but it is a shocking fact that at least 12 other nations have rates lower than ours.

The reason is apparent: The extreme disparity between the health services available to the poverty stricken and to the more affluent segment of society.

The benefits of modern medical knowledge have barely begun to reach the children of the poor in our inner city and rural slums, and particularly our nonwhite population.

You might be interested in what these countries are, Senator Bartlett: Sweden, Netherlands, Norway, Finland, Switzerland, Australia, Japan, Denmark, New Zealand, United Kingdom, France, Canada, Belgium, and Germany.

In this list that I am giving you for 1965, the United States was the 15th in that year.

Senator BARTLETT. We have a considerable way to go.

Acting Secretary COHEN. We certainly do. Take Sweden, the rate was 13.3 per thousand live births in a year when ours was 24.7. You might say the differential there is about 10 per 1,000 live births.

In other words, let us say that we could in the next couple years move halfway toward that, that would be a saving of five births per thousand. That is very important.

I see absolutely no reason why that is not within our competence in the next couple years.

### ESKIMO AND INDIAN INFANT MORTALITY IN ALASKA

Senator BARTLETT. Mr. Chairman, in that connection, it is dreadful to know that in some sections of Alaska among the Eskimo and Indian populations the infant mortality is 200 per thousand live births.

Senator HILL. 200?

Senator BARTLETT. 200.

Senator HILL. Per thousand?

Senator BARTLETT. Per thousand.

Acting Secretary COHEN. I certainly think that this ought to be one of our high priority items because there is nothing mysterious about how to organize this. Comprehensive prenatal care, family planning services, the organization of neighborhood health services such as I am talking about, can deal with this problem effectively.

### POOR AND NONWHITE INFANT MORTALITY

The contrasting death and illness rates of our white and nonwhite populations confirm the inequality of services. The death rate for nonwhite infants is 87 percent higher than that of white infants.

A white child who survives infancy can expect to live from 5 to 6 years longer than a nonwhite child of the same age.

The poor and nonwhite still suffer from a wide variety of handicapping conditions that could be prevented or corrected by early medical attention.

Often, however, the medical care they get is too little and too late—fragmented, impersonal, inaccessible. The result is sickness that need not happen and death that could be averted.

### MATERNAL AND INFANT CARE PROJECTS

We need new approaches and new resources for expanded child health services—in neighborhood centers, parent and child centers,

and comprehensive maternity and infant care projects in low-income areas.

In some areas where such projects have been launched, the infant death rate has dropped by as much as 40 percent, in 2 years, Senator Bartlett. I think this fact was taken from a comparison in Chicago between an area where we have maternal and child health projects and an area where we have none.

The drop was that precipitous in that short a time.

Senator BARTLETT. It can be done rapidly?

Acting Secretary COHEN. Yes, sir.

Senator HILL. We don't have too many of these centers, do we?

Acting Secretary COHEN. We have, as I recall, about 54 maternity and infant care projects throughout the country.

The Office of Economic Opportunity has on the drawing boards some 41 or 42 neighborhood health centers but only, I think, seven, eight, or 10 are in operation.

I think if we move forward on the neighborhood health centers, and more rapidly on the family planning services, comprehensive prenatal and postnatal care, with better outpatient care in the hospitals, we could do the job in a short period of time.

Senator HILL. But we need these additional centers?

Acting Secretary COHEN. Yes, sir.

This is an auspicious beginning, but we need to reach many mothers and children if we are to bring our health standards to the levels of which we are capable in this country.

### CHILD HEALTH ACT OF 1967

We made substantial progress last year in expanding and consolidating the child health provisions into the Child Health Act of 1967, a rather controversial and unnoticed aspect of the Social Security Amendments of 1967.

The 1969 budget contains an increase of $58 million for these purposes. I commend this increase to you as being very important.

### MATERNITY CARE AND CHILD MEDICAL SERVICES

In addition, we are proposing additional legislation this year to extend over a 5-year period maternity care to all mothers in low-income families, and medical services to children under the age of 1 year in such families.

### FAMILY PLANNING

I believe that one of the most significant legislative achievements of the Congress last year was the statutory recognition of the importance of family planning services.

Specific language was added by the Congress to both the child health and dependent children (AFDC) laws incorporating family planning services in these two programs.

In the child health program, there is a specific earmarking for family planning services of 6 percent of the total funds.

All such services are provided on a voluntary basis with freedom from coercion and freedom in choice of method utilized.

Family planning should be an intrinsic part of medicaid, maternal and child health, and AFDC programs. There is a close association between poverty, illness, and large family size.

Studies have shown that most people at all income levels prefer small families, but the poor have less freedom of choice because they lack the knowledge of and availability to family planning services.

I would like to report to the committee one of the conclusions of a study we made last year. This study showed that, of the 8.2 million low-income women in the childbearing age, there were 451,000 unwanted pregnancies.

This study may be of interest to your committee and I should be glad to make it available for your review.

Senator HILL. You will make it available to us?

Acting Secretary COHEN. Yes, sir.

Senator HILL. Good.

(The study follows:)

FAMILY PLANNING AND THE REDUCTION OF POVERTY IN THE UNITED STATES

Man is so prolific that if his fertility were unchecked most couples in the United States would have three to five times as many children as they now have. To cite an extreme example, if a man and woman marry when the bride is 20 years old, remain capable of having children until she is 45, and never try to prevent conception, they will have about 15 children.[1] Actually, many couples would suffer reproductive impairment before having so many children. However, couples who marry in the early 20's, do not use contraception, and experience the normal risks of impaired fecundity usually have many more children than the typical American couple. Among groups in which deliberate fertility control is never used, the average number of children per couple is around 10.[2]

Under primitive conditions of life, high fertility was necessary for man's survival as a species. A large number of children had to be born every year to replace the many persons who died. However, as man's basic needs for food, clothing, and shelter were met more satisfactorily, death rates became lower, fertility remained high, and populations grew. Under such conditions, it is not surprising that the desire for fertility control has been found among nearly all peoples, ancient and modern, for whom we have any extensive cultural records. In the past, many of the methods used were magical and ineffective, some were effective but would be considered cruel or immoral in our own culture (infanticide and abortion), and one—withdrawal—was fairly effective and is still widely used. However, it is only in comparatively recent times that the use of contraception has become widespread in the United States and other modern countries. As a historian of contraception put it, "The desire to control conception is very old. Contraception as a genuinely effective instrument is new; as a diffused social habit or as a democratized social institution it is new."[3]

Generally, the use of contraception has diffused from the top or middle segments of the socioeconomic scale to the lower and from urban to rural areas. In other words, the couples who were in close contact with the rise of a technological culture and who were most likely to benefit from it, were the first to reduce their fertility by a substantial margin. This tendency has been explained by their greater awareness of effective methods of contraception, their greater desire to keep family size low in order to take advantage of the new opportunities offered by expanding economies, and the diminished economic utility of children in an industrial society. Children were no longer viewed as economic assets, as they had been in an unmechanized farm setting, but as economic burdens. People still wanted children, but they did not want as many as before.

In summary, the historical role of contraception in the development of industrial societies has been to increase people's chances to take advantage of oppor-

[1] This is based on the assumption that, on the average, the wife would become pregnant once every 17 months (i.e., about 8 months after each pregnancy ended), and that she would have two fetal deaths. Estimates of man's reproductive potential are described in more detail in *Family Planning, Sterility, and Population Growth,* by Freedman, Whelpton, and Campbell (McGraw-Hill, 1959), pp. 239–240.

[2] Joseph W. Eaton and Albert J. Mayer, *Man's Capacity to Reproduce,* The Free Press, Glencoe, Illinois, 1954, p. 20.

[3] Norman E. Himes, *Medical History of Contraception,* The Williams and Wilkins Company, Baltimore, Maryland, 1936, p. 223.

tunities to improve their conditions of life. And this is the primary role envisioned for fertility control in programs intended to reduce poverty. By implication, such programs will have their most beneficial effects only in the presence of real opportunities for the poor to escape poverty. This is a crucial point, for family planning programs cannot only reinforce other programs, but also be reinforced by them. Historically, the existence of reasonable hope for an economically secure life has motivated couples to limit the size of their families; also, small families have made it possible for people to take advantage of opportunities they might otherwise have missed. Our purpose is to help establish this pattern of mutually reinforced goal-directed behavior as firmly among the poor as it is among the more prosperous.

## DIMENSIONS OF THE PROBLEM

A high proportion of poor couples of reproductive age do not control their fertility adequately. This judgment is their own, not one imposed by the application of arbitrary criteria. It is clear from a number of surveys that many couples living in poverty do not want as many children as they have.[4] So, family planning programs available to poor people represent efforts to help them achieve their own family-size goals, whether they be no children or ten children. Either extreme, of course, is unlikely. Poor couples, like most American couples, generally want two to four children.

As a result of their high fertility, the burden of childhood dependency is unusually heavy among the poor. In March 1966, there were 130 children under 18 years of age for every 100 adults of working age (18–64) living in families within the poor population. The corresponding ratios were 101 among the near-poor and only 62 among the non-poor. This means that poor adults of working age have over twice as many children to provide for, on the average, as do adults with adequate incomes.[5]

The statement that the poor have high fertility is, in part, redundant. Because the definition of poverty is based upon both income and number of people in the household, the families designated as "poor" or "near poor" tend to have more children than other families. This qualification is not intended to discount the importance of high fertility as a factor in perpetuating poverty, but only to draw attention to the fact that the fertility of the poor will always be high, assuming that we continue to use the criterion of family size in defining poverty. Even if the proportion of people designated as "poor" and "near-poor" declines from its current level of 25 percent to 5 percent of the population, that 5 percent will have high fertility—possibly even higher than the fertility of today's 25 percent. Therefore, it would not be appropriate to judge the effectiveness of publicly supported family planning programs by following trends in the fertility of the population remaining in poverty. In fact, the families remaining in poverty may tend to be those that did not participate in family planning programs.

The approach taken here is to estimate the recent annual fertility rates of women of childbearing age who were counted among the poor and near poor in March 1966 and then to estimate the extent to which the fertility of these women might have been reduced by offering them effective methods of contraception. However, for the reasons stated above, this will not indicate the extent to which the fertility of the women *remaining* in poverty in future years will be reduced. We intend only to contrast the actual recent situation with a hypothetical situation in which women have adequate control of their fertility.

As a first step in estimating the recent annual fertility of women in poverty in 1966, we estimated the number of births in the 6-year period 1960–65 (approximately) whose survivors were children under 6 years of age in March 1966. This was done for three groups of the 1966 population under 6: the poor, the near-poor, and all others. Then we estimated the average number of women 15–44 years of age during the period 1960–65 whose survivors were counted among the poor, near-poor, and all others in 1966. From the estimates of births and women, fertility rates per 1,000 women 15–44 were computed. These calculations were carried out separately for each color group. The results are shown in the top panel of Table 1.

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[4] Pascal K. Whelpton, Arthur A. Campbell, and John E. Patterson, *Fertility and Family Planning in the United States*, The Princeton University Press, 1966, p. 243.

[5] These and other estimates of the fertility of the poor, near-poor, and non-poor are derived from special tabulations by the Bureau of the Census from the Current Population Survey for March 1966. Poverty status has been defined with the use of the Social Security Administration's criteria, which are described in "Who's Who Among the Poor: A Demographic View of Poverty," by Mollie Orshansky, *Social Security Bulletin*, July 1965.

TABLE 1.—ESTIMATED FERTILITY DURING 1960–65 OF WOMEN INCLUDED AMONG THE POOR AND NEAR POOR IN MARCH 1966, BY COLOR: UNITED STATES

PRELIMINARY ESTIMATES, CONSISTENT WITH OBSERVED NUMBER OF CHILDREN UNDER 6 YEARS OF AGE IN MARCH 1966

| Poverty status | Average annual number of births 1960–65 [1] | | | Average number of women 15–44, 1960–65 [2] | | | Average annual fertility rate 1960–65 | | |
|---|---|---|---|---|---|---|---|---|---|
| | Total | White | Nonwhite | Total | White | Nonwhite | Total | White | Nonwhite |
| Total | 4,097,000 | 3,440,000 | 657,000 | 37,394,000 | 32,899,000 | 4,495,000 | 109.6 | 104.6 | 146.2 |
| Poor and near-poor | 1,304,000 | 844,000 | 460,000 | 7,900,000 | 5,544,000 | 2,356,000 | 165.1 | 152.2 | 195.2 |
| Poor | 896,000 | 527,000 | 369,000 | 5,457,000 | 3,624,000 | 1,833,000 | 164.2 | 145.4 | 201.3 |
| Near-poor | 408,000 | 317,000 | 91,000 | 2,443,000 | 1,920,000 | 523,000 | 167.0 | 165.1 | 174.1 |
| Other | 2,793,000 | 2,596,000 | 197,000 | 29,494,000 | 27,355,000 | 2,139,000 | 94.7 | 94.9 | 92.1 |
| REVISED ESTIMATES, ASSUMING THAT 7.5 PERCENT OF THE POOR AND NEAR-POOR CHILDREN HAVE MOTHERS WHO WERE NOT INCLUDED AMONG THE POOR AND NEAR POOR IN MARCH 1966 | | | | | | | | | |
| Total | 4,097,000 | 3,440,000 | 657,000 | 37,394,000 | 32,899,000 | 4,495,000 | 109.6 | 104.6 | 146.2 |
| Poor and near-poor | 1,205,000 | 780,000 | 425,000 | 7,900,000 | 5,544,000 | 2,356,000 | 152.5 | 140.7 | 180.1 |
| Poor | 828,000 | 487,000 | 341,000 | 5,457,000 | 3,624,000 | 1,833,000 | 151.7 | 134.4 | 186.0 |
| Near-poor | 377,000 | 293,000 | 84,000 | 2,443,000 | 1,920,000 | 523,000 | 154.3 | 152.6 | 160.6 |
| Other | 2,892,000 | 2,660,000 | 232,000 | 29,494,000 | 27,355,000 | 2,139,000 | 98.1 | 97.2 | 108.5 |

[1] Derived from the number of children under 6 years of age in March 1966, assuming that births during the preceding 6 years had been subjected to the same mortality rates, by color, as those observed for 1964. This implied that the proportion of births surviving to ages under 6 in March 1966 was 97.7 percent for white infants and 95.6 percent for nonwhite infants. The resulting preliminary estimates of births were reduced by 1 percent to force them to agree with national totals, by color.

[2] These estimates are consistent with the average number of women 15–44 years of age, by color, in the total resident population of the United States during 1960–65 (computed by averaging estimates for April 1960 and July 1966, published in Current Population Reports, series P–25, No. 352). These totals for white and nonwhite women were distributed by poverty status according to the distribution for white and nonwhite women 14–44 years of age in March 1966.

Source: Derived from special tabulations by Bureau of the Census from the Current Population Survey for March 1966.

For our present purposes, the key figure is the estimate of 165 births per 1,000 women 15–44 for the poor and near-poor combined. This estimate of 165 is very probably inflated because it includes some births in the numerator whose mothers are not represented in the denominator. This is because some of the children counted among the poor and near-poor in 1966 were not living with their mothers and their mothers were not classified as poor or near-poor. This situation occurs, for example, when the mother of an illegitimate child leaves the child with the child's grandmother and finds a job in another city. The mother might be living alone and have an income high enough to keep her out of poverty, while the grandmother and child are both counted among the poor.

We do not know how common this situation is, and we have little basis for estimating its prevalence. However, we do know that in 1966, 37 percent of nonwhite children under 18 were not living with both parents. (Data for the nonwhite population are cited here because a majority of the nonwhite population lives in poverty.) Let us assume that the proportion is somewhat smaller for poor and near-poor children under 6 years of age: say, 25 percent. Let us further assume that the most common situation represented by this proportion is the absence of the father: say, in 70 percent of the cases. Then, 30 percent of 25 percent, or 7.5 percent of the children under 6 are not living with their mothers. Therefore, the numerator of the fertility rate of 165 is inflated by 7.5 percent and should be reduced by this proportion in order to represent more adequately the fertility of women currently classified as poor and non-poor. The implications of this adjustment are shown in the second panel of Table 1.

If continued indefinitely, the annual fertility rates shown in the lower half of Table 1 would yield approximately 4.6 births per women for the poor and near-poor and 2.9 births per woman for all others by the end of the childbearing period. The rate of 2.9 births per woman is consistent with 3.0 children per married woman, and this is comparable to averages of 3.3 children wanted by white wives and 2.9 children wanted by nonwhite wives who were interviewed in 1960.[6] In view of the close convergence of these figures, it seems reasonable to assume that the fertility rate of 98 represents the approximate level of fertility that the poor and near-poor would have achieved during 1960–65 if they had been as effective as other couples in controlling their fertility. The difference of 55 points between this desired rate of 98 and the observed rate of 153 may be taken as an estimate of the excess fertility of the poor. It represents 36 percent of their observed fertility rate, or 434,000 births annually.

Although this may appear to be a high estimate of unwanted childbearing, it seems to be consistent with other evidence. For example, the 1960 survey cited above showed that among white married couples, the combination of low educational attainment and low income resulted in severe excess fertility: if the wife had not gone to high school and if the husband earned less than $4,000 a year, then 39 percent did not want as many children as they already had.[7] In addition to such couples, one would have to consider the higher rates of excess fertility among poor Negro married couples[8] and the high levels of illegitimate fertility among the poor.

### PROBLEMS OF TIMING

The problem of fertility control has two major aspects: the control of child-spacing and the limitation of completed family size. Although major attention has focussed on the problem of large families and excess fertility, as discussed in the preceding section, the problem of adequate child-spacing may be of greater strategic importance for poor couples. Freedman has shown that early childbearing and close spacing of births are serious obstacles in young couples' efforts to improve their economic position.[9] The burden of too many children too soon can be so heavy that the couple never manages to provide adequately for themselves or their children.

Also, the failure to adopt effective fertility control measures early in marriage may adversely affect the couple's ability to limit the total number of children they eventually have. A 1960 survey showed that among 18–39-year-old white wives with little education (a major component of the poverty group), 32 percent had borne more children then they or their husbands wanted and half

[6] Whelpton et al., *op. cit.*, p. 44.
[7] *Ibid.*, p. 248.
[8] *Ibid.*, pp. 361–369.
[9] Ronald Freedman, "Final Project Report, Economic Status, Unemployment, and Family Growth," Social Security Administration Project No. 107–03–043 and continuation Project No. 107(C1)–4–083 (mimeographed).

of these (or 15 percent of the total) had failed to use contraception *before* they had more children than they wanted.[10] It is clear from this and other research that it is important to begin efforts to control fertility early in the childbearing period.

The importance of child-spacing is emphasized here because many of the publicly supported family planning programs now in operation first reach the mother when she is in the hospital to give birth to a child. Although there are many good reasons for taking advantage of the maternity-ward setting, there should be additional programs to reach the prospective mother before she has her first child. In a very real sense, it may be more important to delay the first child than to prevent the seventh.

The timing of the first birth is of crucial strategic importance in the lives of young women because the need to take care of a baby limits severely their ability to take advantage of opportunities that might have changed their lives for the better. In this regard, the problems posed by births to unmarried women are especially serious. The girl who has an illegitimate child at the age of 16 suddenly has 90 percent of her life's script written for her. She will probably drop out of school; even if someone else in her family helps to take care of the baby, she will probably not be able to find a steady job that pays enough to provide for herself and her child; she may feel impelled to marry someone she might not otherwise have chosen. Her life choices are few, and most of them are bad. Had she been able to delay the first child, her prospects might have been quite different, assuming that she would have had opportunities to continue her education, improve her vocational skills, find a job, marry someone she wanted to marry, and have a child when she and her husband were ready for it. Also, the child would have been born under quite different circumstances and might have grown up in a stable family environment.

Although it is not possible to estimate accurately the level of illegitimate fertility among the poor, we can set some reasonable limits with the use of national data on illegitimate births by color. As a minimum, let us assume that the proportion of white and nonwhite births in 1960–65 that were illegitimate was the same for the poor and near-poor as for the nation as a whole: 3.0 percent for white births and 23.4 percent for nonwhite births. This assumption yields 10.1 percent illegitimate for the poor and near-poor combined. As a maximum, let us assume that all of the illegitimate births in the country occurred to poor and near-poor women; this would mean that 21.2 percent of their births were illegitimate. To obtain a medium estimate between these two extremes, we assumed that the proportion of poor and near-poor births that were illegitimate was the average of the minimum and maximum estimates for each color group. This yielded an estimate of 15.7 percent illegitimate for the poor and near-poor, or an average of 189,000 births annually for 1960–65. Details of the estimating procedure are shown in Table 2.

The estimate that 16 percent of the births to the poor and near-poor are illegitimate seems somewhat low in view of other evidence. Data from the Census Bureau's survey of March 1966 show that among children under 18 who are living with women of reproductive age (in most cases, their mothers), 23 percent are in female-headed households. Not all of these households are headed by unmarried women, but many of them are. (The comparable proportion for children not counted among the poor or near-poor is only 3 percent.) However, even if 16 percent is a low estimate of illegitimacy for poor and near-poor births, it cannot be very low if the maximum possible estimate is 21 percent, as indicated in Table 2.

The proportions illegitimate for the poor and near-poor in Table 2 are consistent with rates of approximately 68 illegitimate births per 1,000 unmarried women 15–44 years of age annually, compared with 8 per 1,000 for women who are not included in either of the poverty groups. This level of illegitimate fertility implies that among the poor and near-poor, approximately 18 percent of the girls have had an illegitimate birth by the time they reach their 20th birthday. It should be emphasized that such estimates are based on slim and fragmentary evidence. They are cited simply to suggest the order of magnitude of the problems of fertility control among the poor and near-poor.

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[10] Whelpton et al., *op. cit.*, p. 248.

TABLE 2.—ESTIMATES OF ILLEGITIMATE BIRTHS DURING 1960–65 FOR WOMEN INCLUDED AMONG THE POOR AND NEAR POOR IN MARCH 1966, BY COLOR: UNITED STATES

| Poverty status | Medium estimate [1] | | | Minimum estimate [2] | | | Maximum estimate [3] | | |
|---|---|---|---|---|---|---|---|---|---|
| | Total | White | Nonwhite | Total | White | Nonwhite | Total | White | Nonwhite |
| | Average annual number of illegitimate births | | | | | | | | |
| Total | 256,000 | 102,000 | 154,000 | 256,000 | 102,000 | 154,000 | 256,000 | 102,000 | 154,000 |
| Poor plus near poor | 189,000 | 63,000 | 126,000 | 122,000 | 23,000 | 99,000 | 256,000 | 102,000 | 154,000 |
| Other | 67,000 | 39,000 | 28,000 | 134,000 | 79,000 | 55,000 | | | |
| | Percent of births that are illegitimate | | | | | | | | |
| Total | 6.2 | 3.0 | 23.4 | 6.2 | 3.0 | 23.4 | 6.2 | 3.0 | 23.4 |
| Poor plus near poor | 15.7 | 8.1 | 29.6 | 10.1 | 3.0 | 23.4 | 21.2 | 13.1 | 36.2 |
| Other | 2.3 | 1.5 | 12.1 | 4.6 | 3.0 | 23.4 | | | |

[1] Average of minimum and maximum estimates.
[2] Assuming that all groups have the same proportions illegitimate, by color.
[3] Assuming that all illegitimate births occur to poor and near poor women.

## FERTILITY-RELATED CHARACTERISTICS OF THE POOR AND NEAR-POOR

In order to estimate the number of persons that might be served in publicly supported family planning programs, we need some information about characteristics affecting exposure to the risk of conception—particularly, the age and marital status of the women in the childbearing years of life. In addition, it will be necessary to estimate the prevalence of reproductive impairments in the population and the number of women who do not need to use contraception because they are pregnant or trying to conceive.

Table 3 presents estimates of the number of women 15–44 years of age in 1966 for the poor, near-poor, and non-poor. Inasmuch as these estimates relate to the noninstitutional population, comparable data are also shown for the total resident population of the United States, which is used in the computation of age-specific fertility rates for the nation as a whole. The two populations differ by only 1.1 percent.

TABLE 3.—NUMBER OF WOMEN 15 TO 44 YEARS OF AGE, BY AGE AND POVERTY STATUS: UNITED STATES, 1966

| Age | Total resident population (July 1, 1966) [1] | Noninstitutional population (March 1966) [2] | | | | |
|---|---|---|---|---|---|---|
| | | Total | Poor and near-poor | Poor | Near-poor | Other |
| | Number of women | | | | | |
| 15 to 44 | 39,512,000 | 39,076,000 | 8,208,000 | 5,657,000 | 2,551,000 | 30,868,000 |
| 15 to 19 | 8,806,000 | [3] 8,605,000 | [3] 2,091,000 | [3] 1,516,000 | [3] 575,000 | [3] 6,514,000 |
| 20 to 24 | 6,981,000 | 6,831,000 | 1,385,000 | 920,000 | 465,000 | 5,496,000 |
| 25 to 29 | 5,840,000 | 5,761,000 | 1,249,000 | 869,000 | 380,000 | 4,512,000 |
| 30 to 34 | 5,527,000 | 5,510,000 | 1,264,000 | 855,000 | 409,000 | 4,246,000 |
| 35 to 39 | 5,987,000 | 5,988,000 | 1,188,000 | 797,000 | 391,000 | 4,800,000 |
| 40 to 44 | 6,371,000 | 6,333,000 | 1,032,000 | 701,000 | 331,000 | 5,301,000 |
| | Percent distributions by age | | | | | |
| 15 to 44 | 100.0 | 100.0 | 100.0 | 100.0 | 100.0 | 100.0 |
| 15 to 19 | 22.3 | 22.0 | 25.5 | 26.8 | 22.5 | 21.1 |
| 20 to 24 | 17.7 | 17.6 | 16.9 | 16.3 | 18.2 | 17.8 |
| 25 to 29 | 14.8 | 14.7 | 15.2 | 15.4 | 14.9 | 14.6 |
| 30 to 34 | 14.0 | 14.1 | 15.4 | 15.1 | 16.0 | 13.8 |
| 35 to 39 | 15.2 | 15.3 | 14.5 | 14.1 | 15.3 | 15.6 |
| 40 to 44 | 16.1 | 16.2 | 12.6 | 12.4 | 13.0 | 17.2 |

[1] U.S. Bureau of the Census, Current Population Reports, Series P–25, No. 352, Nov. 18, 1966, p. 15.
[2] Derived from special tabulations by Bureau of the Census from the Current Population Survey for March 1966.
[3] Estimated from tabulations showing age groups 14 to 17 and 18 to 19 for the female population. It was assumed that the proportion of 14- to 17-year-old women who were age 14 was the same in each component of the noninstitutional population as it was in the total resident population: 25.7 percent.

As these data show, the poor and near-poor population contain somewhat higher proportions of younger women (ages 15–19) than does the non-poor population of reproductive age. The excess at ages 15–19 in the poverty groups is balanced by a relative deficit at the older childbearing ages, 40–44. These findings are somewhat surprising. In view of the fact that the definitions of the poor and near-poor are selective of women with relatively many children, one might have expected a higher proportion of older women in the two poverty groups. However, this is not the case. Instead, as far as their age distributions are concerned, the poor and near-poor have a greater potential for future childbearing than the non-poor.

Table 4 shows the widespread extent of marital instability among the poor and near-poor. The proportion of women in the modal marital status for our society (married, husband present) is only 45 percent for the poor, 62 percent for the near-poor, and 67 percent for the non-poor. The proportions of women who have been married but are no longer living with a husband are 24 percent for the poor, 12 percent for the near-poor, and only 5 percent for the non-poor. Thus, the disruption of marital ties, for whatever reason, is nearly five times as common among the poor as among the non-poor. Poor and near-poor women are more likely to have been widowed, divorced, separated, or simply living apart from their husbands than non-poor women.

It is difficult to judge how the greater instability among the poor and near-poor affects their fertility. On the one hand, it may reduce their exposure to sexual intercourse, relative to that among the non-poor. On the other hand, the reduced exposure due to smaller proportions married and living with a husband may be compensated for by irregular sexual unions. This conclusion is consistent with the information on illegitimacy presented earlier. On balance, we have no reason to believe that the poor and near-poor have a substantially lower exposure to the risk of conception than the non-poor. It may be somewhat lower, but the difference is probably not great.

Estimates of the proportion of women exposed to the risk of conception in any population are necessarily rough. For present purposes, it has been assumed that all married women are at risk and 50 percent of the unmarried. This yields an estimate of 82 percent of the number of the poor and near-poor women 15–44 years of age. This estimate is intended to include women who are regularly exposed to the risk of conception as well as those who are only occasionally exposed.[11]

The prevalence of sterility among the poor and near-poor is probably similar to that for the general population. This conclusion is based on a review of the evidence for socioeconomic differences in the prevalence of fecundity impairments in a 1960 study of family planning. Although it is true that for white couples the proportion of couples with fecundity impairments is greater among the less educated (who are more likely to be poor and near-poor), it is also true that this proportion is about the same for white and nonwhite couples.[12] For present purposes it was assumed that socioeconomic differences in the prevalence of sterility were too small to affect our estimates substantially. Proportions sterile, by age, were obtained from a smoothed set of percentages developed from the survey data referred to above and applied to the numbers of poor and near-poor women, by age, shown in Table 3. This yielded an estimate of 13 precent sterile.[13]

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[11] The estimate that 50 percent of the unmarried are exposed to the risk of conception is based on the assumption that the monthly risk of conception ("fecundability") for women regularly engaged in intercourse is 0.2. If the proportion of unmarried women having a birth in any given year is 6.8 percent (see the preceding section of this report), then approximately 8 percent were pregnant during the year (allowing for 15 percent fetal wastage). Assuming 8 percent pregnant and a fecundability of 0.2, the proportion of women exposed to the risk of conception must have been at least 8.6 percent, assuming that none of them used contraception. If 60 percent of those engaging in intercourse did use contraception, however, then 12.7 percent must have been engaged in intercourse regularly. If we further assume that sexual union was less regular among the unmarried than the married, the proportion of all unmarried women engaging in intercourse is some multiple of 12.7. If we assume that the frequency of intercourse among unmarried women is only 25 percent of that among married women, then the appropriate multiple is 4. This yields an estimate of 50.8 percent of unmarried women who have intercourse only occasionally. The purpose of elaborating this train of tenuous assumptions is simply to show that we have to make some fairly exaggerated assumptions even in order to arrive at an estimate that 50 percent of the unmarried women have intercourse occasionally. A lower estimate would probably be somewhat more defensible.

[12] Whelpton et al., *op. cit.*, pp. 158 and 352.

[13] This is consistent with the proportion of couples classified as "definitely sterile" and "probably sterile" in the 1960 study cited above. It does not include an allowance for the less severe impairments found among those classified as "possibly sterile" and "possibly fecund" in this study because the women in these two categories still need contraception, even though their risk of conception is below normal.

TABLE 4. ESTIMATED NUMBER OF WOMEN 15–44 YEARS OF AGE, BY MARITAL STATUS AND POVERTY STATUS: UNITED STATES, NONINSTITUTIONAL POPULATION, MARCH 1966

| Marital status | Number of women 15–44 [1] | | | | | Percent distribution by marital status | | | | |
|---|---|---|---|---|---|---|---|---|---|---|
| | Total | Poor plus near-poor | Poor | Near-poor | Other | Total | Poor plus near-poor | Poor | Near-poor | Other |
| Total | 39,076,000 | 8,208,000 | 5,657,000 | 2,551,000 | 30,868,000 | 100.0 | 100.0 | 100.0 | 100.0 | 100.0 |
| Married | 26,621,000 | 5,201,000 | 3,423,000 | 1,778,000 | 21,420,000 | 68.1 | 63.4 | 60.5 | 69.7 | 69.4 |
| Husband present | 24,735,000 | 4,122,000 | 2,528,000 | 1,594,000 | 20,613,000 | 63.3 | 50.2 | 44.7 | 62.5 | 66.8 |
| Husband absent | 1,886,000 | 1,079,000 | 895,000 | 184,000 | 807,000 | 4.8 | 13.1 | 15.8 | 7.2 | 2.6 |
| Separated | 1,031,000 | 601,000 | 507,000 | 94,000 | 430,000 | 2.6 | 7.3 | 9.0 | 3.7 | 1.4 |
| Other [2] | 855,000 | 478,000 | 388,000 | 90,000 | 377,000 | 2.2 | 5.8 | 6.9 | 3.5 | 1.2 |
| Widowed | 382,000 | 178,000 | 139,000 | 39,000 | 204,000 | 1.0 | 2.2 | 2.5 | 1.5 | .7 |
| Divorced | 1,094,000 | 420,000 | 326,000 | 94,000 | 674,000 | 2.8 | 5.1 | 5.8 | 3.7 | 2.2 |
| Never married | 10,981,000 | 2,409,000 | 1,768,000 | 641,000 | 8,572,000 | 28.1 | 29.3 | 31.3 | 25.1 | 27.8 |

[1] Estimated from tabulations showing age groups 14–17 and 18–44 by marital status and poverty status. It was assumed that the proportion of 14–17-year-old women who were age 14 was the same in each component of the noninstitutional population as it was in the total resident population: 25.7 percent. It was also assumed that none of the 14-year-olds was married.

[2] In the total population, 25 percent of the women in this category report a husband who is in the Armed Forces. Comparable data are not available for the population classified by poverty status.

Source: Derived from special tabulations by Bureau of the Census from the Current Population Survey for March 1966.

In our estimate of the need for contraception among the poor and near-poor, we must also deduct an allowance for women who are pregnant or seeking pregnancy. This allowance should be consistent with the desired fertility of the poor, rather than with recent actual fertility, if we want the estimates to reflect the number of women who need contraception. The assumed desired fertility rate of 98 births per 1,000 women 15–44 years of age means that 9.7 percent of the women have a baby during the year (a one percent allowance has been deducted for women who have twins). Assuming a fetal death rate of 150 fetal deaths per 1,000 pregnancies (this represents, approximately, known fetal deaths, but is probably an underestimate of actual fetal deaths), 11.4 percent of the women were pregnant during the year. Assuming that each pregnancy lasted 8 months, on the average (9 months for full-term babies and 3 months for fetal deaths), then two-thirds of these women were pregnant at any one time during the year and would not be in need of contraceptive services at that time. This give us an estimate of 7.6 percent who do not need contraceptive services because of pregnancy.

It is difficult to estimate the proportion of women who are trying to get pregnant at any one time, because the time it takes to conceive varies considerably from couple to couple. Consequently, the distribution of conception waits is quite skewed. As a rough approximation, let us assume that it takes an average of 6 months to conceive (excluding 2 months for the puerperal period). If 11.4 percent of women become pregnant in any one year (which is consistent with the assumptions in the preceding paragraph), then half that proportion, or 5.7 percent, are trying to get pregnant at any one time and have no need for contraceptive services.

In summary, the allowance for current pregnancies is assumed to be 7.6 percent, and the allowance for women trying to conceive is 5.7 percent. Together, these proportions add to an allowance of 13 percent (rounded) who will not need contraception at any one time because of a desired conception.

The estimates presented in this section have been brought together in Table 5. They show that at any given time, there are nearly 4.6 million women among the poor and near-poor who need contraception. This may be considered a high estimate of the number of women who need to have family planning services made available to them in public clinics, because some of the couples among the poor and near-poor are able to exercise satisfactory control over their fertility. However, even these couples do not have the same access as the non-poor to the more effective and acceptable methods of contraception, particularly the pill and the loop. So, simply in order to equalize the access of the poor and near-poor to modern methods of contraception under medical supervision, it is appropriate to try to make contraceptive services available to all who may need and want them.

## COSTS AND BENEFITS OF FAMILY PLANNING SERVICES

This section presents attempts to measure the costs and quantifiable benefits of family planning services in a way that will make it possible to compare them with the cost and benefits of other programs intended to reduce poverty. It should be understood at the outset, however, that such comparisons are not intended to be used invidiously.

TABLE 5.—ESTIMATED NUMBER OF POOR AND NEAR-POOR WOMEN 15 TO 44 YEARS OF AGE WHO NEED CONTRACEPTIVE SERVICES, UNITED STATES, MARCH 1966

| Item | Number of women | Percent |
|---|---|---|
| Total | 8,208,000 | 100 |
| Deductions: | | |
| Not exposed to risk | 1,477,000 | 18 |
| Sterile | 1,067,000 | 13 |
| Pregnant or trying to conceive | 1,067,000 | 13 |
| All deductions | 3,611,000 | 44 |
| Remainder who need contraception | 4,597,000 | 56 |

For example, if it could be shown that family planning programs achieve greater economic benefits per dollar spent than vocational training programs, this would not mean that family planning programs could be substituted for vocational training programs, or even that they should take precedence over vocational training programs. Every program intended to reduce poverty has certain unique effects that cannot be assumed by other programs. Also, every program is limited in the effects it can achieve. Therefore, the estimates of costs and benefits presented here should be regarded largely as reassurance that the task of offering contraceptive services to the poor is worth while.

We have estimated the incidence of excess fertility among the poor and near-poor to be 55 excess births per 1,000 women 15–44 during 1960–65, and we have estimated the need for family planning services among the poor and near-poor on the basis of numbers of women in these groups in March 1966. In order to make both of these estimates relate to the same time period, it has been assumed that the rate of 55 excess births per 1,000 women 15–44 years of age continued through 1966. Applying this to the estimate of 8,208,000 poor and near-poor women 15–44 years of age in 1966 gives us a 1966 estimate of 451,000 excess births.

In order to help couples avoid these 451,000 excess births, family planning services would have to be provided for 4,597,000 women, according to the estimates presented in the preceding section. Thus, for every unwanted birth prevented, contraceptive services would have to be provided for an average of 10.2 women. For the purpose of making rough estimates, it will be sufficient to round this estimate to 10.

How much would this cost? The Planned Parenthood Federation has estimated the costs of subsidized family planning services at between $20 and $25 per patient per year.[14] As a conservative estimate, we have assumed a higher cost of $30. When multiplied by 10, this gives us an annual estimate of $300 for every unwanted birth avoided.

The prevention of an unwanted birth has two major economic benefits. First, it avoids the cost of providing for an additional child in the family; second, it may enable the potential mother to earn money to supplement the family's income.

The costs of supporting a child vary with the number of children already in a family and the level of support chosen as the criterion of poverty. Using the Social Security Administration's index based on 1965 income for a family of five (husband, wife, and three children), an additional family member adds $470 to the annual income required to avoid being classified as poor, and $605 to avoid being classified as near-poor. In order to present a conservative estimate of the costs or raising a child, we have chosen the lower of these two figures.

The costs avoided by preventing an "excess" birth are avoided not only this year, but also in future years. Therefore, the costs avoided extend throughout the years the child would have been in the home. Assuming that the child would have remained in the home until his 18th birthday and assuming that 94.4 percent of the children would survive to that age (an estimate based on nonwhite mortality for 1964), the total amount of money saved for every unwanted birth avoided would be $7,986. In order to represent the economic impact for the year in which the birth was avoided, the annual savings have been discounted at a rate of 4 percent annually for 18 years. This yields an estimate of the $5,617 saved for every $300 spent on family planning services in any given year. The ratio of the economic benefit to the cost is 18.7 to 1.

As noted earlier, another economic benefit of adequate fertility control is that it makes it possible for the potential mother to spend a longer time earning money to supplement her family's income. Just how many years or months the prevention of an unwanted birth adds to the working life of a woman depends, in part, on the availability of day care services for her children. If such services are available, an unwanted pregnancy could interrupt the mother's employment for only two months. However, if they are not available, the interruption could last until the child begins school at the age of six. Since such services are not generally available, let us assume that an unwanted pregnancy would make it impossible for the potential mother to work for an average of four additional years. (This estimate is less than the maximum of six to allow for the possibility that some women may have a wanted child during the period when they might

[14] "Family Planning and Infant Mortality: An Analysis of Priorities," a Report by the Department of Program Planning and Development and Department of Research, Planned Parenthood—World Population, New York, June 1967 (mimeographed), p. 4.

have worked.) Let us further assume that 30 percent of the women who avoid an unwanted pregnancy would work. (There is little evidence on which to base this assumption; the proportion is assumed to be lower than the 41 percent of poor female heads of households who worked in 1965.) Using these assumptions, the prevention of 451,000 births would enable 135,000 women to work for four years. If they earned an average of only $2,000 annually (assuming that some work part-time and some work full-time), their earnings would total $8,000 each, or $7,260 when discounted to the first year at a rate of 4 percent. Since only 30 percent of the women are assumed to work, the additional earnings would average $2,178 per unwanted birth avoided. In this case the economic benefit is 7.3 times greater than the cost of $300 per unwanted birth avoided.

In summary, the economic benefits of each unwanted birth prevented are as follows:

| | |
|---|---|
| Avoided expenses for raising a child to age 18 | $5,617 |
| Additional earnings for women who were enabled to work | 2,178 |
| Total | 7,795 |

The total economic benefit is 26 times greater than the cost of $300 per unwanted birth prevented.

The above estimates of economic benefits are considered to be conservative. Better estimates could undoubtedly be prepared on the basis of more detailed data on the fertility characteristics of poor and near-poor women and on the relationship between childspacing, family size, and the woman's employment history. However, such estimates would only establish more firmly the readily apparent conclusion that family planning programs can achieve considerable economic benefits at relatively low costs.

To present a balanced picture, it must be noted that the benefits of family planning programs would accrue to a limited number of the poor and near-poor. In 1966, for example, adequate fertility control would have helped 451,000 poor and near-poor women of childbearing age and their families. Assuming that average family size was 4 persons (husband, wife, and two children), a total of 1,804,000 persons might have benefited from the prevention of unwanted births. This is only 3.8 percent of the total number of people counted among the poor and near-poor. Of course, other families would be helped in future years, and the eventual proportion of people benefiting from family planning services would be much larger than the 3.8 percent affected in any one year. We can estimate the larger proportion very roughly by assuming that women 15–44 years of age continue to be 17 percent of all persons in the poor and near-poor populations, that half of them (or 8.5 percent of the total) would have avoided one or more unwanted children by making use of family planning services, and that their families eventually included an average of 5 persons; these assumptions imply that ultimately 42 percent of the population living in poverty would have received the economic and other benefits of family planning services. Although this estimate is very rough, it serves to indicate the limitations on the benefits that family planning programs can reasonably be expected to generate. Although there is a great need for adequate control of fertility among the poor and near-poor, and although family planning programs represent a highly efficient way of easing the economic distress of the poor, they are not a panacea for poverty.

In addition to the economic effects of adequate fertility control, there are qualitative benefits that may be considered even more important. These are summarized below:

1. If every child is a wanted child, children will be better cared for, both physically and emotionally. In fact, studies by the Department of Health, Education, and Welfare indicate that family planning is the most cost-effective measure available to reduce infant mortality.[15]
2. Mothers will be subjected to lower risks of health if births are not closely spaced.
3. The assurance that another child won't come before it is wanted will help couples plan other aspects of their lives with more confidence. It will reduce the feeling of hopelessness with which many poor people face life.

The above effects are stated with confidence. Improved control of fertility is virtually certain to bring about changes in the directions stated. In addition, there are possible benefits about which only speculative statements may be made,

[15] *Ibid.*, p. 9.

given the present state of knowledge. For example, it seems reasonable to suppose that a healthier emotional environment within the family will reduce problems of school discipline, truancy, and juvenile delinquency. Such benefits are not only speculative, but one step further removed from the presumed cause, improved control of fertility. The above listings, therefore, are confined to the immediate and obvious effects of adequately controlled fertility.

### CHARACTERISTICS OF EFFECTIVE FAMILY PLANNING PROGRAMS

A concerted effort to offer effective contraceptive measures to the poor will involve a number of approaches. This section of the report specifies the program elements needed and suggests some criteria that might be used to guide program decisions. This should be regarded simply as an initial attempt to outline the characteristics of publicly supported family planning programs. Experience should modify the approaches and criteria presented for consideration here.

Four means of increasing the availability of contraceptive services can be used in public programs:

1. Offering contraceptive services during confinement for delivery in a public hospital and during postpartum care;
2. Offering contraceptive services in family planning clinics or other out-patient clinics whose clients are not necessarily limited to women who have delivered in a public hospital;
3. Publicizing contraceptive methods and services:
   a. Methods of contraception, including those available without a doctor's prescription;
   b. The location of clinics where contraceptive services may be obtained.
4. Educating parents and potential parents about reproductive physiology and contraceptive methods:
   a. In schools;
   b. In settings where men and women of reproductive age who are not in school can be reached.

Essentially, these four kinds of programs involve two basic approaches: service and education. The exact mixture of these two elements that will prove most effective will vary from one situation to another. In the long run, education may be more economical and more effective. But the immediate effects of education may be small. Apparently educational efforts met with some success in the slums of Chicago.[16] This experience should be carefully reviewed for its program implications.

Programs intended to offer contraceptive services to the poor should meet the following criteria:

1. Information about contraceptive services should be given to mothers before or during confinement for delivery in public hospitals and services should be made available during postpartum care. This is the route through which contraceptive services are now offered by most federally supported programs, particularly by those financed through grants from the Children's Bureau.
2. Contraceptive services should also be available to women who have never had a child or who have not been reached in the maternity-ward setting.
3. Eligibility requirements for receiving contraceptive services should be liberal with respect to income. As the data presented earlier in this report suggest, family planning is not only a means of helping people who are already poor, but also a way of helping people avoid poverty. Therefore, income requirements for receiving contraceptive services should be as liberal as possible.
4. Eligibility requirements should be liberal with respect to marital status. Such services should be made available to the unmarried as well as the married. As noted earlier in this report, the incidence of sexual intercourse outside marriage need not be high in order to produce relatively high illegitimacy rates. Therefore, the number of unmarried women making use of contraceptive services may not be great.
5. Eligibility requirements should be liberal with respect to the age of unmarried women seeking help. This will undoubtedly pose some problems, but they may not be insurmountable. Some publicly supported programs are already facing them (for example, in Baltimore). The need to help young women avoid

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[16] "During the two and a half years of mass communication treatment, the low-income population has adopted contraception as a permanent part of its culture, via a process of private discussion and evaluation, provoked and stimulated by newspapers and other mass publicity." From "United States: The Chicago Fertility Control Studies." *Studies in Family Planning*, Population Council, New York, New York, No. 15, October 1966, p. 8.

premarital births is particularly urgent in view of the harmful consequences of such births both for the mothers and their children.

6. The range of methods of contraception offered should be wide enough to meet the preferences and needs of different clients. The effectiveness of particular methods should be balanced against other considerations. For example, the rhythm method should be made available to women who ask for it. Intrauterine devices now in common use can be given only to women who have had children. Although contraceptive pills are highly effective, they may not be entirely appropriate for women who are exposed only occasionally to the risk of conception; such women would probably be better served with intercourse-connected methods. Also, some way should be found to make condoms available to men; this was the most commonly used method among the poor in 1955 and 1960, and may still be so. It is a highly effective method, when used regularly, and readily available.

7. Communication between agencies offering family planning services and other agencies, both public and private, should be close enough to develop good referral systems. Again, the route to the family planning clinic should not be solely through the maternity ward.

8. In the referral of clients to contraceptive services and in the provision of services, there should be no trace of coercion. The purpose of family planning programs is to offer services, not to impose them.

9. Every agency providing contraceptive services should routinely keep records that will make it possible to develop statistics on the number of people served, the methods prescribed, the number of dropouts, the number of return visits, the number of accidental pregnancies, and other information that will aid in evaluating the services offered and their impact on community needs. For some suggestions about the development of a statistical system, see the Appendix to the present report.

### NEXT STEPS

The preparation of this report has generated a few ideas concerning the development of the Department's activities in the area of family planning, which are presented below for what they may be worth.

1. A report should be developed through collaboration between a number of agencies in the Department and outside consultants, setting forth the rationale for federal involvement in family planning programs, the magnitude of the task, the program characteristics considered desirable, and the unique contributions that can be made by the several agencies to the Department's total effort. Collaboration with the Office of Economic Opportunity in the development of this report should be seriously considered. The report should be used as a working document to guide further development.

2. In the light of this report, a study should be made of the Department's authority to support the kinds of programs considered most useful, and plans should be made to seek whatever additional legislative authority and appropriations may be needed. Current legislative proposals, such as H.R. 355, should also be reviewed.

3. Task forces or advisory committees, consisting of persons within the Department and experts from outside the government, should be organized to consider how best to conduct three main tasks:

a. The delivery of services
b. Education
c. Program evaluation

As an appendix to the present report, some suggestions are made concerning the development of a statistical system to aid in the evaluation of family planning services.

## Appendix: Statistics Needed for the Evaluation of Family Planning Services

Plans for the provision of contraceptive services would be incomplete if they did not include means of evaluating the services offered and the impact of programs locally and nationally. The following suggestions concern the development of uniform statistics on contraceptive services that could be used in program evaluation.

### COVERAGE

The statistics should cover all services funded by the federal government, including those provided by private physicians under Title XIX, State govern-

ments, local governments, and voluntary agencies (i.e., affiliates of the Planned Parenthood Federation). These sources of support should be identified in the statistical presentation so that we can measure the services provided through various channels.

INFORMATION TO BE COLLECTED

1. Number of patients and type of service.—The data should show the number of patients receiving different kinds of family planning services (for example, whether the woman received only information on methods of contraception, whether she was given some specific method, and, if so, the type of method) the number of new patients, the number of return visits, the number dropping out of the program, and the case load (number of patients in the active file at some specific date or dates). These data should be presented for specific clinics or organizational units that would be defined by the agency collecting the data. There will be many problems of defintion. For example, should a patient who leaves one clinic and enters another (perhaps because she moved) be considered a drop out in the former clinic and a new case in the latter?

2. There should be data on the various routes through which patients were referred to the clinics; for example: the maternity ward, local welfare department, friends and neighbors, etc.

3. There should be data on additional services provided; for example, postnatal care, Pap smears, infant care, etc.

4. Cost of the service to the patient, if any.

5. Sources and amounts of financial support for the clinic. Try to estimate amounts of money needed for family planning services alone, so that the average costs of various services per patient-year can be calculated.

6. Demographic and socioeconomic characteristics of the patients. It may be advisable to obtain some of these data from samples (either of clinics or of patients) in order to keep down the paperwork load. However, it is very important to obtain information on the patients' pregnancy histories. Only slightly less important are data on previous contraceptive history, marital status, educational attainment, religion, race, labor force status, occupation, income, and whether the patient receives welfare payments. In addition, data should be collected on husband's educational attainment, religion, race, labor force status, occupation, and income.

REPORTS TO BE ISSUED

1. An annual report in which an attempt is made to assess the extent to which the needs for family planning services are being met by publicly supported facilities. This report would also show detailed statistics for the year and describe the characteristics of the new patients, those continuing to receive services, and those dropping out. The report should attempt to identify particular groups that are not adequately served.

2. A monthly report showing numbers of new patients, continuing case load, and number of dropouts for various types of public facilities. This report would also identify new clinics opened during the month under review and describe projected changes in the whole field of publicly supported family planning services.

COORDINATION WITH OTHER DATA COLLECTING SYSTEMS

Full advantage should be taken of whatever machinery is now operating to provide data on family planning services in governments (Federal, State, and local) and in the Planned Parenthood Federation. There should also be coordination with the National Survey of Family Growth, particularly with regard to attempts to identify areas where services are insufficient.

APPOINTMENT OF MRS. KATHERINE OETTINGER AS DEPUTY ASSISTANT SECRETARY FOR FAMILY PLANNING AND POPULATION

Acting Secretary COHEN. Last year, a new position of Deputy Assistant Secretary for Family Planning and Population was established in the Department to coordinate the Department's programs of medical and social services, education and research in this field, and Mrs. Katherine Oettinger, who was formerly Chief of the Children's Bureau, was named to this important post.

### Planning Services Objectives

In a memorandum to the heads of HEW's operating agencies, former Secretary Gardner said:

> The immediate objective is to extend family planning services to all those desiring such services who would not otherwise have access to them.
>
> Family planning is an integral part of our overall health program directed at the reduction of infant and maternal mortality and improving the health of the family.

The policy emphasized freedom from coercion and freedom of choice in method to be used.

The Department also plans to step up its research in human reproduction and fertility, to continue to test the safety and effectiveness of contraceptive devices, and to increase public understanding of family life and sex education.

### Budget Request

The budget places greatly increased emphasis on family planning. The $56 million in the budget for 1969 compares with $28 million budgeted in 1968 and $20 million in 1967.

Here again, I commend this increase to you, Mr. Chairman, as being of very great importance at the present time.

I worked closely with former Secretary Gardner in the development of this family planning policy and it has my most enthusiastic suppport.

## HEALTH RESEARCH

All of our progress in health depends on a sound foundation of biomedical research. Thanks to the interest and support of this committee, our health research effort has grown steadily over the years.

I tried to summarize what I think is the contribution this committee has made. I went over a lot of indices—money, people, grants, and so on.

It seems to me that the following is the important point of what you have done.

In its report to the President last year, the National Institutes of Health noted that as a result of Federal support of research, 65,000 senior investigators are now at work in some 2,000 academic and research institutions. In addition, some 30,000 individuals are getting advanced training in scientific and clinical specialties.

These are the people, this is where you are putting your money in terms of getting biomedical research and the training of people who can train research people.

This vast effort has revolutionized the range of medical capability; has improved the outlook for people suffering from heart disease, cancer, and a number of other serious ailments; and has opened new insights into the functioning of biological systems, the ways in which we develop and age, and into the nature of life itself.

The investments in biomedical research have yielded many dividends in the last year alone. This must continue.

### Medical Research Potentialties

Within the past year, we witnessed new and dramatic potentialities of medical research, particularly in organ transplantation, in the development of the artificial heart and the artificial kidney, in new

knowledge of the mechanisms of human heredity, and in the realization that measles can now be completely prevented.

These recent achievements were the result of careful work over a period of years—work made possible by the Federal Government's continuing and increasing investment in basic research.

The importance of this investment can hardly be overemphasized. Such specific, target-oriented research should be continued and encouraged, and we intend to give this kind of work a high priority.

At the same time, we need to pursue new knowledge along a broad and varied front—knowledge that will yield new techniques to prevent diseases, ease suffering, and promote longevity for as many people as possible.

### International Center for Advanced Study in the Health Sciences (Fogarty Center)

I think this is an appropriate place to mention that we are proceeding with plans for the establishment of the International Center for Advanced Study in the Health Sciences, which will bear the name of the late John E. Fogarty, former chairman of the House Appropriations Subcommittee on Labor-HEW.

The initial function of the Fogarty Center will be to create the environment and to provide the means to assemble scholars and scientists for the advanced study of science as it relates to health.

### Dissemination of Medical Information

Our investment in medical research is a contribution to the improved health not only to the people of our Nation but all the people of the world. We share this knowledge for the peace and happiness of everyone.

I would like to say this, Mr. Chairman. When I have been outside the United States, I have made the point that the billion and a quarter or billion and a half dollars a year that you are investing in the National Institutes of Health is not merely for the health of the American people but that whatever results we obtain is going to benefit all the people of the world.

That medical knowledge is not restricted to the water line and when we discover information we give it to anyone, everywhere, and we believe that that is an important contribution that we are making to mankind throughout the world.

We share this knowledge for the peace and happiness of everyone.

### Manpower and Womanpower Shortages

All of our social programs depend on an adequate supply of well-trained professional and supporting manpower. At present, the Nation's manpower shortage is grave, and it is likely to remain so for some time to come.

The recent report of the National Advisory Commission on Health Manpower underscored the great need for health workers of all types. The need is equally serious in the field of social work, education, and rehabilitation.

We need to increase the output of trained people in all these fields. We need to devise patterns of organization and administration that will make the most efficient use of professional personnel.

And we need to develop and train new categories of workers—aides, auxiliaries, technicians—to provide essential services as part of a team effort and to stretch our limited supply of manpower.

To do so, we have to reevaluate the skills required for various types of services and tailor these skills to different categories of need.

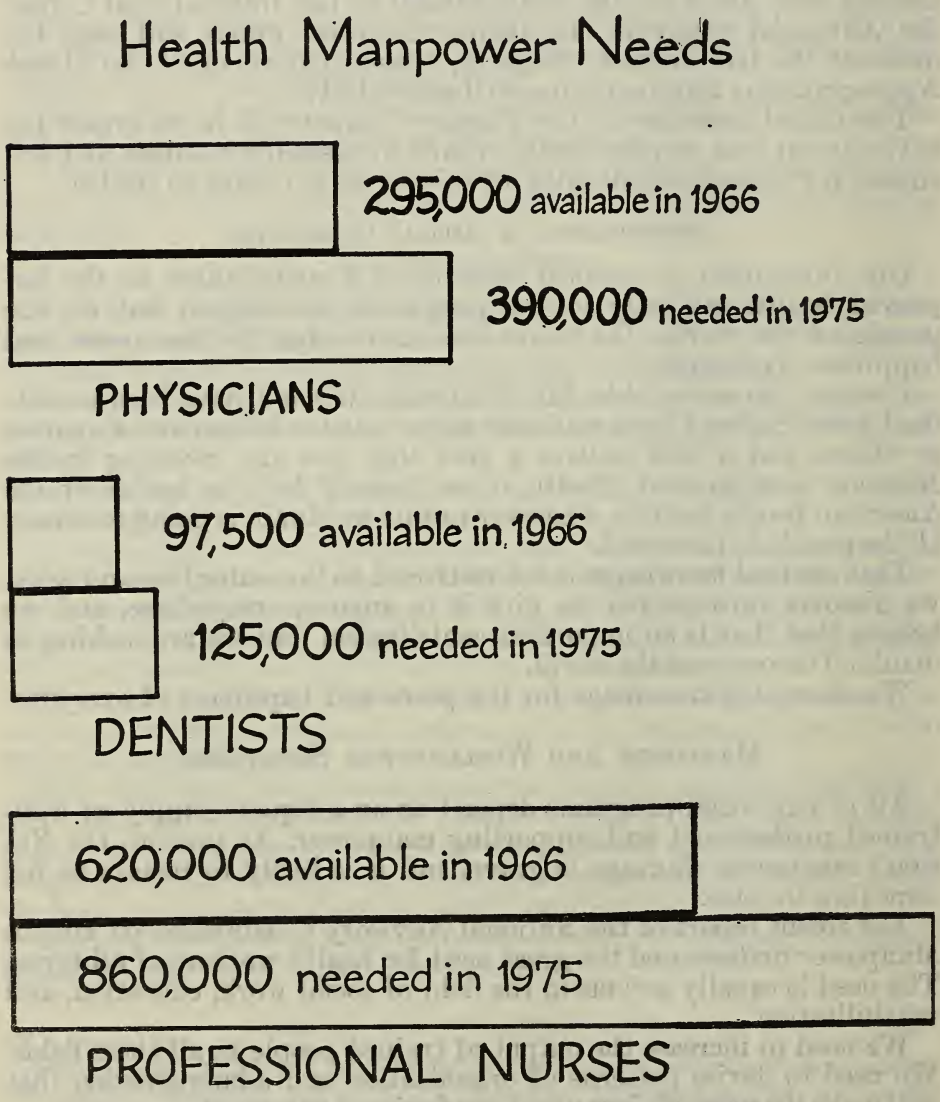
The manpower problem is a challenge to almost every element of society—business and industry, the education community, professional groups, and government at all levels.

We have made a start in various training programs and in our efforts at coordination among governmental agencies.

But we need to be both more imaginative and more aggressive if we are to come anywhere near our manpower needs in the decade ahead.

Chart No. 6 gives some indication of the manpower problems in the health field.

Chart 6



On Chart No. 6, Mr. Chairman, you will see I listed a few of the tremendous needs.

There are 295,000 physicians available in 1966. We will need 390,000 in 1975. We have 620,000 nurses available in 1966; we will need 860,000 in 1975.

I have a table here which I will be glad to put in the record that gives the estimated needs for a number of other professional and technical groups.

Senator HILL. Suppose you supply that for the record.

(The table follows:)

ESTIMATED MANPOWER NEEDS IN SELECTED HEALTH OCCUPATIONS RESULTING FROM GROWTH OF EMPLOYMENT REQUIREMENTS AND NET REPLACEMENTS, 1966–75

| Occupation | Employment, 1966 | Employment requirements, projected 1975 | Manpower needs (1966–75) for— | | |
|---|---|---|---|---|---|
| | | | Growth and net replacements | Growth | Net replacements [1] |
| Medical professions: | | | | | |
| Physicians [2] | 295,000 | 390,000 | 145,000 | 95,000 | 50,000 |
| Dentists | 97,500 | 125,000 | 45,000 | 27,500 | 17,500 |
| Optometrists | 17,000 | 20,000 | 6,100 | 3,000 | 3,100 |
| Podiatrists | 8,000 | 9,600 | 3,000 | 1,600 | 1,400 |
| Nursing: | | | | | |
| Aides, orderlies, and attendants | 700,000 | 1,080,000 | 690,000 | 380,000 | 310,000 |
| Professional nurses | 620,000 | 860,000 | 390,000 | 240,000 | 150,000 |
| Licensed practical nurses | 300,000 | 465,000 | 290,000 | 165,000 | 125,000 |
| Other professional and technical: | | | | | |
| Pharmacists | 120,000 | 126,000 | 38,000 | 6,000 | 32,000 |
| Medical X-ray technicians | 72,000 | 100,000 | 51,000 | 28,000 | 23,000 |
| Medical laboratory assistants | 50,000 | 100,000 | 70,000 | 50,000 | 20,000 |
| Medical technologists [3] | 40,000 | 75,000 | 50,000 | 35,000 | 15,000 |
| Physical therapists | 12,500 | 27,000 | 19,500 | 14,500 | 5,000 |
| Medical record librarians | 12,000 | 18,000 | 10,000 | 6,000 | 4,000 |
| Occupational therapists | 6,500 | 16,500 | 13,000 | 10,000 | 3,000 |
| Dietitians | 30,000 | 38,000 | 17,000 | 8,000 | 9,000 |

[1] Net replacements include separations from the labor force because of deaths, retirements, family responsibilities, or other reasons, minus workers qualified in the occupation returning to the labor force.
[2] Includes doctors of medicine (M.D.) and doctors of osteopathy (D.O.).
[3] Includes workers who require 4 years of postsecondary training or the equivalent in experience.

Source: U.S. Department of Labor, Bureau of Labor Statistics.

## ENVIRONMENTAL PROBLEMS AND CONSUMER PROTECTION

Acting Secretary COHEN. Americans continue to foul their environment at a phenomenal rate. Each year we dump 125 million tons of pullutants in the air. Our landscape is littered with junk and waste, part of the 165 million tons of solid waste we produce annually.

We are buffeted by crowding, harried by noise, endangered by radiation. We know relatively little about the more than 500,000 synthetic chemicals and other compounds on the market today or about their effect on human beings.

This is all very important. I think if I could do one thing immediately, Mr. Chairman, it is to try to persuade people not to throw beer cans on the highway. Every day as I travel in and out from work, the thing that seems to me so shocking about the attitude, again, of our people is that they will throw these beer cans out of their car onto the highway.

I think it shows a disrespect for the community and the lack of responsibility, and if I could find some way to change people's attitude I would like to do it.

Senator HILL. I might seek to encourage them to go back to the electric streetcar.

Acting Secretary COHEN. If you did away with the automobile it would solve some problems.

Senator BARTLETT. You could use stronger language about that, too.

Acting Secretary COHEN. I really think that while it may seem a small item of irritation, it embodies an attitude on the part of people who do this that I think is at the basis of many of our social problems, the lack of feeling of self-respect for their neighborhood and their community and somebody else's neighborhood and community and throwing them on the highway, letting somebody else pick them up, making it a public expense to go and clean them up, leaving them there for weeks at at time.

It is a very tragic indication, I think, of the kinds of problems that we are faced with in our communities today.

Senator HILL. We certainly have them today, don't we?

Acting Secretary COHEN. Yes, sir.

### INSTALLING MOTIVATION AND ACHIEVEMENT IN CHILDREN

When you try to think about why we are in the problems we are today, I think the problem that I mentioned a little while ago about working with these children to give them a sense of motivation and achievement is the key. I think that unless you can get parents in the community to instill in a person while he is very young the sense that he has a responsibility for work and for doing things well and for a sense of pride in his family and his community; unless you can do this, most of these social problems are going to get more complicated for our grandchildren than they are now.

Senator HILL. They are multiplying all the time, aren't they?

Acting Secretary COHEN. Yes, sir.

The rising tide of pollution threatens not only our health but the very quality of our lives.

### AIR QUALITY ACT OF 1967

The Air Quality Act of 1967 gave us new tools to help restore the Nation's air to an acceptable quality. It will enable us to expand our research and development efforts in this field.

It authorizes the establishment of air quality control regions which should lead to the development of desirable air quality criteria. It encourages planning and control activities on a regional basis.

As a result, we are accelerating our efforts to clean up the air. But we are not nearly as advanced in other environmental areas. Nor have we as yet begun to develop a total, comprehensive approach toward conserving our environment or refashioning it where necessary.

Mr. Chairman, last year at the request of the President, I met with 50 of the leading industrialists in the United States about our air pollution problem in three separate meetings, in small groups.

I found that these industrial leaders were aware of our problem, were willing to work on this, were willing to cooperate with the Federal Government, were willing to cooperate with their own people in doing something about it.

I think this is a very, very important first step. I believe that what we did last year and the change in the attitude of the business and industrial leaders is important.

### Technological Research

I hope the additional money we have in the budget to promote new technological research to find the causes and cure for this pollution will weigh very heavily in your consideration of matters of importance.

With the business and industrial leaders sympathetic and favorable, now is the time, it seems to me, to build on that support.

The increasing complexity of the products and services we live with makes it necessary to take protective measures in common. The individual is simply not up to judging the safety or efficacy of a new drug or plastic or synthetic.

He is asked to choose wisely under conditions which baffle the experts. We must devise new safeguards to protect the American consumer from fraudulent or potentially hazardous substances and products.

### VOCATIONAL EDUCATION

A useful and rewarding job is the surest road to independent living. But the disadvantaged face almost insurmountable barriers in getting and holding a job. They lack skills, work experience, and normal work habits. Seeing no way out for themselves, they often lack motivation and self-respect. They need education to live as well as to learn.

Vocational educational and job training are crucial to our efforts at salvaging human beings. Much greater attention must be given to vocational education within the framework of our school system.

Too often, vocational education has been outside that system or has occupied an inferior place within it. Children enrolled in vocational education courses often sense this second-class status and drop out early.

Moreover, vocational education in many communities has not been as responsive to the needs of our society as it might be. The emphasis has been on occupations bypassed by our advancing technology.

Vocational education should be part of a total program that prepares the individual to live in society. Our young people and our adults have the right to a total rather than a fragmented education, including preparation for the world of work.

Occupational education, planned work experience, and job and career counseling should be offered as part of the general education program in all schools. And to help serve the multiple and changing needs of individuals, the school should link itself to family, employer, and community.

We need new and innovative approaches to vocational education and manpower training. We need to build a sound system that will motivate young people to stay in school, that will be preventive and constructive instead of palliative.

And we need to do a much better job of coordinating the various job training programs at the local level.

### Report of Advisory Committee on Vocational Education

We recently transmitted to the Congress the report of the Advisory Committee on Vocational Education appointed under the 1963 amend-

ments. The Committee headed by Martin Essex made a number of recommendations which should be reviewed by both the substantive legislative committees and the Appropriation Committees. There will also shortly be transmitted the report of the special committee which was authorized by the Congress last year.

We still have a long way to go before we have a satisfactory and adequate program of vocational education in this country.

## HIGHER EDUCATION

Our society is committed to the goal that every American receive all the education he needs to properly develop his abilities. In today's world, this means higher education.

For millions of Americans, higher education used to be only a dream. Today, it is a necessity and more and more students are aspiring to an education beyond the high school.

They are doing so in increasing numbers. College and university enrollment last fall was at a record high of nearly 7 million, an increase of 8 percent over the previous fall and 45 percent over 4 years ago. In another 4 years the enrollment total is expected to rise another 25 percent.

At the beginning of this century over 4 percent of Americans from 18 to 21 were enrolled in higher education; by 1960, this proportion had increased to 23 percent. Today, it is over 33 percent. For the first time in our history, education beyond the high school, is becoming the norm rather than the exception in America.

TABLE 2.—*Dates when degree credit enrollments in institutions of higher education first exceeded significant levels*

| *Enrollment exceeded* | *Date* |
|---|---|
| 100,000 | 1880 |
| 500,000 | 1920 |
| 1,000,000 | 1928 |
| 2,000,000 | 1946 |
| 3,000,000 | 1957 |
| 4,000,000 | 1962 |
| 5,000,000 | 1965 |
| 6,000,000 | 1967 |
| 7,000,000 [1] | 1969 |
| 8,000,000 [1] | 1972 |
| 9,000,000 [1] | 1975 |

[1] Projected.

Table 2 is an indication of the remarkable progress made in recent years and the growth expected in the next 7 years.

## ENROLLMENT

Mr. Chairman, the year 1880 was the year when enrollment in higher education first exceeded 100,000 in the United States. Then it took us 40 more years, until 1920, to exceed 500,000.

In 8 years, between 1920 and 1928, we doubled it and reached a million. Then we reached 2 million right after World War II when the boys came back from service and the GI bill of rights enabled them to get back in school.

We reached 3 million by 1957. We reached 4 million by 1962. We increased it another million in 3 years by 1965. We are at 6 million

now, 2 years later. The estimate is 7 million for 1969, 8 million by 1972, and 9 million by 1975.

Now, that means in 1957 when we had 3 million in college that we will have built, in a sense by 1975 when we have 9 million, the equivalent of two more systems of higher education in the United States.

Just think what a gigantic enterprise we have had and that we still have to complete in higher education.

### Two-Year Community Colleges

One of the most significant developments which is occurring is the increase in enrollment in 2-year community colleges. Enrollment has increased from about 850,000 in the fall of 1963 to 1,440,000 in the fall of 1967. This is a most important step in making post-high-school education more easily accessible to additional students.

### Increasing Cost of Education

Yet millions of youngsters still do not share in this opportunity. The cost of higher education has soared in recent years. For too many high school graduates, going on to college still depends far more upon the ability to pay than the ability to learn.

We have to strike down all the barriers—financial, racial, social, and geographical—to a college education. We also have to make sure that our colleges and universities have the teachers, facilities, and resources they need to accommodate the flood of new students.

Finally, we have to maintain and improve the quality of higher education and to strengthen its services to our communities and States.

TABLE 3.—EXPENDITURES BY INSTITUTIONS OF HIGHER EDUCATION RELATED TO GROSS NATIONAL PRODUCT: UNITED STATES, 1957–58 TO 1967–68

| Calendar year | Gross national product (in billions) | School year | Expenditures by institutions of higher education | |
|---|---|---|---|---|
| | | | Total (in billions) | As a percent of gross national product |
| 1957 | $441.1 | 1957–58 | $6.5 | 1.5 |
| 1958 | 447.3 | 1958–59 | 7.1 | 1.6 |
| 1959 | 483.7 | 1959–60 | 7.7 | 1.6 |
| 1960 | 503.7 | 1960–61 | 8.7 | 1.7 |
| 1961 | 520.1 | 1961–62 | 9.5 | 1.8 |
| 1962 | 560.3 | 1962–63 | 11.3 | 2.0 |
| 1963 | 590.5 | 1963–64 | 12.2 | 2.1 |
| 1964 | 632.4 | 1964–65 | 13.8 | 2.2 |
| 1965 | 683.9 | 1965–66 | 15.5 | 2.3 |
| 1966 | 743.3 | 1966–67 | 16.6 | 2.2 |
| 1967 | 785.0 | 1967–68 | 17.9 | 2.3 |

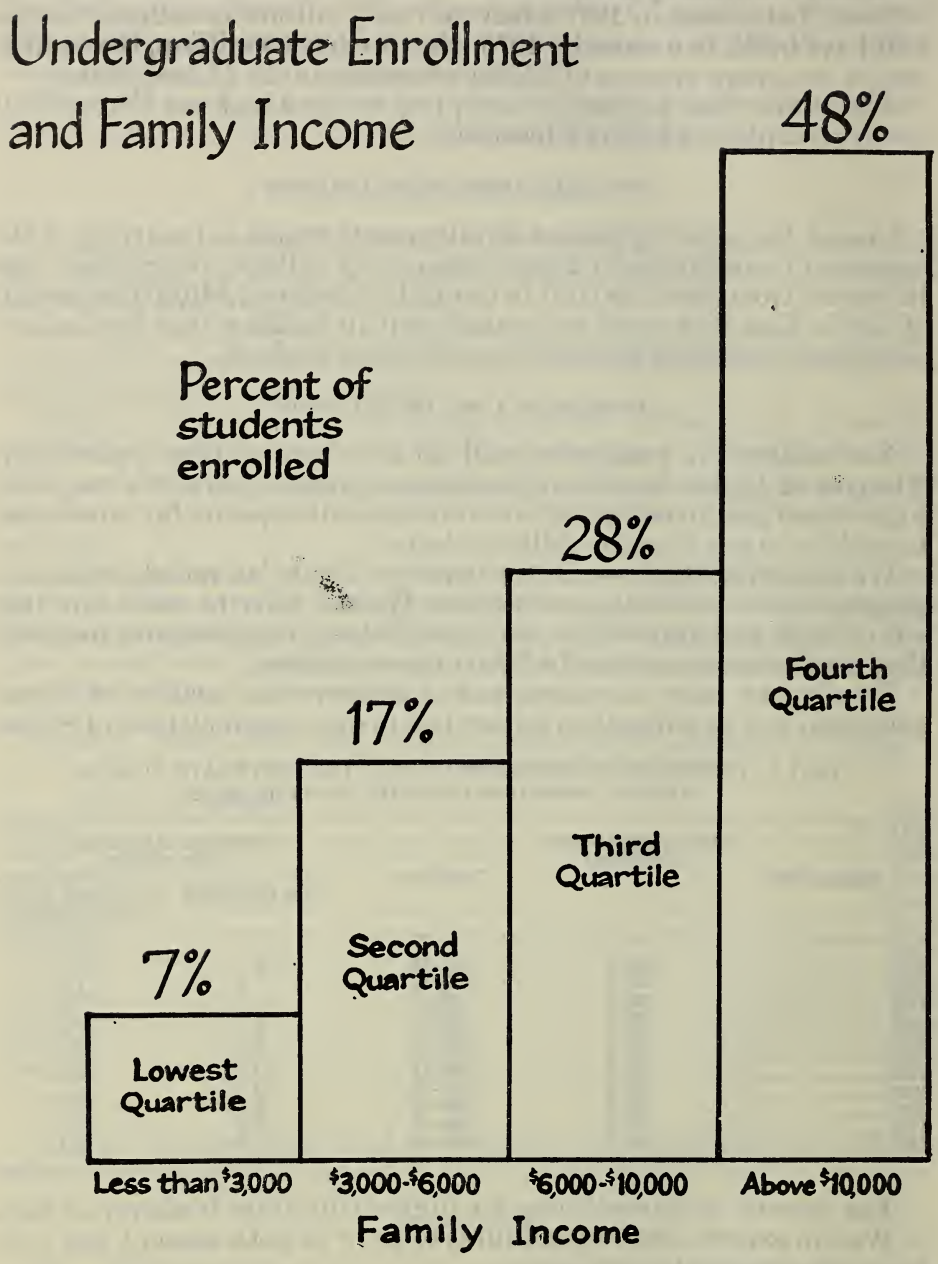
The growth in expenditures for higher education is shown in table 3. We can expect these expenditures to grow in both amount and relative to the gross national product.

### Student Financial Aid

A major issue will be how to organize and finance student financial aid so that all students from low-income families who have the ability and interest in attending college can do so.

Chart No. 7 indicates that in 1967, 48 percent of all undergraduates came from the 25 percent of families with the highest incomes, while only 7 percent came from the 25 percent of the families with the lowest incomes.

Chart 7




As incomes went up, the proportion of students enrolled rose rapidly.

I think that does indicate that we still have more to do to make the financial opportunity to go to college a reality in this country.

I believe we must begin to develop a plan by which we make it possible for every boy or girl with ability and purpose to attend college.

## ELEMENTARY AND SECONDARY EDUCATION

Any adequate discussion of the needs in elementary and secondary education would require an entire volume by itself.

The Elementary and Secondary Education Act of 1965 has enabled the Nation to make important progress, but it is still premature to know in substantial detail exactly what the results will be until we have had a longer period of experience.

I am glad that the Congress extended the Elementary and Secondary Education Act for 2 years last year and I hope that advance funding for title I will be enacted this year. School districts need this kind of longer range provisions to enable them to plan wisely and well for the use of the Federal funds.

There are many unsolved problems in elementary and secondary education which will take us a number of years to deal with properly.

As chart No. 8 shows, while the average annual current expenditure per pupil in 1967 was $369 for the Nation, State annual per pupil expenditures ranged from $912 in New York to $335 in Mississippi. Fifteen States expended over $600 and five States expended under $400 per pupil.

The relative difference between the State with the highest per pupil expenditure—New York—and the State with the lowest per pupil expenditure—Mississippi—has decreased somewhat in recent years.

In school year 1963–64, for example, New York's per pupil expenditure—$744—was triple that of Mississippi—$249.

By the 1966–67 school year, New York's per pupil expenditure—$912—was 2.7 times as large as Mississippi's $335.

But the gap is increasing in terms of absolute dollar differences—$495 difference in 1963–64, as compared to $577 in 1966–67.

This, to me, is one of the problems that we really must overcome. This wide gap in per pupil expenditures must be overcome. I am not one to believe that the problems of education are all solved by every pupil, every State, every locality getting that same amount of money, but the present degree of variation it seems to me to be unconscionable.

I would hope that more funds could be available to be able to neutralize it.

### Kindergartens

There are still many localities in which children cannot attend kindergarten.

In the year 1966, about 25 percent of all 5-year-old children did not attend kindergarten or school. Eighty percent of all 4-year-olds were not enrolled in any kindergarten or nursery school.

### Financial Resources and Teacher Quality

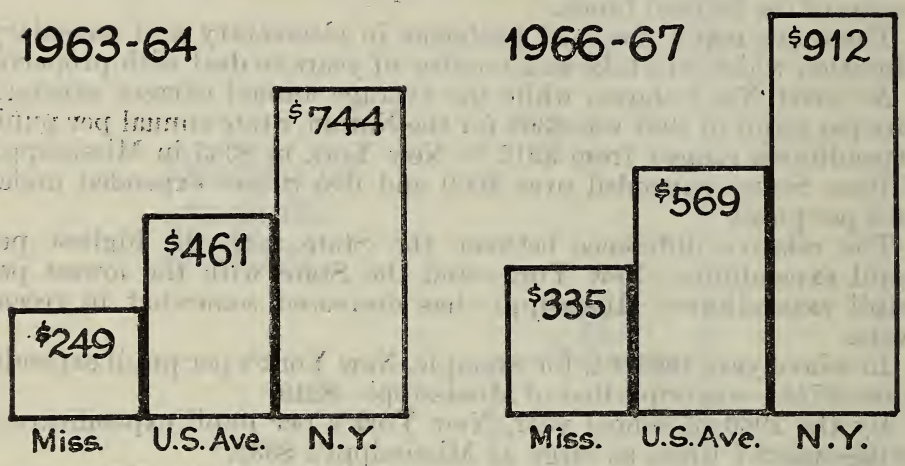
The major responsibility for financing elementary and secondary education falls on the localities, and financial problems today plague practically every city school system.

No one would question that elementary and secondary education in the inner city must be strengthened greatly in financial resources and in quality of teachers if the children in these areas are to have high quality education.

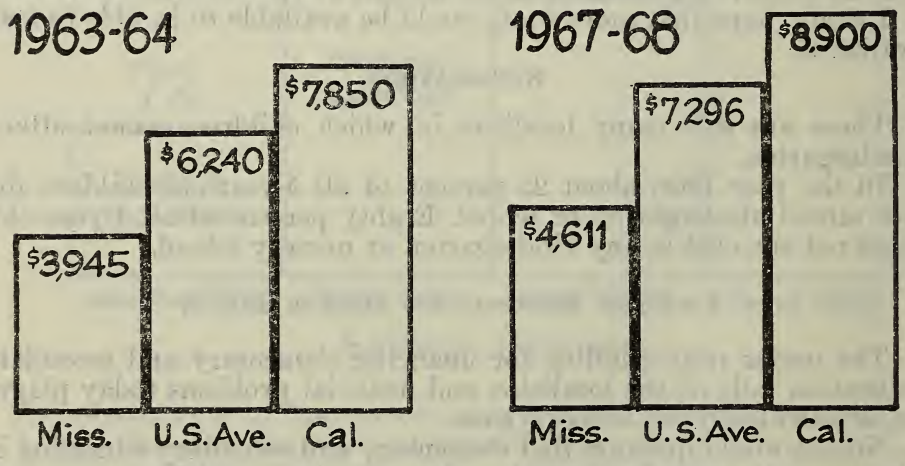
Yet a study of the Advisory Commission on Intergovernmental Relations, covering 37 largest standard metropolitan statistical areas in the country, showed that State financial aid to local schools tended to favor suburban schools over central city schools.

Chart 8

# Current Expenditure Per Pupil




# Average Salary of Teachers




The Commission's studies show that the schools serving low-income central city children are receiving less per pupil as well as per capita than those serving the more affluent suburbs.

Another study of 35 cities showed that cities averaged $124.92 per pupil in State aid in 1964–65, while suburban districts got an average of $165.54 per student—$40.62 more.

We need to reconsider local and State methods of financing elementary and secondary education and the role of Federal financial help in the three-way partnership if these imbalances are to be corrected.

The need for effective, competent teachers grows each day. Allowing for enrollment increases, teacher turnover, and some replacement of teachers with substandard certificates, we foresee a need for well over 900,000 new teachers in the next 5 years.

Teachers' salaries in 1967–68 range from an average of $4,611 in Mississippi to $8,900 in California, with a national average of $7,296.

An increase in the salaries of elementary and secondary schoolteachers is mandatory to attract and hold capable, imaginative, and enthusiastic individuals as teachers. The success of our educational programs will depend on the quality of our teachers. More effort must be made to provide adequate numbers of trained educational manpower.

Teacher training and retraining and the use of teacher aides should be emphasized and additional measures taken to attract qualified people into teaching and to strengthen teacher education.

### URBAN CRISIS

Many of the problems I have been discussing converge with special severity in our cities. The cities are in deep crisis, a crisis that is both physical and social. The physical crisis is visible in the terrible overcrowding, contaminated air, choked streets and highways, and deteriorating neighborhoods.

But the social crisis—the rising welfare loads, high unemployment among the young and untrained, high rates of crime and delinquency, and unrest and alienation in the inner city ghettos—the looting and rioting—is even more corrosive.

The reasons for the crisis are familiar. The concentration within the cities of racial minorities has created ghettos which reflect, not only poverty, but also the multiple ills of economic and racial segregation.

The flight of the upper and middle-income groups to the suburbs has eroded the local tax base, while the costs of public services—police and fire protection, education, sanitation, welfare, health—have soared into the innercity.

Within the last few years, we have begun to face the urban problem realistically and with a renewed sense of dedication. Recent legislation has given us a variety of new tools and resources.

But we are still groping for solutions to this very difficult problem. We have a long way to go before we apply ourselves to the total problems of the city in a coordinated way.

This we must do, and the Department of Health, Education, and Welfare must play an important role in that endeavor.

### Rebuilding Cities

In the past 2 weeks, Secretary Wirtz, the Director of the Office of Economic Opportunity and I have met with the staffs and the mayors of Chicago, Gary, and Cleveland, in an attempt to try to see what their problems are and how the Federal Government might help them.

I believe that in my own Department, we must have a more effective instrument to deal with the cities. I propose in the near future to suggest some ways in my Department that we can do this.

The reason for this, Mr. Chairman, is that in the past, our major lines of work have been on the one hand with the universities, which is important, and on the other hand, with the States, which is very important.

But I think we have to reach out now and begin to work more closely with the great urban centers if we are going to make health, education, and welfare services available to them to meet the problems that they have.

The overriding challenge of our time is to rebuild our cities so that they are not only more livable but so that they are once more the centers for jobs, education, culture, and leadership in today's world.

### RESPONDING TO THE PROBLEMS

Many other problems are also before us—mental illness and mental retardation, alcoholism, drug addiction, and juvenile delinquency, to name but a few. In my presentation, I have limited myself to but some of the issues as we view them today.

We are, I believe, responding to all of these problems. We certainly don't have all the solutions. And the pace of progress has been understandably uneven. We are confronted with matters of incredible complexity, involving institutional change as well as the reordering of human resources.

Nonetheless, we can report encouraging progress on a broad series of fronts.

Before doing so, however, I should like to describe some of the organization and management improvements we have made in HEW.

These actions have two important purposes: (1) to discharge our own responsibilities, our share in the national effort, in a more efficient manner, and (2) to improve our relationships with the agencies and institutions, both public and private, with which we work.

### ORGANIZATION AND MANAGEMENT

We have given considerable attention to modernizing the Department's administrative machinery and revitalizing its organizational structure. Since we last reported to this committee, we have made two major organizational realinements.

The first occurred last August when three major agencies—the Welfare Administration, the Vocational Rehabilitation Administration, and the Administration on Aging—were combined in a new Social and Rehabilitation Service. This reorganization was designed to:

Bring together the various HEW services that deal with special groups, such as the aged, the handicapped, and children:

Encourage the concept of preventive and rehabilitative social services for all the disadvantaged, including the poverty stricken;

Separate cash payments for welfare recipients from programs of service, thus making better use of scarce, highly skilled personnel; and

Help improve the delivery of services by establishing simplified and clearer channels at the regional level to the States and communities.

This move is already helping to encourage a combination of services—counseling, medical diagnosis and treatment, income support, day care, homemaker services, adult basic education—delivered in a coordinated way and tailored to the specific needs of disadvantaged individuals and families.

### Second Organizational Change

The second major organizational change is designed to strengthen and improve the coordination of the Department's scattered health programs.

Two steps have been taken so far to accomplish this. First, the direction of the Food and Drug Administration and the Public Health Service was unified under the Assistant Secretary for Health and Scientific Affairs, Dr. Philip R. Lee.

Second, the bureaus of the Public Health Service were reorganized into two new health agencies: an enlarged National Institutes of Health and the Health Services and Mental Health Administration.

The new NIH is made up of the previous institutes and divisions, the Bureau of Health Manpower, and the National Library of Medicine.

In the new agency, educational activities will have equal status with research activities.

The Health Services and Mental Health Administration brings together the Bureau of Health Services, the National Institute of Mental Health, the Bureau of Disease Prevention and Environmental Control, and the National Center for Health Statistics.

The Surgeon General, Dr. William H. Stewart, will function as the Assistant Secretary's principal deputy. Dr. Shannon continues as Director of NIH, and Dr. Marston, who has done, I think, such a remarkable job with the regional medical program, will now become head of the new Health Services and Mental Administration.

This new arrangement will give us greater flexibility in dealing with States and communities, hospitals and universities, and the health professions. We hope, too, that it will serve to improve the delivery of health services to the people who are most in need of health care.

### Saint Elizabeths Hospital

In another action last year, Saint Elizabeths Hospital, heretofore a separate agency within HEW, was transferred to the National Institute of Mental Health. The purpose is to transform it, under NIMH tutelage, into a modern, community-based mental health center for the District of Columbia.

Senator Hill. That is what it was supposed to be?

Acting Secretary Cohen. Yes, sir. I think under the leadership of Dr. Yolles, in NIH, in the course of time it will become just that.

### State Departments of Health and Welfare

I would like to point out to the committee a very significant reorganization step that has recently been taken by several States. This re-

organization concerns the creation of a combined State department for health and welfare.

Ten jurisdictions now have a health and welfare, or a health and social services department. While the State of Maine created its department over 35 years ago, as a small State trying to unify these, six of these departments have been created in the last 6 years, including some of the larger States, Wisconsin being one of the most recent.

Now the creation of these combined health and welfare departments indicates, I believe, a recognition of the interrelationship between the problems of poverty and ill-health, and a realization of the necessity to better coordinate the services in these fields.

I am very pleased to see this trend taking place. I am hopeful that it will facilitate improved program coordination at both the State level, and between all levels of government—Federal, State, and local.

### Elimination in Drug Applications Backlog

In addition to organizational steps, a number of improvements were made in the Department's management systems. To cite just one example, the Food and Drug Administration, under Dr. Goddard's leadership, was able to eliminate a 2-year backlog in processing new drug applications.

Senator Hill. That was real progress, was it not?

### Management Reforms

Acting Secretary Cohen. I think Dr. Goddard really accomplished a very important task.

One of the most significant management reforms had to do with Health, Education, and Welfare assistance to State and local agencies. As you know, more than 90 percent of the funds apropriated to this department are allocated to these agencies in the form of grants.

The improvements included delegating more decisionmaking authority to regional offices; eliminating duplicative requirements, and streamlining the technical review procedure.

These reforms are expected to cut the time devoted to the processing of grants by 50 percent, and should enable the Department to respond much more quickly to State and local needs.

I might say, Mr. Chairman, this is an area I intend to work on, with Mr. Kelly's help, because I believe that two factors that bother Governors and mayors and universities are the long time it sometimes takes on some of the grants, and the complex paperwork.

If we could simplify the processing, speed up the time and still review the projects conscientiously for quality, I think that would be a great contribution.

### WORKING WITH OTHERS

All of these administrative and organizational measures are part of the Department's continuing effort to strengthen State and local agencies and to improve our relationships with them.

This effort has taken two forms: (1) legislation to encourage greater initiative and flexibility on the part of State and local agencies and institutions; and (2) the creation of mechanisms to foster closer ties between the Federal and non-Federal partners.

### Partnership for Health Act

A major legislative breakthrough was the Partnership for Health Act which freed the States and communities from categorical restraints. It enabled them to approach their own health needs more rationally, to plan comprehensively, and to set their own priorities.

### Educational Professions Development Act

Another step in this direction was the Educational Professions Development Act which provided greater flexibility in Federal support for the training of faculty and staff members.

### Advance Program Funding

The late funding of Federal programs in support of education has been a continuing source of frustration to the school community. School officials had to hire teachers and plan their activities before they knew how Federal authorizations would affect these activities.

After studying this problem, we proposed a system of advance funding and the Congress enacted an amendment to this effect last year.

Advance funding should remove many of the uncertainties faced by the Nation's school officials and enable them to plan their programs more realistically.

### Grants

We are looking into the matter of grants from several angles—financial arrangements, procedures, and relationships. We are giving intensive study to the difficult and controversial question of block versus categorical grants. We are exploring new ideas and alternatives that might help us arrive at more flexible arrangements.

### Center for Community Planning

Finally, we are focusing resources throughout the Department on urban problems. We established a new base for this effort in the Center for Community Planning, which was set up within the Office of the Secretary last year. The Center enables HEW to address itself directly to the problems of the central cities.

It serves as a resource for city officials and a primary point of contact with the Department of Housing and Urban Development on model cities plans and programs.

It works closely with HUD and other Federal agencies to coordinate multipurpose projects involving education, land use, recreation, housing, health care, and social services.

## ACCOMPLISHMENTS

Now let me highlight just a sampling of accomplishments under some major HEW programs which you have made possible.

On March 1, more than 23.5 million people—one out of every nine Americans—received an increased monthly social security check.

In 1967, social security benefits helped keep 5.7 million aged people out of poverty. As I pointed out before, a million more people are expected to escape poverty as a result of the 1967 amendments to the Social Security Act. An additional million would have been taken out of poverty if the benefits had been increased to a $70 minimum as the administration recommended.

In its first 18 months, medicare has paid out benefits totaling $5.3 billion. Virtually all other people are now protected against hospital costs and some 93 percent are signed up for voluntary medical insurance—a tremendous response for a voluntary program.

About 9 million disadvantaged children—in over 18,000 school districts in all the States—were helped last year by special projects under the Elementary and Secondary Education Act of 1965.

Nearly one and a quarter million young Americans are continuing their education beyond high school with the help of Federal financial aid programs.

Some 10 million adults have partcipated in federally assisted vocational education programs since 1965.

More than 200,000 mothers and their infants have received special medical care in 54 low-income areas over the past 4 years. In some of these areas, infant mortality has dropped by as much as 40 percent.

This year more thn 200,000 disabled people will be rehabilitated for useful work, almost 50 percent more than 3 years ago. More than one out of every 10 of these people were on public welfare.

Close to 300 community mental health centers are being built or staffed with Federal help. They are located in areas where 47 million Americans live.

The foregoing are merely illustrative of the vast effort you are supporting in every field related to human well-being. It is a shared effort, which depends on participation and leadership among a variety of groups and at all levels of Government.

We appreciate the support that you have given, particularly you, Mr. Chairman, during your years of leadership as chairman of this committee and as chairman of the Senate Committee on Labor and Public Welfare, and we hope that what you will do this year will make it possible to make continuing progress in these important programs.

This completes my opening statement, My Chairman; both Mr. Kelly and Mr. Cardwell are here to explain our budget proposals and we will be glad to answer any questions that you may have.

1968 BUDGET REDUCTIONS

Senator HILL. I want to say this: You have certainly brought us a most enlightening, a most informative, and most comprehensive statement. I certainly want to thank you for it.

Acting Secretary COHEN. Thank you, Mr. Chairman.

Senator HILL. You have given us a picture of your Department and its programs and its work and its labors and its aims and purposes, the like of which I am not sure we have ever had before.

Mr. KELLY. What would you like to add?

I thought you might like to have for the committee a statement which we put together as to how we went about effecting the reductions which the Congress called for last year.

Senator HILL. All right, we would like to have that.

Mr. KELLY. Under Public Law 90–218. In the overall, the Congress required that we make a $764 million reduction; $170 million of this was made by the Congress in acting on the appropriation bill.

The remainder of $594 million we had to make. In summary, we took $69 million out of formula grants to States. We cut back construction grants and construction loan programs by $337 million with the feeling that this is the most inflationary aspect and also the most controllable aspect of the budget.

We took $19 million out of personal services and our related administrative expenses. We also took $15 million out of research and demonstration projects. This was not an across-the-board reduction but a reduction that was made, one, in overestimates of continuation costs and, two, in decreasing the amount by which we would supplement continuing projects for their increased costs.

We eliminated student loan reallocations and saved another $6 million. We made a deferral in the speed with which we were launching the regional medical program and reduced anticipated obligations by $26 million.

Senator HILL. Out of a total of what?

1968 SUPPLEMENTAL BUDGET REDUCTIONS

Mr. KELLY. About $80 million. We took $134 million worth of proposed supplemental appropriations and deleted the request for those. All other adjustments were $12 million to make up our total reduction of $594 million.

Mr. Chairman, if you like, we can submit to you the details.

Senator HILL. Let us have those details so that we can put them in the record.

(The information follows:)

# PRINCIPAL ACTIONS TAKEN BY DHEW TO ACHIEVE REDUCTION IN FY68 OBLIGATIONS

| | OBLIGATION REDUCTIONS (DOLLARS IN MILLIONS) |
|---|---|
| 1. FORMULA GRANTS TO STATES AND LOCALITIES | $ 69 |
| 2. CONSTRUCTION AND LOANS AND GRANTS FOR CONSTRUCTION | 337 |
| 3. PERSONNEL COSTS AND RELATED ADMINISTRATIVE EXPENSES | 19 |
| 4. RESEARCH AND DEMONSTRATION PROJECTS | 15 |
| 5. ELIMINATE STUDENT LOAN REALLOCATION | 6 |
| 6. REGIONAL MEDICAL PROGRAM | 26 |
| 7. ELIMINATION OR REDUCTION OF PROPOSED 1968 REQUESTS FOR SUPPLEMENTAL APPROPRIATIONS | 134 |
| 8. ADJUSTMENT FOR CARRY-OVER FROM 1967 | -12 |
| TOTAL, DEPARTMENT OF HEALTH, EDUCATION, AND WELFARE REDUCTIONS | 594 |

# OBLIGATION REDUCTIONS IN FISCAL YEAR 1968 BUDGET BY AGENCY

| | (DOLLARS IN MILLIONS) |
|---|---|
| FOOD AND DRUG ADMINISTRATION | $ 11 |
| OFFICE OF EDUCATION | 347 |
| PUBLIC HEALTH SERVICE | 171 |
| SOCIAL AND REHABILITATION SERVICE | 42 |
| SOCIAL SECURITY ADMINISTRATION | – |
| SPECIAL INSTITUTIONS | 6 |
| OFFICE OF THE SECRETARY | 17 |
| TOTAL | 594 |

# FORMULA GRANTS TO STATES & LOCALITIES
# REDUCTION IN FY 1968 OBLIGATIONS
(DOLLARS IN MILLIONS)

| APPROPRIATION/PROGRAM | 1968 OBLIGATION IN 1968 BUDGET | 1968 OBLIGATION IN 1969 BUDGET | REDUCTION |
|---|---|---|---|
| **OFFICE OF EDUCATION** | | | |
| SUPPLEMENTARY EDUCATIONAL CENTERS AND SERVICES (ESEA-TITLE III) | $ 209 | $ 188 | $ 21 |
| EQUIPMENT & MINOR REMODELING (NDEA TITLE III) | 80 | 77 | 3 |
| LIBRARY RESOURCES (ESEA TITLE III) | 104 | 99 | 5 |
| SCHOOL ASSISTANCE IN FEDERALLY AFFECTED AREAS (PL-815 AND PL-874) | 439 | 420 | 19 |
| EDUCATIONAL OPPORTUNITY GRANTS (HEA-TITLE IV-A) | 141 | 133 | 8 |
| WORK STUDY PROGRAMS (HEA-TITLE IV-C) | 140 | 134 | 6 |
| VOCATIONAL EDUCATION ACT OF 1963 | 199 | 198 | 1 |
| LIBRARY SERVICES | 6 | 6 | * |
| ADULT BASIC EDUCATION | 32 | 31 | 1 |
| PRESCHOOL AND SCHOOL PROGRAMS (ESEA-TITLE VI) | 15 | 14 | 1 |
| **PUBLIC HEALTH SERVICE** | | | |
| COMPREHENSIVE STATE HEALTH PLANNING | 5 | 5 | * |
| HEALTH PROFESSIONS EDUCATIONAL IMPROVEMENT | 52 | 49 | 3 |
| **SOCIAL & REHABILITATION SERVICE** | | | |
| INNOVATION OF REHABILITATION SERVICES | 3 | 3 | * |
| COMMUNITY PLANNING, SERVICES AND TRAINING FOR THE AGING | 11 | 10 | 1 |
| **TOTAL, HEW** | **1436** | **1367** | **69** |

* REDUCTION LESS THAN ONE-HALF MILLION DOLLARS

# HEW SUPPORTED CONSTRUCTION
## (GRANTS, LOANS AND DIRECT)
## REDUCTIONS IN FY 1968 OBLIGATIONS (DOLLARS IN MILLIONS)

| AGENCY | 1968 OBLIG. IN '68 BUDGET | 1968 OBLIG. IN '69 BUDGET | REDUCTION |
|---|---|---|---|
| **OFFICE OF EDUCATION** | | | |
| HIGHER EDUCATION FACILITIES: | | | |
| GRANTS | $450 | $307 | $143 |
| LOANS | 203 | 154 | 49 |
| EDUCATION RESEARCH FACILITIES | 25 | 1 | 24 |
| TOTAL, OFFICE OF EDUCATION | 678 | 462 | 216 |
| **PUBLIC HEALTH SERVICE** | | | |
| HILL-BURTON (HOSPITAL AND MEDICAL FACILITIES) | 274 | 263 | 11 |
| HEALTH TEACHING FACILITIES | 203 | 136 | 67 |
| HEALTH RESEARCH FACILITIES | 50 | 38 | 12 |
| MEDICAL LIBRARY FACILITIES | 11 | 10 | 1 |
| DIRECT CONSTRUCTION | 20 | 10 | 10 |
| TOTAL, PUBLIC HEALTH SERVICE | 558 | 457 | 101 |
| **ALL OTHER** | 49 | 29 | 20 |
| TOTAL, HEW CONST. | $1,285 | $948 | $337 |

# PERSONNEL COSTS AND RELATED ADMINISTRATIVE EXPENSES

## REDUCTIONS IN FY 1968 OBLIGATIONS

(DOLLARS IN THOUSANDS)

| AGENCY AND BUREAU | AMOUNT OF REDUCTIONS |
|---|---|
| FOOD AND DRUG ADMINISTRATION | $ 2,417 |
| OFFICE OF EDUCATION | 899 |
| PUBLIC HEALTH SERVICE | 13,640 |
| SOCIAL AND REHABILITATION SERVICE | 1,019 |
| OFFICE OF THE SECRETARY | 909 |
| TOTAL, DHEW | $18,884 |

# RESEARCH & DEMONSTRATION GRANTS

## REDUCTIONS IN FY 1968 OBLIGATIONS

(DOLLARS IN THOUSANDS)

| AGENCY | REDUCTION |
|---|---|
| **PUBLIC HEALTH SERVICE** | |
| HEALTH MANPOWER | $ 379 |
| DISEASE PREVENTION & ENVIRONMENTAL CONTROL | 1,535 |
| HEALTH SERVICES | 211 |
| NATIONAL INSTITUTES OF HEALTH | 10,942 |
| NATIONAL INSTITUTE OF MENTAL HEALTH | 1,108 |
| TOTAL, PUBLIC HEALTH SERVICE | $ 14,175 |
| **SOCIAL & REHABILITATION SERVICE** | |
| ADMINISTRATION ON AGING | $ 13 |
| REHABILITATION SERVICES ADMINISTRATION | 650 |
| CHILDREN'S BUREAU | 300 |
| TOTAL, SOCIAL & REHABILITATION SERVICE | 963 |
| TOTAL, DEPARTMENT OF HEALTH, EDUCATION AND WELFARE | $ 15,138 |

Senator HILL. Mr. Cardwell.

Mr. CARDWELL. Mr. Chairman, I will be here throughout the hearings as you review the other operating agencies. I do have for the record a summary of the HEW budget as a whole. We would commend it to your review and to the review of the committee.

Senator HILL. Will you submit that to us for the record?

Mr. CARDWELL. Yes, sir.

Senator HILL. All right, we will have it appear at this point in the record.

It shows your reduction; does it not?

Mr. CARDWELL. It shows the budget in brief. It reviews the total appropriation requirements. It shows the relationship of appropriations and obligations, and summarizes highlights of changes that are proposed in 1969 over 1968.

Senator HILL. We will have that appear in full in the record at this point.

(The information follows:)

# HEW BUDGET IN BRIEF
## (DOLLARS IN BILLIONS)

| FEDERAL FUNDS: | 1968 | 1969 | CHANGE |
|---|---|---|---|
| APPROPRIATIONS | $14.5 | $15.4 | $+0.9 |
| OBLIGATIONS | 14.3 | 16.0 | +1.7 |
| EXPENDITURES | 13.3 | 14.5 | +1.2 |
| TRUST FUND EXPENDITURES | 29.0 | 33.0 | +4.0 |
| INTERFUND ADJUSTMENT | -1.4 | -1.7 | -0.3 |
| TOTAL EXPENDITURES FOR THE DEPARTMENT | 40.9 | 45.8 | +4.9 |

# 1968 SUPPLEMENTALS
(IN MILLIONS)

| | |
|---|---|
| PUBLIC ASSISTANCE GRANTS | $1,135 |
| WORK INCENTIVES | 40 |
| GENERAL FUND PAYMENT TO THE HEALTH INSURANCE TRUST FUNDS | 373 |
| SOCIAL SECURITY PROGRAM ADMINISTRATION | 85 |
| RAT CONTROL | 20 |
| AIR POLLUTION | 16 |
| NATIONAL CENTER FOR HEALTH SERVICES RESEARCH & DEVELOPMENT | 6 |
| MENTAL RETARDATION | 7 |
| STATE-WIDE VOCATIONAL REHABILITATION PLANNING | 2 |
| PUBLIC BROADCASTING | 4 |
| OTHER SUPPLEMENTALS | 2 |
| TOTAL | 1,690 |

# FUNDS IN 1969 BUDGET FOR PROPOSED LEGISLATION

(DOLLARS IN MILLIONS)

| | |
|---|---|
| STUDENT ASSISTANCE | $ 23 |
| VOCATIONAL EDUCATION | 15 |
| JUVENILE DELINQUENCY | 25 |
| PUBLIC BROADCASTING | 20 |
| TOTAL | 83 |

# HEW BUDGET BY OPERATING AGENCY
## (DOLLARS IN MILLIONS)

| | 1968 | | 1969 | |
|---|---|---|---|---|
| **FEDERAL FUNDS:** | APPROPRIATIONS | OBLIGATIONS | APPROPRIATIONS | OBLIGATIONS |
| FOOD & DRUG ADMINISTRATION | $67 | $72 | $70 | $85 |
| OFFICE OF EDUCATION | 4,019 | 3,887 | 3,791 | 4,119 |
| PUBLIC HEALTH SERVICE | 2,891 | 2,797 | 2,914 | 3,186 |
| SOCIAL & REHABILITATION SERVICE | 6,051 | 6,047 | 6,823 | 6,836 |
| SOCIAL SECURITY ADMIN. | 1,385 | 1,385 | 1,691 | 1,691 |
| SPECIAL INSTITUTIONS | 36 | 37 | 37 | 47 |
| OFFICE OF THE SECRETARY | 26 | 26 | 73 | 73 |
| TOTAL, FEDERAL FUNDS | 14,474 | 14,251 | 15,399 | 16,037 |
| **TRUST FUNDS:** | | | | |
| SOCIAL SECURITY ADMIN. | 32,595 | 28,987 | 37,670 | 33,184 |
| ADJUSTMENT FOR INTERFUND TRANSACTIONS | -1,395 | -1,395 | -1,699 | -1,699 |
| **GRAND TOTAL, HEW** | **45,673** | **41,842** | **51,370** | **47,522** |

# MAJOR CHANGES IN THE 1969 BUDGET FOR THE OFFICE OF EDUCATION

| (DOLLARS IN MILLIONS) | 1968 | | 1969 | |
|---|---|---|---|---|
| | APPROP. | OBL. | APPROP. | OBL. |
| ELEMENTARY & SECONDARY | $2,080 | $2,031 | $1,972 | $2,004 |
| (TITLE I, ESEA) | (1,191) | (1,191) | (1,200) | (1,200) |
| HIGHER EDUCATION | 1,443 | 1,045 | 839 | 1,094 |
| (CONSTRUCTION GRANTS) | (450) | (307) | (75) | (226) |
| (STUDENT ASSISTANCE) | (518) | (503) | (575) | (622) |
| TEACHER TRAINING | 177 | 177 | 247 | 247 |
| VOCATIONAL EDUCATION | 256 | 265 | 272 | 272 |
| LIBRARIES AND COMMUNITY SERVICES | 157 | 161 | 149 | 158 |
| PROGRAMS FOR THE HANDICAPPED | 53 | 53 | 85 | 85 |
| RESEARCH | 89 | 90 | 146 | 176 |
| OTHER EDUCATION PROGRAMS | 63 | 64 | 80 | 82 |
| TOTAL | 4,019 | 3,887 | 3,791 | 4,119 |

# MAJOR CHANGES IN THE 1969 BUDGET FOR THE PUBLIC HEALTH SERVICE AND FOOD AND DRUG ADMINISTRATION

(DOLLARS IN MILLIONS)

| | 1968 | | 1969 | |
|---|---|---|---|---|
| | APPROPRIATIONS | OBLIGATIONS | APPROPRIATIONS | OBLIGATIONS |
| PARTNERSHIP FOR HEALTH | $ 156 | $150 | $ 195 | $ 200 |
| HEALTH MANPOWER | 383 | 309 | 282 | 369 |
| (CONSTRUCTION GRANTS) | (203) | (135) | (85) | (152) |
| DISEASE PREVENTION, CONSUMER PROTECTION & ENVIRONMENTAL CONTROL (AIR POLLUTION) | 303 (80) | 297 (71) | 336 (107) | 362 (118) |
| HEALTH SERVICES (NATIONAL CENTER FOR HEALTH SERVICES R&D) | 505 (21) | 504 (21) | 504 (30) | 557 (30) |
| NATIONAL INSTITUTES OF HEALTH | 1,175 | 1,164 | 1,197 | 1,240 |
| (REGIONAL MEDICAL PROGRAMS) | (59) | (54) | (69) | (100) |
| (CONSTRUCTION GRANTS) | (35) | (38) | (8) | (21) |
| NATIONAL INSTITUTE OF MENTAL HEALTH (CONSTRUCTION GRANTS) | 358 (45) | 360 (45) | 377 (15) | 426 (60) |
| OTHER PHS PROGRAMS | 78 | 83 | 95 | 117 |
| TOTAL | 2,958 | 2,869 | 2,984 | 3,271 |

# MAJOR CHANGES IN THE 1969 BUDGET FOR THE SOCIAL & REHABILITATION SERVICE

(DOLLARS IN MILLIONS)

| | 1968 | | 1969 | |
|---|---|---|---|---|
| | APPROP. | OBLIG. | APPROP. | OBLIG. |
| WORK INCENTIVES | $40 | $40 | $135 | $135 |
| MAINTENANCE PAYMENTS | 2,985 | 2,985 | 3,052 | 3,052 |
| MEDICAL ASSISTANCE | 1,808 | 1,808 | 2,118 | 2,118 |
| SOCIAL SERVICES, INNOVATION, AND ADMINISTRATION | 467 | 467 | 595 | 595 |
| REHABILITATION SERVICES AND RESEARCH | 377 | 376 | 443 | 443 |
| MATERNAL AND CHILD HEALTH AND WELFARE | 236 | 235 | 298 | 298 |
| MENTAL RETARDATION | 34 | 32 | 30 | 42 |
| DEVELOPMENT OF PROGRAMS FOR THE AGING | 17 | 17 | 26 | 26 |
| OTHER SRS PROGRAMS | 87 | 87 | 126 | 126 |
| TOTAL | 6,051 | 6,047 | 6,823 | 6,836 |

# TRUST FUND EXPENDITURES BY PURPOSE

(DOLLARS IN MILLIONS)

| | 1968 | 1969 |
|---|---|---|
| RETIREMENT & SURVIVORS BENEFIT PAYMENTS | 20,742 | 23,711 |
| DISABILITY INSURANCE BENEFIT PAYMENTS | 2,118 | 2,521 |
| HEALTH INSURANCE BENEFIT PAYMENTS: | | |
| HOSPITAL INSURANCE | 3,369 | 3,865 |
| MEDICAL INSURANCE | 1,473 | 1,656 |
| ADMINISTRATIVE EXPENSES | 795 | 856 |
| PAYMENT TO RAILROAD RETIREMENT ACCOUNT & OTHER | 486 | 346 |
| TOTAL | 28,983 | 32,955 |

# MAJOR CHANGES IN THE 1969 BUDGET FOR THE SOCIAL SECURITY ADMINISTRATION

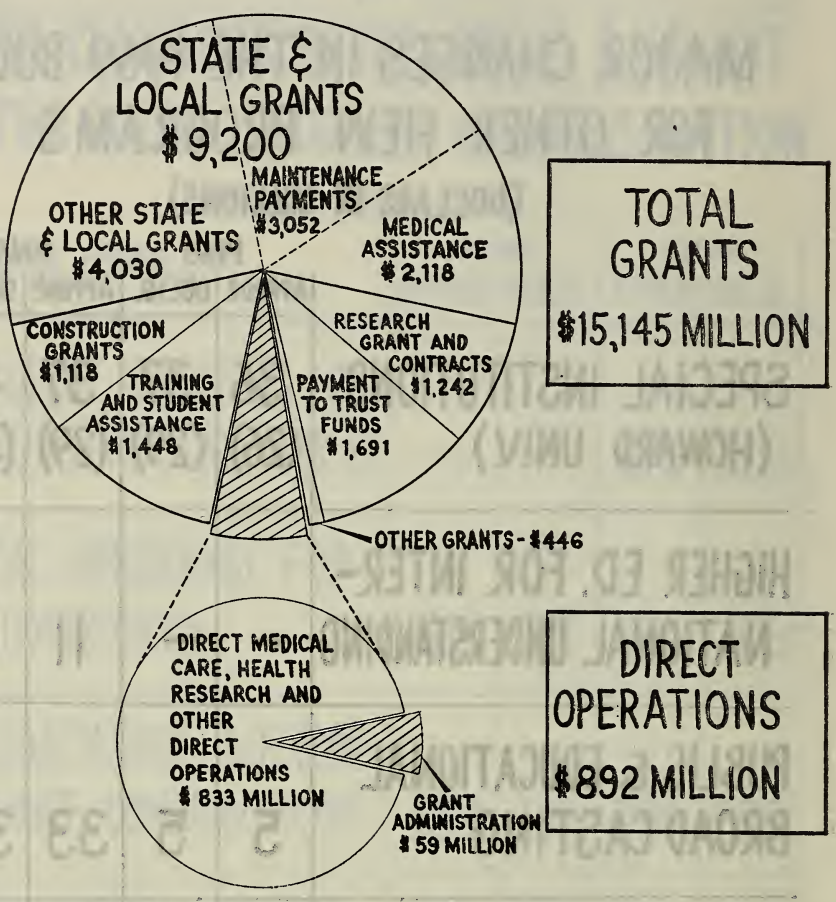
(DOLLARS IN MILLIONS)

| FEDERAL FUNDS | 1968 APPROP. | 1968 OBLIG. | 1969 APPROP. | 1969 OBLIG. |
|---|---|---|---|---|
| RETIREMENT BENEFITS FOR UNINSURED PERSONS OVER 72 | — | — | 226 | 226 |
| HOSPITAL INSURANCE FOR THE UNINSURED | 541 | 541 | 465 | 465 |
| SUPPLEMENTARY MEDICAL INSURANCE CONTRIBUTIONS | 739 | 739 | 895 | 895 |
| MILITARY SERVICE CREDITS | 105 | 105 | 105 | 105 |
| TOTAL | 1,385 | 1,385 | 1,691 | 1,691 |

# MAJOR CHANGES IN THE 1969 BUDGET FOR OTHER HEW PROGRAMS

(DOLLARS IN MILLIONS)

| | 1968 | | 1969 | |
|---|---|---|---|---|
| | APPROP. | OBLIG. | APPROP. | OBLIG. |
| SPECIAL INSTITUTIONS (HOWARD UNIV.) | 36 (26) | 37 (29) | 37 (29) | 47 (38) |
| HIGHER ED. FOR INTER-NATIONAL UNDERSTANDING | — | — | 11 | 11 |
| PUBLIC & EDUCATIONAL BROAD CASTING | 5 | 5 | 33 | 33 |
| GENERAL ADMINISTRATION | 21 | 21 | 29 | 29 |
| TOTAL | 63 | 63 | 110 | 120 |




EXPRESSIONS OF APPRECIATION TO SENATOR HILL

Senator HILL. Is there anything else you would like to add?

Mr. KELLY. No, sir.

Senator HILL. Is there anything you would like to add, Mr. Secretary?

Acting Secretary COHEN. Yes; there is something I would like to add.

I imagine this is the first time I have testified before your committee as the Secretary, and probably the last time I will testify before your committee while you are the chairman of this distinguished subcommittee.

I just want to say it has been a great pleasure working with you, Senator Hill. I think your record in this whole field of health, education, and welfare is a great record, and our Department is very proud to have worked with you cooperatively, and we hope that this last year, I guess, of both of our tenure will still be cooperative.

Senator HILL. I want to thank you, sir, for the very fine help and cooperation which you have given this committee and express to you my personal appreciation for the very fine help and cooperation you have given to me.

We started working together way back some years ago. You have always been tremendously helpful and very fine, indeed. I certainly express to you my deep appreciation. Thank you very much, sir.

Acting Secretary COHEN. Thank you, Mr. Chairman.

Mr. KELLY. Mr. Chairman, I don't like to recognize that you have decided you are going to leave us, but I would like to second the Secretary's statement. It has been an enjoyable experience working with you.

Senator HILL. Thank you. I like to work with the Irish brigade. I want to thank you, sir, and assure you it has been a privilege and pleasure to work with you, sir. You have been most helpful and cooperative in a very fine way. You have helped us a great deal. You have done the same thing, too, Mr. Cardwell.

Mr. CARDWELL. Thank you, sir. I will reserve my goodbys for the end of the hearing.

Acting Secretary COHEN. He wants to see what you are going to do first.

Senator HILL. Thank you very, very much.

I shall insert at this point for the information and guidance of the committee and of the Senate the table on the history of the 1969 estimates.

(The table follows:)

HISTORY OF 1969 ESTIMATE

| Appropriation | 1968 appropriation [1] | 1969 | | | Department reduction from agency request | Budget Bureau reduction from Department submission | Explanation of difference | Positions | Amount |
|---|---|---|---|---|---|---|---|---|---|
| | | Estimate to Department | Department estimate to Budget Bureau | President's budget | | | | | |
| | (a) | (b) | (c) | (d) | (e) | (f) | | | |
| FOOD AND DRUG ADMINISTRATION | | | | | | | BUREAU OF THE BUDGET REDUCTION | | |
| Salaries and expenses | $66,000,000 | $73,752,000 | $73,752,000 | $69,801,000 | 0 | $3,951,000 | New drug evaluation | 4 | $66,000 |
| | | | | | | | Surveillance of marketed drugs | 5 | 68,000 |
| | | | | | | | Drug research | 16 | 1,299,000 |
| | | | | | | | Adverse-reaction report system | 2 | 35,000 |
| | | | | | | | Administrative support | 12 | 205,000 |
| | | | | | | | Food and pesticide research | 21 | 547,000 |
| | | | | | | | Food standards setting | 2 | 90,000 |
| | | | | | | | Cosmetic and hazardous-substance research. | 2 | 60,000 |
| | | | | | | | Special scientific equipment | | 200,000 |
| | | | | | | | Self-certification program: Industry information and field inspections of food manufacturers. | 20 | 207,000 |
| | | | | | | | Seminars and workshops for food industry. | 4 | 33,000 |
| | | | | | | | Field inspections to determine food sanitation. | 14 | 129,000 |
| | | | | | | | Field inspections and industry information related to fair packaging and labeling. | 4 | 38,000 |
| | | | | | | | Field inspections, industry information, and medical support related to intensified drug plant inspections. | 18 | 146,000 |
| | | | | | | | Drug abuse research | | 17,000 |
| | | | | | | | Investigations and sample analyses related to distribution of abused drugs (accountability program). | 6 | 63,000 |
| | | | | | | | Criminal investigations to determine illegal use of abused drugs. | | 63,000 |
| | | | | | | | Development of State drug abuse programs. | 6 | 157,000 |
| | | | | | | | FDA management systems analysis | 2 | 80,000 |
| | | | | | | | FDA personnel management | 3 | 53,000 |

| | | | | | | | | |
|---|---|---|---|---|---|---|---|---|
| | | | | | | | FDA general services | 7 | 82,000 |
| | | | | | | | FDA financial management | 3 | 113,000 |
| | | | | | | | FDA policy management | 3 | 27,000 |
| | | | | | | | Data processing | 2 | 56,000 |
| | | | | | | | International liaison | 2 | 10,000 |
| | | | | | | | Field inspections relating to chemical contaminants in food. | 11 | 107,000 |
| | | | | | | | Total, Bureau of the Budget reduction. | 169 | 3,951,000 |
| | | | | | | | BUREAU OF THE BUDGET REDUCTION | | |
| | | | | | | | Repairs and improvement of headquarters and District facilities. | | 100,000 |
| | | | | | | | Construction of swine-breeding facilities | | 300,000 |
| | | | | | | | Construction of dog-breeding facilities | | 100,000 |
| Buildings and facilities | 1,150,000 | 600,000 | 600,000 | 100,000 | 0 | 500,000 | Total, Bureau of the Budget reduction | | 500,000 |
| Total, Food and Drug Administration. | 67,150,000 | 74,352,000 | 74,352,000 | 69,901,000 | 0 | 4,451,000 | Total reduction, Food and Drug Administration. | 169 | 4,451,000 |
| OFFICE OF EDUCATION | | | | | | | DEPARTMENT REDUCTION | | |
| Elementary and secondary educational activities. | 1,640,963,066 | 2,048,550,000 | 1,999,790,000 | 1,561,703,000 | $48,760,000 | 438,087,000 | Supplementary educational centers and services: Number of projects reduced from 1,680 to 1,530. | | 39,000,000 |
| | | | | | | | Strengthening State departments of education: Number of new positions to increase leadership capabilities in State agencies reduced by 200. | | 3,750,000 |
| | | | | | | | Equipment and minor remodeling: Number of State approved projects reduced by 10 percent. | | 8,500,000 |
| | | | | | | | Program planning and evaluation: Level of evaluation capabilities of State educational agencies, including computer and contractual services, increased; number of State planning and evaluation staff members increased by 30. | | +2,500,000 |
| | | | | | | | Program support: Level of evaluations and studies reduced. | | 10,000 |
| | | | | | | | Total, Department reduction | | 48,760,000 |

See footnote at end of table.

| Appropriation | 1968 appropriation [1] | 1969 | | | Department reduction from agency request | Budget Bureau reduction from Department submission | Explanation of difference | Positions | Amount |
|---|---|---|---|---|---|---|---|---|---|
| | | Estimate to Department | Department estimate to Budget Bureau | President's budget | | | | | |
| | (a) | (b) | (c) | (d) | (e) | (f) | | | |
| | | | | | | | BUREAU OF BUDGET REDUCTION | | |
| | | | | | | | Educationally deprived children: Number of disadvantaged students receiving benefits reduced from 10,000,000 to 9,500,000; earmarking of summer program funds eliminated. | ---------- | $250,000,000 |
| | | | | | | | Supplementary educational centers and services: Number of continuation projects reduced from 1,530 to 1,075; and initiation of new projects eliminated. | ---------- | 90,837,000 |
| | | | | | | | Guidance, counseling, and testing: Level of funding reduced by 10 percent. | ---------- | 2,500,000 |
| | | | | | | | Equipment and minor remodeling: Number of State-approved projects reduced by 7 7 percent. | ---------- | 64,750,000 |
| | | | | | | | Library resources: Level of support to States for procurement of library resources, textbooks, and instructional materials reduced from $1.91 to $0.84 per student. | ---------- | 59,000,000 |
| | | | | | | | Program planning and evaluation: Level of evaluation capabilities of State educational agencies, including computer and contractual services, reduced; number of State planning and evaluation staff members reduced by 70. | ---------- | 6,000,000 |
| | | | | | | | Dropout prevention program: Amount will implement new program for innovative projects in poverty area schools to reduce and prevent school dropouts, and will support between 15 and 20 projects. | ---------- | +30,000,000 |
| | | | | | | | Bilingual education program: Amount will implement new program of bilingual education, and will support 20 teacher training programs, between | ---------- | +5,000,000 |

| | | | | | | | | |
|---|---|---|---|---|---|---|---|---|
| | | | | | | | 25 and 40 local school programs, and some production of teaching materials. | |
| | | | | | | | Total, Bureau of Budget reduction | 438,087,000 |
| | | | | | | | DEPARTMENT REDUCTION | |
| School assistance in federally affected areas. | $439,137,000 | $473,517,000 | $473,137,000 | $410,335,000 | $380,000 | $62,802,000 | Construction—Technical services: 1968 lapse rate on existing positions maintained. | 380,000 |
| | | | | | | | BUREAU OF THE BUDGET REDUCTION | |
| | | | | | | | Maintenance and operations: Funding level of entitlements reduced from 80 percent to 70 percent. | 54,610,000 |
| | | | | | | | Construction: Funding of some eligible projects deferred until following year. | 8,192,000 |
| | | | | | | | Total, Bureau of Budget reduction | 62,802,000 |
| | | | | | | | DEPARTMENT REDUCTION | |
| Education professions development activities. | 163,850,000 | 284,710,000 | 253,713,000 | 215,913,000 | 30,997,000 | 37,800,000 | State grants for recruitment of educational personnel: Number of teachers and teacher aides recruited and trained reduced from 15,000 to 12,000. | 5,000,000 |
| | | | | | | | Fellowships and graduate programs for elementary, secondary, and other educational personnel: Number of new fellowships reduced from 5,256 to 3,932, and number of program development grants reduced from 115 to 75. | 16,315,000 |
| | | | | | | | Institutes and training programs for elementary, secondary, and other educational personnel: Number of persons trained reduced from 40,300 to 38,700. | 2,750,000 |
| | | | | | | | College teacher fellowships: Reduction reflects revised estimate of continuation costs—from 10,825 to 9,325, 2d-, 3d-, and 4th-year awards. | 6,600,000 |
| | | | | | | | Program support: Level of evaluations and studies reduced. | 332,000 |
| | | | | | | | Total, Department reduction | 30,997,000 |

See footnote at end of table.

HISTORY OF 1969 ESTIMATE—Continued

| Appropriation | 1968 appropriation [1] | 1969 | | | Department reduction from agency request | Budget Bureau reduction from Department submission | Explanation of difference | Positions | Amount |
|---|---|---|---|---|---|---|---|---|---|
| | | Estimate to Department | Department estimate to Budget Bureau | President's budget | | | | | |
| | (a) | (b) | (c) | (d) | (e) | (f) | | | |
| | | | | | | | BUREAU OF BUDGET REDUCTION | | |
| | | | | | | | State grants for recruitment of educational personnel: Number of teachers and teacher aides recruited and trained reduced from 12,000 to 9,000. | -------- | $5,000,000 |
| | | | | | | | Encouragement of educational personnel: Level of activities to recruit and encourage persons for educational careers reduced. | -------- | 1,000,000 |
| | | | | | | | Fellowships and graduate programs for elementary, secondary, and other educational personnel: Number of new fellowships reduced from 3,932, to 3,185. | -------- | 6,000,000 |
| | | | | | | | Institutes and training programs or elementary, secondary, and other educational personnel: Number of persons trained reduced from 38,700 to 31,400. | -------- | 12,400,000 |
| | | | | | | | College teacher fellowships: Number of new fellowships reduced from 7,500 to 6,000; 400 fourth-year awards eliminated. | -------- | 13,400,000 |
| | | | | | | | Total, Bureau of Budget reduction. | -------- | 37,800,000 |

| | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|
| | | | | | | | DEPARTMENT ADDITIONS | | |
| Teachers Corps | $13,500,000 | $33,150,000 | $41,235,000 | $31,235,000 | +$8,085,000 | $10,000,000 | Program increased because of a change in number of corpsmen to be recruited and the time of their recruitment. Under the agency estimate, 2,000 corpsmen were to be recruited at the end of fiscal year 1969. Under the Department estimate, 5,000 corpsmen were to be recruited near the beginning of fiscal year 1969 and supported for ⅔ of a year. | ---- | +8,100,000 |
| | | | | | | | Program support: Level of evaluations and studies reduced. | ---- | −15,000 |
| | | | | | | | Total, Department additions | ---- | +8,085,000 |
| | | | | | | | BUREAU OF BUDGET REDUCTION | | |
| | | | | | | | Recruiting changed. No corpsmen are to be recruited in fiscal year 1968, thereby reducing continuation costs. The number to be recruited in fiscal year 1969 is 3,000, with 1,500 at the beginning (with full-year support) and 1,500 at the end. | ---- | 10,000,000 |
| | | | | | | | DEPARTMENT ADDITION | | |
| Higher educational activities | 1,034,094,000 | 1,081,061,000 | 1,082,625,000 | 708,127,000 | +1,564,000 | 374,498,000 | Strengthening developing institutions: Number of cooperative arrangements reduced from 390 to 385. | ---- | 800,000 |
| | | | | | | | Construction—Technical services: 86 new positions eliminated. | 86 | 956,000 |
| | | | | | | | Insured student loans—Interest payments: Increase reflects revised estimate of payments due. | ---- | +5,000,000 |
| | | | | | | | Program support: Level of evaluations and studies reduced. | ---- | 1,680,000 |
| | | | | | | | Total, Department addition | ---- | +1,564,000 |

**See footnote at end of table.**

| Appropriation | 1968 appropriation [1] | 1969 | | | Department reduction from agency request | Budget Bureau reduction from Department submission | Explanation of difference | Positions | Amount |
|---|---|---|---|---|---|---|---|---|---|
| | | Estimate to Department | Department estimate to Budget Bureau | President's budget | | | | | |
| | (a) | (b) | (c) | (d) | (e) | (f) | | | |
| | | | | | | | BUREAU OF BUDGET REDUCTION | | |
| | | | | | | | Strenghtening developing institutions: Number of cooperative arrangements reduced from 385 to 350. Number of national teaching fellowships reduced from 1,588 to 1,275. | ..... | $5,000,000 |
| | | | | | | | Construction—Public community colleges and technical institutes: Number of projects reduced from 237 to 83. | ..... | 62,000,000 |
| | | | | | | | Other undergraduate facilities: Number of projects reduced from 700 to 76. | ..... | 271,000,000 |
| | | | | | | | Graduate facilities: Number of projects reduced from 63 to 10. | ..... | 42,000,000 |
| | | | | | | | Technical services: Increase for computer services for construction project data eliminated. | ..... | 487,000 |
| | | | | | | | Educational opportunity grants: Number of new grants reduced from 320,700 to 267,000. | ..... | 57,400,000 |
| | | | | | | | Encouragement of educational talent: Number of projects increased from 95 to 135. | ..... | +2,500,000 |
| | | | | | | | Direct student loans: Allowance based on decision to fund with appropriated dollars rather than participation sales. | ..... | +134,400,000 |
| | | | | | | | Insured student loans—Interest payments: Reduction reflects revised estimate of payments due based on November status report and loans outstanding. | ..... | 49,211,000 |
| | | | | | | | Work-study programs, number of students employed reduced as follows: Winter-spring term, from 223,300 to 204,500; summer term, from 111,300 to 101,900; fall term, from 244,900 to 224,200. | ..... | 24,300,000 |
| | | | | | | | Total, Bureau of Budget reduction. | ..... | 374,498,000 |

| | | | | | | | | |
|---|---|---|---|---|---|---|---|---|
| | | | | | | | BUREAU OF BUDGET REDUCTION | |
| Higher education facilities loan fund. | $102,625,000 | $204,975,000 | $204,975,000 | $104,975,000 | ---------- | $100,000,000 | Number of construction loans to higher education institutions reduced from 220 to 165. | 100,000,000 |
| | | | | | | | DEPARTMENT REDUCTION | |
| Expansion and improvement of vocational education. | 252,900,000 | 272,991,000 | 253,186,000 | 249,995,000 | $19,805,000 | 3,191,000 | Vocational training under George-Barden Act and Vocational Education Act of 1963: Estimate was based on higher authorization pending legislation. Reduction maintains current authorizations. | 14,350,000 |
| | | | | | | | Residential vocational schools: Planning for 10 schools eliminated. | 5,000,000 |
| | | | | | | | Program support: Level of evaluations and studies reduced. | 455,000 |
| | | | | | | | Total, Department reduction | 19,805,000 |
| | | | | | | | BUREAU OF BUDGET REDUCTION | |
| | | | | | | | Vocational training under George-Barden Act and Vocational Education Act of 1963: Support reduced from current authorization to 1968 level. | 3,191,000 |
| | | | | | | | DEPARTMENT REDUCTION | |
| Libraries and community services | 156,500,000 | 186,060,000 | 185,760,000 | 149,199,000 | 300,000 | 36,561,000 | Program support: Level of evaluations and studies reduced. | 300,000 |
| | | | | | | | BUREAU OF BUDGET REDUCTION | |
| | | | | | | | Library services: Interlibrary cooperation and State institutional library services programs reduced to 1968 level. | 5,291,000 |
| | | | | | | | Library construction: Number of library construction projects reduced from 400 to 204. | 18,000,000 |
| | | | | | | | Library of Congress: Level of cataloging and acquisition of printed materials reduced. | 2,270,000 |
| | | | | | | | University community service programs: Number of projects reduced from 935 to 623. | 11,000,000 |
| | | | | | | | Total, Bureau of Budget reduction. | 36,561,000 |

See footnote at end of table.

HISTORY OF 1969 ESTIMATE—Continued

| Appropriation | 1968 appropriation | 1969 | | | Department reduction from agency request | Budget Bureau reduction from Department submission | Explanation of difference | Positions | Amount |
|---|---|---|---|---|---|---|---|---|---|
| | | Estimate to Department | Department estimate to Budget Bureau | President's budget | | | | | |
| | (a) | (b) | (c) | (d) | (e) | (f) | | | |
| | | | | | | | DEPARTMENT REDUCTION | | |
| Educational improvement for the handicapped. | $53,400,000 | $125,600,000 | $110,575,000 | $85,225,000 | $15,025,000 | $25,350,000 | Preschool and school programs: Number of children served reduced from 98,300 to 83,300. | ---------- | $12,900,000 |
| | | | | | | | Captioned films for the deaf and media services: Number of research and development contracts reduced from 24 to 13; number of teachers trained reduced from 247 to 190; and number of children served reduced from 103,350 to 71,540. | ---------- | 2,000,000 |
| | | | | | | | Program support: Level of evaluations and studies reduced. | ---------- | 125,000 |
| | | | | | | | Total, Department reduction | ---------- | 15,025,000 |
| | | | | | | | BUREAU OF BUDGET REDUCTION | | |
| | | | | | | | Preschool and school programs: Number of children served reduced from 83,300 to 53,300. | ---------- | 18,000,000 |
| | | | | | | | Teacher education: Number of teachers receiving in-service training reduced from 12,487 to 9,110; number of new personnel trained reduced from 5,692 to 4,590; number of program development grants reduced from 106 to 84. | ---------- | 7,000,000 |
| | | | | | | | Captioned films for the deaf and media services: Number of research and development contracts reduced from 13 to 12; number of teachers trained reduced from 190 to 160; number of researchers supported reduced from 546 to 542. | ---------- | 350,000 |
| | | | | | | | Total, Bureau of Budget reduction | ---------- | 25,350,000 |

| | | | | | | | | |
|---|---|---|---|---|---|---|---|---|
| | | | | | | | DEPARTMENT REDUCTION | |
| Research and training | 88,967,000 | 165,650,000 | 142,300,000 | 142,300,000 | 23,350,000 | | Laboratories and research and development centers: Regional laboratory program reduced to continuation level of present projects. | 11,700,000 |
| | | | | | | | General education demonstration and development: Reduced to support of three proposed major projects. | 7,150,000 |
| | | | | | | | Vocational education research: Adjusted for consistency with reduction in vocational education grants to States (research and institutes to remain at 10 percent). | 4,000,000 |
| | | | | | | | Educational media: Reduced level of support. | 1,000,000 |
| | | | | | | | Training: Graduate program increases deferred pending more emphasis on program development. | 3,000,000 |
| | | | | | | | Evaluations: Increased level of support. | +3,500,000 |
| | | | | | | | Total, Department reduction | 23,350,000 |
| | | | | | | | BUREAU OF BUDGET REDUCTION | |
| Foreign language training and area programs. | 15,700,000 | 23,500,000 | 23,500,000 | 19,250,000 | 4,250,000 | | Language and area studies: Language and area centers reduced from 126 to 110; number of foreign language fellowships at American institutions reduced from 3,056 to 2,749. | 3,950,000 |
| | | | | | | | Foreign language training and area studies: Number of individuals supported for overseas study reduced from 747 to 693. | 300,000 |
| | | | | | | | Total, Bureau of Budget reduction. | 4,250,000 |
| | | | | | | | DEPARTMENT REDUCTION | |
| Educational research and training (special foreign currency program). | | 7,400,000 | 4,000,000 | 4,000,000 | 3,400,000 | | Training, research, and study grants and research in foreign education: Level of support reduced. | 3,400,000 |

See footnote at end of table.

| Appropriation | 1968 appropriation [1] | 1969 | | | Department reduction from agency request | Budget Bureau reduction from Department submission | Explanation of difference | Positions | Amount |
|---|---|---|---|---|---|---|---|---|---|
| | | Estimate to Department | Department estimate to Budget Bureau | President's budget | | | | | |
| | (a) | (b) | (c) | (d) | (e) | (f) | | | |
| | | | | | | | DEPARTMENT REDUCTION | | |
| Salaries and expenses | $37,519,976 | $55,083,000 | $46,100,000 | $46,100,000 | $8,983,000 | | Executive direction and administration | 133 | $1,975,000 |
| | | | | | | | National Center for Educational Statistics | 39 | 742,000 |
| | | | | | | | Bureau of Elementary and Secondary Education. | 122 | 1,882,000 |
| | | | | | | | Bureau of Adult, Vocational and Library Programs. | 46 | 1,021,000 |
| | | | | | | | Bureau of Higher Education | 159 | 2,302,000 |
| | | | | | | | Bureau of Research | 46 | 721,000 |
| | | | | | | | Bureau of Education of Handicapped | 30 | 340,000 |
| | | | | | | | Total, Department reduction | 575 | 8,983,000 |
| Total, Office of Education | 3,999,156,042 | 4,962,247,000 | 4,820,896,000 | 3,728,357,000 | 141,351,000 | 1,092,539,000 | Total reduction, Office of Education. | 661 | 1,233,890,000 |
| PUBLIC HEALTH SERVICE | | | | | | | | | |
| Office of the Surgeon General | 169,167,000 | 225,940,600 | 225,126,600 | 204,456,000 | 814,000 | 20,670,600 | | | |
| Health manpower | 367,702,965 | 442,697,000 | 415,712,000 | 282,400,000 | 26,985,000 | 133,312,000 | | | |
| Disease prevention and environmental control. | 235,911,000 | 368,107,000 | 329,137,000 | 263,607,000 | 38,970,000 | 65,530,000 | | | |
| Health services (exclusive of Indian health activities). | 393,815,000 | 463,587,000 | 444,462,000 | 393,381,000 | 19,125,000 | 51,081,000 | | | |
| National Institutes of Health | 1,174,414,000 | 1,380,562,185 | 1,352,978,185 | 1,196,693,000 | 27,584,000 | 156,285,185 | | | |
| National Institute of Mental Health. | 357,839,000 | 434,098,000 | 428,750,000 | 377,318,000 | 5,348,000 | 51,432,000 | | | |
| Other Public Health Service | 69,506,000 | 142,659,500 | 120,404,500 | 86,258,000 | 22,255,000 | 34,146,500 | | | |
| Total (exclusive of Indian health programs and emergency health activities). | 2,768,354,965 | 3,457,651,285 | 3,316,570,285 | 2,804,113,000 | 141,081,000 | 512,457,285 | | | |
| Indian health programs | 101,727,000 | 136,752,000 | 131,656,000 | 112,007,000 | 5,096,000 | 19,649,000 | | | |
| Emergency health activities | 8,947,000 | 13,062,000 | 9,162,000 | 2,400,000 | 3,900,000 | 6,762,000 | | | |
| Total, Public Health Service. | 2,879,028,965 | 3,607,465,285 | 3,457,388,285 | 2,918,520,000 | 150,077,000 | 538,868,285 | Total reduction in Public Health Service. | | 688,945,285 |

| | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|
| Office of the Surgeon General, salaries and expenses. | 8,582,000 | 10,785,000 | 10,631,000 | 9,073,000 | 154,000 | 1,558,000 | DEPARTMENT REDUCTION | | |
| | | | | | | | International health activities | 10 | 154,000 |
| | | | | | | | BUREAU OF THE BUDGET REDUCTION | | |
| | | | | | | | International health activities | 10 | 157,000 |
| | | | | | | | Immediate Office of the Surgeon General | 6 | 151,800 |
| | | | | | | | Office of Program Planning and Evaluation. | 8 | 183,000 |
| | | | | | | | Office of Legislation | 6 | 101,400 |
| | | | | | | | Office of Extramural Programs | | 9,000 |
| | | | | | | | Office of Administrative Management: | | |
| | | | | | | | Office of the Executive Officer | 2 | 34,100 |
| | | | | | | | Division of Buildings and Facilities | 9 | 134,700 |
| | | | | | | | Division of Finance | 9 | 143,100 |
| | | | | | | | Division of Grants and Contracts | | 15,000 |
| | | | | | | | Division of Internal Audit | | 12,600 |
| | | | | | | | Division of Procurement and Materiel Management. | | 37,800 |
| | | | | | | | Data systems development staff | | 207,600 |
| | | | | | | | Management policy staff | | 5,000 |
| | | | | | | | Office of Personnel | 15 | 217,200 |
| | | | | | | | Office of Information | 10 | 148,700 |
| | | | | | | | Subtotal | 75 | 1,558,000 |
| | | | | | | | Total reductions | 85 | 1,712,000 |
| | | | | | | | DEPARTMENT REDUCTIONS | | |
| Comprehensive health planning and services. | 160,585,000 | 215,155,600 | 214,495,600 | 195,383,000 | 660,000 | 19,112,600 | Program direction and technical assistance. | | 660,000 |
| | | | | | | | BUREAU OF THE BUDGET REDUCTIONS | | |
| | | | | | | | Grants: | | |
| | | | | | | | Comprehensive State health planning. | | 250,000 |
| | | | | | | | Formula grants | | 13,068,000 |
| | | | | | | | Project grants | | 4,950,000 |
| | | | | | | | Direct operations: | | |
| | | | | | | | Review and approval | 23 | 219,000 |
| | | | | | | | Program direction and technical assistance. | 33 | 625,600 |
| | | | | | | | Subtotal | 56 | 19,112,600 |
| | | | | | | | Total reductions | 56 | 19,772,600 |

See footnote at end of table.

HISTORY OF 1969 ESTIMATE—Continued

| Appropriation | 1968 appropriation[1] | 1969 | | | Department reduction from agency request | Budget Bureau reduction from Department submission | Explanation of difference | Positions | Amount |
|---|---|---|---|---|---|---|---|---|---|
| | | Estimate to Department | Department estimate to Budget Bureau | President's budget | | | | | |
| | (a) | (b) | (c) | (d) | (e) | (f) | | | |
| | | | | | | | DEPARTMENT REDUCTIONS | | |
| Health manpower education and utilization. | $158,062,965 | $240,732,000 | $213,747,000 | $197,400,000 | $26,985,000 | $16,347,000 | Grants: | | |
| | | | | | | | Dental auxiliary untilization | | $1,000,000 |
| | | | | | | | Diploma schools of nursing | | 3,000,000 |
| | | | | | | | Graduate public health training | | 1,000,000 |
| | | | | | | | Nurse traineeships | | 1,000,000 |
| | | | | | | | Public health traineeships | | 1,000,000 |
| | | | | | | | Dental fellowships | | 50,000 |
| | | | | | | | Nursing fellowships | | 150,000 |
| | | | | | | | Health professions scholarships | | 1,000,000 |
| | | | | | | | Research | | 170,000 |
| | | | | | | | Research training | | 900,000 |
| | | | | | | | Dental continuing education | | 900,000 |
| | | | | | | | Direct operations: | | |
| | | | | | | | Physican manpower | 16 | 6,377,000 |
| | | | | | | | Dental health | 27 | 569,000 |
| | | | | | | | Nursing | 62 | 7,357,000 |
| | | | | | | | Allied health manpower | 13 | 1,765,000 |
| | | | | | | | Health manpower education services. | 6 | 513,000 |
| | | | | | | | Program direction and management services. | 12 | 234,000 |
| | | | | | | | Subtotal | 136 | 26,985,000 |
| | | | | | | | BUREAU OF THE BUDGET REDUCTIONS | | |
| | | | | | | | Grants: | | |
| | | | | | | | Health professions educational improvement. | | 14,000,000 |
| | | | | | | | Graduate public health training | | 1,500,000 |
| | | | | | | | Schools of public health | | 446,000 |

| | | | | | | | | |
|---|---|---|---|---|---|---|---|---|
| | | | | | | | Allied health traineeships | 1,000,000 |
| | | | | | | | Public health traineeships | 1,000,000 |
| | | | | | | | Nursing opportunity grants | 200,000 |
| | | | | | | | Research | 1,480,000 |
| | | | | | | | Loans: | |
| | | | | | | | Health professions | +5,300,000 |
| | | | | | | | Nursing | 335,000 |
| | | | | | | | Direct operations: | |
| | | | | | | | Physician manpower | 28 288,000 |
| | | | | | | | Dental health | 24 383,000 |
| | | | | | | | Nursing | 8 305,000 |
| | | | | | | | Allied health manpower | 15 117,000 |
| | | | | | | | Health manpower educational services. | 23 299,000 |
| | | | | | | | Program direction and management services. | 27 294,000 |
| | | | | | | | Subtotal | 125 16,347,000 |
| | | | | | | | Total reductions | 261 43,332,000 |
| | | | | | | | BUREAU OF THE BUDGET REDUCTIONS | |
| Construction of health educational facilities. | 203,000,000 | 201,000,000 | 201,000,000 | 84,800,000 | 0 | 116,200,000 | Construction of teaching facilities for medical, dental, and other health personnel. | 95,000,000 |
| | | | | | | | Construction of teaching facilities for nurses. | 17,000,000 |
| | | | | | | | Construction of teaching facilities for allied health professions personnel. | 4,200,000 |
| | | | | | | | Total reductions | 116,200,000 |
| | | | | | | | BUREAU OF THE BUDGET REDUCTION | |
| Health professions education fund. | 2,015,000 | 730,000 | 730,000 | 154,000 | 0 | 576,000 | Payment of sales insufficiencies—total reduction. | 576,000 |
| | | | | | | | BUREAU OF THE BUDGET REDUCTION | |
| Nurse training fund | 4,395,000 | 235,000 | 235,000 | 46,000 | 0 | 189,000 | Payment of sales insufficiencies—total reduction. | 189,000 |
| Payment of sales insufficiencies | 230,000 | 0 | 0 | 0 | 0 | 0 | | |

See footnote at end of table.

| Appropriation | 1968 appropriation [1] | 1969 | | | Department reduction from agency request | Budget Bureau reduction from Department submission | Explanation of difference | Positions | Amount |
|---|---|---|---|---|---|---|---|---|---|
| | | Estimate to Department | Department estimate to Budget Bureau | President's budget | | | | | |
| | (a) | (b) | (c) | (d) | (e) | (f) | | | |
| | | | | | | | DEPARTMENT REDUCTIONS | | |
| Chronic diseases | $27,942,000 | $42,107,000 | $37,008,000 | $29,779,000 | $5,099,000 | $7,229,000 | Direct operations: | | |
| | | | | | | | Cancer control | 5 | $455,000 |
| | | | | | | | Smoking and health | 3 | 425,000 |
| | | | | | | | Diabetes and arthritis | 11 | 949,000 |
| | | | | | | | Heart disease | 18 | 1,331,000 |
| | | | | | | | Neurological and sensory diseases | 12 | 349,000 |
| | | | | | | | Preventive services | 6 | 535,000 |
| | | | | | | | Kidney diseases | 9 | 555,000 |
| | | | | | | | Nutrition | 5 | 500,000 |
| | | | | | | | Subtotal | 69 | 5,099,000 |
| | | | | | | | BUREAU OF THE BUDGET REDUCTION | | |
| | | | | | | | Research grants | | 759,000 |
| | | | | | | | Direct operations: | | |
| | | | | | | | Cancer control | 20 | 619,000 |
| | | | | | | | Smoking and health | | 15,000 |
| | | | | | | | Diabetes and arthritis | 18 | 909,000 |
| | | | | | | | Heart disease control | 35 | 3,320,000 |
| | | | | | | | Respiratory diseases | 10 | 786,000 |
| | | | | | | | Neurological and sensory diseases | | 41,000 |
| | | | | | | | Preventive services | 10 | 10,000 |
| | | | | | | | Kidney diseases | 5 | 520,000 |
| | | | | | | | Nutrition | 9 | 250,000 |
| | | | | | | | Subtotal | 107 | 7,229,000 |
| | | | | | | | Total reductions | 176 | 12,328,000 |
| Communicable diseases | 70,347,000 | 73,757,000 | 68,507,000 | 63,407,000 | 5,250,000 | 5,100,000 | DEPARTMENT REDUCTIONS | | |
| | | | | | | | Training grants | | 250,000 |
| | | | | | | | Aedes aegypti eradication | 148 | 5,000,000 |
| | | | | | | | Subtotal | 148 | 5,250,000 |

| | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|
| | | | | | | | BUREAU OF THE BUDGET REDUCTION | | |
| | | | | | | | Research grants | | 283,000 |
| | | | | | | | Direct operations: | | |
| | | | | | | | Communicable diseases | 110 | 1,984,000 |
| | | | | | | | Tuberculosis | 40 | 490,000 |
| | | | | | | | Venereal diseases | 107 | 1,537,000 |
| | | | | | | | Pesticides | | 177,000 |
| | | | | | | | Foreign quarantine | 35 | 218,000 |
| | | | | | | | Aedes aegypti eradication | | 411,000 |
| | | | | | | | Subtotal | 292 | 5,100,000 |
| | | | | | | | Total reductions | 440 | 10,350,000 |
| | | | | | | | DEPARTMENT REDUCTIONS | | |
| Air pollution | 80,185,000 | 170,652,000 | 150,652,000 | 106,733,000 | 20,000,000 | 43,919,000 | Direct operations: | | |
| | | | | | | | Research | | 20,000,000 |
| | | | | | | | BUREAU OF THE BUDGET REDUCTIONS | | |
| | | | | | | | Grants: | | |
| | | | | | | | Research | | 1,200,000 |
| | | | | | | | Training | | 32,000 |
| | | | | | | | Fellowships | | 41,000 |
| | | | | | | | Control programs | | 4,245,000 |
| | | | | | | | Direct operations: | | |
| | | | | | | | Research | 16 | 35,767,000 |
| | | | | | | | Abatement | 170 | 2,788,000 |
| | | | | | | | Motor vehicle pollution control | 2 | 59,000 |
| | | | | | | | Training | | +213,000 |
| | | | | | | | Subtotal | 188 | 43,919,000 |
| | | | | | | | Total reductions | 188 | 63,919,000 |
| | | | | | | | DEPARTMENT REDUCTIONS | | |
| Urban and industrial health | 41,750,000 | 57,713,000 | 52,692,000 | 45,611,000 | 5,021,000 | 7,081,000 | Grants: | | |
| | | | | | | | Fellowships | | 37,000 |
| | | | | | | | Training | | 213,000 |
| | | | | | | | Direct operations: | | |
| | | | | | | | Occupational health | 62 | 1,310,000 |
| | | | | | | | Injury control | 95 | 969,000 |
| | | | | | | | Water supply and shellfish | 90 | 1,226,000 |
| | | | | | | | Special health protection | 92 | 1,266,000 |
| | | | | | | | Subtotal | 339 | 5,021,000 |

See footnote at end of table.

| Appropriation | 1968 appropriation [1] | 1969 | | | Department reduction from agency request | Budget Bureau reduction from Department submission | Explanation of difference | Positions | Amount |
|---|---|---|---|---|---|---|---|---|---|
| | | Estimate to Department | Department estimate to Budget Bureau | President's budget | | | | | |
| | (a) | (b) | (c) | (d) | (e) | (f) | | | |
| | | | | | | | BUREAU OF THE BUDGET REDUCTIONS | | |
| | | | | | | | Grants: | | |
| | | | | | | | Research | | $1,896,000 |
| | | | | | | | Training | | 720,000 |
| | | | | | | | Survey and demonstration | | 1,054,000 |
| | | | | | | | Direct operations: | | |
| | | | | | | | Solid wastes | 44 | 766,000 |
| | | | | | | | Occupational health | 35 | 743,000 |
| | | | | | | | Injury control | 30 | 582,000 |
| | | | | | | | Water supply and shellfish | 13 | 124,000 |
| | | | | | | | Arctic health | 32 | 503,000 |
| | | | | | | | Special health protection | 36 | 693,000 |
| | | | | | | | Subtotal | 190 | 7,081,000 |
| | | | | | | | Total reductions | 529 | 12,102,000 |
| | | | | | | | DEPARTMENT REDUCTIONS | | |
| Radiological health | $15,687,000 | $23,878,000 | $20,278,000 | $18,077,000 | $3,600,000 | $2,201,000 | Grants: | | |
| | | | | | | | Research | | 1,000,000 |
| | | | | | | | Training | | 950,000 |
| | | | | | | | Direct operations: | | |
| | | | | | | | Effects of radiation on man | 8 | 150,000 |
| | | | | | | | Development of methodology | 32 | 1,025,000 |
| | | | | | | | Training | 4 | 75,000 |
| | | | | | | | Measurement and survillance | 1 | 25,000 |
| | | | | | | | Technical assistance | 1 | 75,000 |
| | | | | | | | Bureau program direction and management services. | 8 | 300,000 |
| | | | | | | | Subtotal | 54 | 3,600,000 |
| | | | | | | | BUREAU OF THE BUDGET REDUCTIONS | | |
| | | | | | | | Direct operations: | | |
| | | | | | | | Effects of radiation on man | 8 | 156,000 |
| | | | | | | | Development of methodology | 28 | 818,000 |
| | | | | | | | Training | 7 | 219,000 |

| | | | | | | | |
|---|---|---|---|---|---|---|---|
| | | | | | | | Measurement and surveillance | 8 | 116,000 |
| | | | | | | | Technical assistance | 8 | 323,000 |
| | | | | | | | Bureau program direction and management services. | 36 | 569,000 |
| | | | | | | | Subtotal | 95 | 2,201,000 |
| | | | | | | | Total reductions | 149 | 5,801,000 |
| | | | | | | | DEPARTMENT REDUCTIONS | | |
| Community health services | 35,215,000 | 97,699,000 | 81,648,000 | 63,820,000 | 16,051,000 | 17,828,000 | Grants: | | |
| | | | | | | | Research | | 2,444,000 |
| | | | | | | | Training and fellowships | | 500,000 |
| | | | | | | | Migrant health | | 2,180,000 |
| | | | | | | | Direct operations: | | |
| | | | | | | | Health insurance | 47 | 728,000 |
| | | | | | | | Group practice | 8 | 300,000 |
| | | | | | | | Nursing home services | 37 | 411,000 |
| | | | | | | | Home health services | 47 | 522,000 |
| | | | | | | | Adult health protection | 18 | 3,830,000 |
| | | | | | | | State and urban health services | 9 | 1,000,000 |
| | | | | | | | Migrant health services | 30 | 350,000 |
| | | | | | | | Rural health | | 3,000,000 |
| | | | | | | | Family planning | +15 | +500,000 |
| | | | | | | | Program direction | 43 | 1,286,000 |
| | | | | | | | Subtotal | 224 | 16,051,000 |
| | | | | | | | BUREAU OF THE BUDGET REDUCTIONS | | |
| | | | | | | | Grants: | | |
| | | | | | | | Research | | 564,000 |
| | | | | | | | Training | | 400,000 |
| | | | | | | | Migrant health | | 1,000,000 |
| | | | | | | | Direct operations: | | |
| | | | | | | | Health insurance | 43 | 603,000 |
| | | | | | | | Standards and methods | 8 | 500,000 |
| | | | | | | | Health economics | 15 | 213,000 |
| | | | | | | | Health communications | 5 | 65,000 |
| | | | | | | | Migrant health services | | 70,000 |
| | | | | | | | Rural health | 33 | 549,000 |
| | | | | | | | Family planning | 10 | 312,000 |
| | | | | | | | National Center for Health Services Research and Development. | 45 | 12,672,000 |
| | | | | | | | Program direction | 50 | 880,000 |
| | | | | | | | Subtotal | 209 | 17,828,000 |
| | | | | | | | Total reductions | 433 | 33,879,000 |

See footnote at end of table.

HISTORY OF 1969 ESTIMATE—Continued

| Appropriation | 1968 appropriation [1] | 1969 | | | Department reduction from agency request | Budget Bureau reduction from Department submission | Explanation of difference | Positions | Amount |
|---|---|---|---|---|---|---|---|---|---|
| | | Estimate to Department | Department estimate to Budget Bureau | President's budget | | | | | |
| | (a) | (b) | (c) | (d) | (e) | (f) | | | |
| | | | | | | | DEPARTMENT REDUCTIONS | | |
| Patient care and special health services. | $65,113,000 | $81,552,000 | $78,846,000 | $71,193,000 | $2,706,000 | $7,653,000 | Operation of hospitals and clinics | 25 | $100,000 |
| | | | | | | | Research | 42 | 800,000 |
| | | | | | | | Training | 80 | 600,000 |
| | | | | | | | Rehabilitation medicine | 43 | 1,006,000 |
| | | | | | | | Emergency health | | 150,000 |
| | | | | | | | Federal employee health services | 5 | 50,000 |
| | | | | | | | Subtotal | 195 | 2,706,000 |
| | | | | | | | BUREAU OF THE BUDGET REDUCTIONS | | |
| | | | | | | | Operation of hospitals and clinics | 405 | 4,676,000 |
| | | | | | | | Emergency health | 100 | 2,144,000 |
| | | | | | | | Poison control | 9 | 190,000 |
| | | | | | | | Federal employee health services | 25 | 350,000 |
| | | | | | | | Coast Guard | 18 | 293,000 |
| | | | | | | | Subtotal | 557 | 7,653,000 |
| | | | | | | | Total reductions | 752 | 10,359,000 |
| | | | | | | | DEPARTMENT REDUCTIONS | | |
| Hospital construction activities | 293,487,000 | 284,336,000 | 283,968,000 | 258,368,000 | 368,000 | 25,600,000 | Operations and technical services | 26 | 368,000 |
| | | | | | | | BUREAU OF THE BUDGET REDUCTIONS | | |
| | | | | | | | Construction grants: | | |
| | | | | | | | Hospitals and clinics | | 12,200,000 |
| | | | | | | | Long-term care facilities | | 5,000,000 |

| | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|
| | | | | | | | Diagnostic or treatment centers | | 2,000,000 |
| | | | | | | | Rehabilitation facilities | | 1,000,000 |
| | | | | | | | Modernization of health facilities | | 5,400,000 |
| | | | | | | | Subtotal | | 25,600,000 |
| | | | | | | | Total reductions | 26 | 25,968,000 |
| | | | | | | | DEPARTMENT REDUCTIONS | | |
| Biologics standards | 8,649,000 | 8,942,760 | 8,910,760 | 8,499,000 | 32,000 | 411,760 | Biologics standards | | 32,000 |
| | | | | | | | BUREAU OF THE BUDGET REDUCTIONS | | |
| | | | | | | | Biologics standards | 19 | 411,760 |
| | | | | | | | Total reductions | 19 | 443,760 |
| | | | | | | | DEPARTMENT REDUCTIONS | | |
| National Cancer Institute | 183,356,000 | 207,348,030 | 201,413,030 | 187,707,000 | 5,935,000 | 13,706,030 | Grants: | | |
| | | | | | | | Research: | | |
| | | | | | | | Regular | | 4,215,000 |
| | | | | | | | Special programs: General research support | | 295,000 |
| | | | | | | | Direct operations: | | |
| | | | | | | | Laboratory and clinical research | | 200,000 |
| | | | | | | | Collaborative research and development | | 982,000 |
| | | | | | | | Biometry, epidemiology, and field studies | | 23,000 |
| | | | | | | | Review and approval of grants | | 102,000 |
| | | | | | | | Program direction | | 118,000 |
| | | | | | | | Subtotal | | 5,935,000 |

See footnote at end of table.

HISTORY OF 1969 ESTIMATE—Continued

| Appropriation | 1968 appropriation [1] | 1969 | | | Department reduction from agency request | Budget Bureau reduction from Department submission | Explanation of difference | Positions | Amount |
|---|---|---|---|---|---|---|---|---|---|
| | | Estimate to Department | Department estimate to Budget Bureau | President's budget | | | | | |
| | (a) | (b) | (c) | (d) | (e) | (f) | | | |
| | | | | | | | BUREAU OF THE BUDGET REDUCTIONS | | |
| | | | | | | | Grants: | | |
| | | | | | | | Research: | | |
| | | | | | | | Regular | | $1,877,000 |
| | | | | | | | Special programs: | | |
| | | | | | | | General research support | | 21,000 |
| | | | | | | | Specialized research centers. | | 3,280,000 |
| | | | | | | | Fellowships | | 85,000 |
| | | | | | | | Training | | 2,052,000 |
| | | | | | | | Direct operations: | | |
| | | | | | | | Laboratory and clinical research | 13 | 888,000 |
| | | | | | | | Collaborative research and development. | 82 | 5,184,000 |
| | | | | | | | Biometry, epidemiology, and field studies. | 12 | 159,000 |
| | | | | | | | Review and approval of grants | 4 | 129,000 |
| | | | | | | | Program direction | 3 | 31,030 |
| | | | | | | | Subtotal | 114 | 13,706,030 |
| | | | | | | | Total reductions | 114 | 19,641,030 |
| | | | | | | | DEPARTMENT REDUCTIONS | | |
| National Heart Institute | $165,898,000 | $190,515,000 | $189,148,000 | $169,735,000 | $1,367,000 | $19,413,000 | Grants: | | |
| | | | | | | | Research: | | |
| | | | | | | | Regular | | +57,000 |
| | | | | | | | Special programs: General research support. | | 332,000 |
| | | | | | | | Direct operations: | | |
| | | | | | | | Laboratory and clinical research | | 71,000 |
| | | | | | | | Collaborative research and development. | | 982,000 |

| | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|
| | | | | | | | Biometry, epidemiology, and field studies. | | 29,000 |
| | | | | | | | Review and approval of grants | | 10,000 |
| | | | | | | | Subtotal | | 1,367,000 |
| | | | | | | | BUREAU OF THE BUDGET REDUCTIONS | | |
| | | | | | | | Grants: | | |
| | | | | | | | Research: | | |
| | | | | | | | Regular | | 10,833,000 |
| | | | | | | | Special programs: | | |
| | | | | | | | General research support | | 870,000 |
| | | | | | | | Specialized research centers. | | 2,750,000 |
| | | | | | | | Fellowships | | 141,000 |
| | | | | | | | Training | | 302,000 |
| | | | | | | | Direct operations: | | |
| | | | | | | | Laboratory and clinical research | +2 | 689,000 |
| | | | | | | | Collaborative research and development. | 12 | 3,262,000 |
| | | | | | | | Biometry, epidemiology, and field studies. | 8 | 158,000 |
| | | | | | | | Training activities | 5 | 80,000 |
| | | | | | | | Review and approval of grants | | 289,000 |
| | | | | | | | Program direction | 2 | 39,000 |
| | | | | | | | Subtotal | 29 | 19,413,000 |
| | | | | | | | Total reductions | 52 | 20,780,000 |
| | | | | | | | DEPARTMENT REDUCTIONS | | |
| National Institute of Dental Research. | 30,288,000 | 34,121,391 | 33,676,391 | 30,414,000 | 445,000 | 3,262,391 | Grants: | | |
| | | | | | | | Research: | | |
| | | | | | | | Regular | | 319,000 |
| | | | | | | | Special programs: | | |
| | | | | | | | General research support | | 18,000 |
| | | | | | | | Direct operations: | | |
| | | | | | | | Laboratory and clinical research | | 25,000 |
| | | | | | | | Collaborative research and development. | | 50,000 |
| | | | | | | | Biometry, epidemiology, and field studies. | | 18,000 |
| | | | | | | | Review and approval of grants | | 15,000 |
| | | | | | | | Subtotal | | 445,000 |

See footnote at end of table.

HISTORY OF 1969 ESTIMATE—Continued

| Appropriation | 1968 appropriation [1] | 1969 | | | Department reduction from agency request | Budget Bureau reduction from Department submission | Explanation of difference | Positions | Amount |
|---|---|---|---|---|---|---|---|---|---|
| | | Estimate to Department | Department estimate to Budget Bureau | President's budget | | | | | |
| | (a) | (b) | (c) | (d) | (e) | (f) | | | |
| | | | | | | | BUREAU OF THE BUDGET REDUCTIONS | | |
| | | | | | | | Grants: | | |
| | | | | | | | Research: | | |
| | | | | | | | Regular | | $219,000 |
| | | | | | | | Special programs: | | |
| | | | | | | | General research support | | +8,000 |
| | | | | | | | Dental research institutes | | 2,000,000 |
| | | | | | | | Fellowships | | 42,000 |
| | | | | | | | Training | | 70,000 |
| | | | | | | | Direct operations: | | |
| | | | | | | | Laboratory and clinical research | 12 | 539,000 |
| | | | | | | | Collaborative research and development. | 2 | 271,000 |
| | | | | | | | Biometry, epidemiology, and field studies. | 5 | 78,391 |
| | | | | | | | Review and approval of grants | 4 | 51,000 |
| | | | | | | | Subtotal | 23 | 3,262,391 |
| | | | | | | | Total reductions | 23 | 3,707,391 |
| | | | | | | | DEPARTMENT REDUCTIONS | | |
| National Institute of Arthritis and Metabolic Diseases. | $143,954,000 | $157,239,000 | $154,089,000 | $146,489,000 | $3,150,000 | $7,600,000 | Grants: | | |
| | | | | | | | Research: | | |
| | | | | | | | Regular | | 2,972,000 |
| | | | | | | | Special programs: General research support. | | 28,000 |
| | | | | | | | Direct operations: | | |
| | | | | | | | Laboratory and clinical research | | 95,000 |
| | | | | | | | Collaborative research and development. | | 36,000 |
| | | | | | | | Biometry, epidemiology, and field studies. | | 9,000 |
| | | | | | | | Review and approval of grants | | 10,000 |
| | | | | | | | Subtotal | | 3,150,000 |

| | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|
| | | | | | | | BUREAU OF THE BUDGET REDUCTIONS | | |
| | | | | | | | Grants: | | |
| | | | | | | | Research: | | |
| | | | | | | | Regular | | 3,991,000 |
| | | | | | | | Special programs: General research support. | | 185,000 |
| | | | | | | | Fellowships | | 311,000 |
| | | | | | | | Training | | 970,000 |
| | | | | | | | Direct operations: | | |
| | | | | | | | Laboratory and clinical research | +10 | 1,077,000 |
| | | | | | | | Collaborative research and development. | 8 | 743,000 |
| | | | | | | | Biometry, epidemiology, and field studies. | 4 | 99,000 |
| | | | | | | | Review and approval of grants | 9 | 221,000 |
| | | | | | | | Program direction | 2 | 3,000 |
| | | | | | | | Subtotal | 13 | 7,600,000 |
| | | | | | | | Total | 13 | 10,750,000 |
| | | | | | | | DEPARTMENT REDUCTIONS | | |
| National Institute of Neurological Diseases and Blindness. | 126,956,000 | 146,438,726 | 149,019,726 | 131,195,000 | +2,581,000 | 17,824,726 | Grants: | | |
| | | | | | | | Research: | | |
| | | | | | | | Regular | | +2,466,000 |
| | | | | | | | Special programs: General research support. | | +305,000 |
| | | | | | | | Direct operations: | | |
| | | | | | | | Laboratory and clinical research | | 51,000 |
| | | | | | | | Collaborative research and development. | | 100,000 |
| | | | | | | | Biometry, epidemiology, and field studies. | | 29,000 |
| | | | | | | | Review and approval of grants | | 10,000 |
| | | | | | | | Subtotal | | +2,581,000 |

See footnote at end of table.

HISTORY OF 1969 ESTIMATE—Continued

| Appropriation | 1968 appropriation [1] | 1969 | | | Department reduction from agency request | Budget Bureau reduction from Department submission | Explanation of difference | Positions | Amount |
|---|---|---|---|---|---|---|---|---|---|
| | | Estimate to Department | Department estimate to Budget Bureau | President's budget | | | | | |
| | (a) | (b) | (c) | (d) | (e) | (f) | | | |
| | | | | | | | BUREAU OF THE BUDGET REDUCTIONS | | |
| | | | | | | | Grants: | | |
| | | | | | | | Research: | | |
| | | | | | | | Regular | | $10,537,000 |
| | | | | | | | Special programs: | | |
| | | | | | | | General research support | | 1,478,000 |
| | | | | | | | Scientific evaluation | | 95,000 |
| | | | | | | | Categorical clinical research centers. | | 150,000 |
| | | | | | | | Specialized research centers. | | 300,000 |
| | | | | | | | Fellowships | | 312,000 |
| | | | | | | | Training | | 891,000 |
| | | | | | | | Direct operations: | | |
| | | | | | | | Laboratory and clinical research | 26 | 1,182,000 |
| | | | | | | | Collaborative research and development. | 23 | 1,994,000 |
| | | | | | | | Biometry, epidemiology, and field studies. | 10 | 841,000 |
| | | | | | | | Review and approval of grants | | 63,000 |
| | | | | | | | Program direction | | +18,274 |
| | | | | | | | Subtotal | 59 | 17,824,726 |
| | | | | | | | Total reductions | 59 | 15,243,726 |
| | | | | | | | DEPARTMENT REDUCTIONS | | |
| National Institute of Allergy and Infectious Diseases. | $94,198,000 | $105,471,598 | $106,653,598 | $98,562,000 | +$1,182,000 | $8,091,598 | Grants: | | |
| | | | | | | | Research: | | |
| | | | | | | | Regular | | +1,261,000 |
| | | | | | | | Special programs: General research support. | | +102,000 |

| | | | | | | | | |
|---|---|---|---|---|---|---|---|---|
| | | | | | | | Direct operations: | |
| | | | | | | | Laboratory and clinical research | 81,000 |
| | | | | | | | Collaborative research and development. | 100,000 |
| | | | | | | | Subtotal | +1,182,000 |
| | | | | | | | BUREAU OF THE BUDGET REDUCTIONS | |
| | | | | | | | Grants: | |
| | | | | | | | Research: | |
| | | | | | | | Regular | 5,843,000 |
| | | | | | | | Special programs: General research support. | 481,000 |
| | | | | | | | Fellowships | 54,000 |
| | | | | | | | Training | 72,000 |
| | | | | | | | Direct operations: | |
| | | | | | | | Laboratory and clinical research | 19 1,659,000 |
| | | | | | | | Collaborative research and development. | 10 +54,000 |
| | | | | | | | Review and approval of grants | 2 45,000 |
| | | | | | | | Program direction | +8,402 |
| | | | | | | | Subtotal | 31 8,091,598 |
| | | | | | | | Total reductions | 31 6,909,598 |
| | | | | | | | DEPARTMENT REDUCTIONS | |
| National Institute of General Medical Sciences. | 160,250,000 | 186,193,000 | 175,481,000 | 165,777,000 | 10,712,000 | 9,704,000 | Grants: | |
| | | | | | | | Research: | |
| | | | | | | | Regular | 9,929,000 |
| | | | | | | | Special programs: General research support. | 636,000 |
| | | | | | | | Direct operations: | |
| | | | | | | | Collaborative research and development. | 100,000 |
| | | | | | | | Review and approval of grants | 39,000 |
| | | | | | | | Program direction | 8,000 |
| | | | | | | | Subtotal | 10,712,000 |

See footnote at end of table.

| Appropriation | 1968 appropriation [1] | 1969 | | | Department reduction from agency request | Budget Bureau reduction from Department submission | Explanation of difference | Positions | Amount |
|---|---|---|---|---|---|---|---|---|---|
| | | Estimate to Department | Department estimate to Budget Bureau | President's budget | | | | | |
| | (a) | (b) | (c) | (d) | (e) | (f) | | | |
| | | | | | | | BUREAU OF THE BUDGET REDUCTIONS | | |
| | | | | | | | Grants: | | |
| | | | | | | | Research: | | |
| | | | | | | | Regular | | $1,383,000 |
| | | | | | | | Special programs: | | |
| | | | | | | | General research support | | +64,000 |
| | | | | | | | Scientific evaluation | | 34,000 |
| | | | | | | | Pharmacology-toxicology research. | | 2,000,000 |
| | | | | | | | Behavioral research centers. | | 1,500,000 |
| | | | | | | | Instrument development and engineering research centers. | | 2,500,000 |
| | | | | | | | Fellowships | | +76,000 |
| | | | | | | | Training | | 784,000 |
| | | | | | | | Direct operations: | | |
| | | | | | | | Collaborative research and development. | | 1,408,000 |
| | | | | | | | Training activities | | 67,000 |
| | | | | | | | Review and approval of grants | 6 | 188,000 |
| | | | | | | | Program direction | | +20,000 |
| | | | | | | | Subtotal | 6 | 9,704,000 |
| | | | | | | | Total reductions | 6 | 20,416,000 |
| | | | | | | | DEPARTMENT REDUCTIONS | | |
| National Institute of Child Health and Human Development. | $68,621,000 | $80,569,100 | $77,975,100 | $75,394,000 | $2,594,000 | $2,581,100 | Grants: | | |
| | | | | | | | Research: | | |
| | | | | | | | Regular | | 1,999,000 |
| | | | | | | | Special programs: General research support. | | 80,000 |

| | | | | | | | | |
|---|---|---|---|---|---|---|---|---|
| | | | | | | | Direct operations: | |
| | | | | | | | Laboratory and clinical research | 227,000 |
| | | | | | | | Collaborative research and development. | 95,000 |
| | | | | | | | Biometry, epidemiology, and field studies. | 173,000 |
| | | | | | | | Review and approval of grants | 10,000 |
| | | | | | | | Program direction | 10,000 |
| | | | | | | | Subtotal | 2,594,000 |
| | | | | | | | BUREAU OF THE BUDGET REDUCTIONS | |
| | | | | | | | Grants: | |
| | | | | | | | Research: | |
| | | | | | | | Regular | 1,176,000 |
| | | | | | | | Special programs: General research support. | 19,000 |
| | | | | | | | Fellowships | 91,000 |
| | | | | | | | Training | 2,063,000 |
| | | | | | | | Direct operations: | |
| | | | | | | | Laboratory and clinical research | 916,000 |
| | | | | | | | Collaborative research and development. | +2,117,000 |
| | | | | | | | Biometry, epidemiology, and field studies. | 316,100 |
| | | | | | | | Training activities | 3,000 |
| | | | | | | | Review and approval of grants | 92,000 |
| | | | | | | | Program direction | 22,000 |
| | | | | | | | Subtotal | 2,581,100 |
| | | | | | | | Total reductions | 5,175,100 |
| | | | | | | | DEPARTMENT REDUCTIONS | |
| Regional medical programs | 58,814,000 | 98,683,420 | 91,250,420 | 68,922,000 | 7,433,000 | 22,328,420 | Grants: Regional medical programs | 7,000,000 |
| | | | | | | | Direct operations: | |
| | | | | | | | Professional and technical assistance. | 195,000 |
| | | | | | | | Program direction | 238,000 |
| | | | | | | | Subtotal | 7,433,000 |

See footnote at end of table.

| Appropriation | 1968 appropriation [1] | 1969 | | | Department reduction from agency request | Budget Bureau reduction from Department submis?ion | Explanation of difference | Positions | Amount |
|---|---|---|---|---|---|---|---|---|---|
| | | Estimate to Department | Department estimate to Budget Bureau | President's budget | | | | | |
| | (a) | (b) | (c) | (d) | (e) | (f) | | | |
| | | | | | | | BUREAU OF THE BUDGET REDUCTIONS | | |
| | | | | | | | Grants: Regional medical programs | | $22,100,000 |
| | | | | | | | Direct operations: | | |
| | | | | | | | Professional and technical assistance. | | 33,000 |
| | | | | | | | Review and approval of grants | | +42,000 |
| | | | | | | | Program director | | 237,420 |
| | | | | | | | Subtotal | | 22,328,420 |
| | | | | | | | Total reductions | | 29,761,420 |
| | | | | | | | DEPARTMENTAL REDUCTIONS | | |
| Environmental health sciences | $17,289,000 | $24,559,666 | $24,319,666 | $18,099,000 | $240,000 | $6,220,666 | Grants: | | |
| | | | | | | | Research: | | |
| | | | | | | | Regular | | +409,000 |
| | | | | | | | Special programs: General research support. | | +55,000 |
| | | | | | | | Direct operations: | | |
| | | | | | | | Laboratory and clinical research | | 694,000 |
| | | | | | | | Program direction | | 10,000 |
| | | | | | | | Subtotal | | 240,000 |
| | | | | | | | BUREAU OF THE BUDGET REDUCTIONS | | |
| | | | | | | | Grants: | | |
| | | | | | | | Research: | | |
| | | | | | | | Regular | | 2,299,000 |
| | | | | | | | Special programs: | | |
| | | | | | | | General research support | | 191,000 |
| | | | | | | | Environmental health science institutes. | | 500,000 |
| | | | | | | | Fellowships | | 137,000 |
| | | | | | | | Training | | 647,000 |

| | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|
| | | | | | | | Direct operations: | | |
| | | | | | | | Laboratory and clinical research | 5 | 2,444,000 |
| | | | | | | | Review and approval of grants | | 2,666 |
| | | | | | | | Subtotal | 5 | 6,220,666 |
| | | | | | | | Total reductions | 5 | 6,460,666 |
| | | | | | | | DEPARTMENT REDUCTIONS | | |
| General research and services, National Institutes of Health. | 81,141,000 | 90,480,494 | 91,041,494 | 87,500,000 | +561,000 | 3,541,494 | Grants: | | |
| | | | | | | | Research: | | |
| | | | | | | | Regular | | +965,000 |
| | | | | | | | Special programs: General research support. | | +95,000 |
| | | | | | | | Direct operations: | | |
| | | | | | | | Collaborative research and development. | | 100,000 |
| | | | | | | | Computer research and technology | | 359,000 |
| | | | | | | | Review and approval of grants | | 30,000 |
| | | | | | | | Program direction | | 10,000 |
| | | | | | | | Subtotal | | +561,000 |
| | | | | | | | BUREAU OF THE BUDGET REDUCTIONS | | |
| | | | | | | | Grants: | | |
| | | | | | | | Research: | | |
| | | | | | | | Regular | | 2,636,000 |
| | | | | | | | Special programs: | | |
| | | | | | | | General research support | | 263,000 |
| | | | | | | | International centers for medical research and training. | | 500,000 |
| | | | | | | | General clinical research centers. | | +134,000 |
| | | | | | | | Fellowships | | 143,000 |
| | | | | | | | Training | | 6,000 |
| | | | | | | | Direct operations: | | |
| | | | | | | | Collaborative research and development. | 4 | +613,000 |
| | | | | | | | International research | 3 | 210,000 |
| | | | | | | | Computer research and technology | 16 | 411,000 |
| | | | | | | | Review and approval of grants | 4 | 135,000 |
| | | | | | | | Program direction | 1 | +15,506 |
| | | | | | | | Subtotal | 28 | 3,541,494 |
| | | | | | | | Total reductions | 28 | 2,980,494 |

See footnote at end of table.

HISTORY OF 1969 ESTIMATE—Continued

| Appropriation | 1968 appropriation[1] | 1969 | | | Department reduction from agency request | Budget Bureau reduction from Department submission | Explanation of difference | Positions | Amount |
|---|---|---|---|---|---|---|---|---|---|
| | | Estimate to Department | Department estimate to Budget Bureau | President's budget | | | | | |
| | (a) | (b) | (c) | (d) | (e) | (f) | | | |
| | | | | | | | BUREAU OF THE BUDGET REDUCTIONS | | |
| Grants for construction of health research facilities. | $35,000,000 | $50,000,000 | $50,000,000 | $8,400,000 | 0 | $41,600,000 | The reduction of $41,600,000 is offset by $12,208,000 carried over to 1969 as a result of the 1968 cost reduction program. The $12,208,000 when added to the $8,400,000 requested for 1969, will produce a program level of $20,608,000. | -------- | $41,600,000 |
| | | | | | | | DEPARTMENT REDUCTIONS | | |
| Mental health research and services. | 245,703,000 | 285,905,000 | 281,050,000 | 277,639,000 | $4,855,000 | 3,411,000 | Grants: | | |
| | | | | | | | Research: | | |
| | | | | | | | General research support | | +832,000 |
| | | | | | | | Training | | +1,700,000 |
| | | | | | | | Direct operations: | | |
| | | | | | | | Regional and field activities | | 6,217,000 |
| | | | | | | | Fort Worth and Lexington Clinical Centers. | -------- | 1,170,000 |
| | | | | | | | Subtotal | | 4,855,000 |
| | | | | | | | BUREAU OF THE BUDGET REDUCTIONS | | |
| | | | | | | | Grants: | | |
| | | | | | | | Research: | | |
| | | | | | | | Regular | | 1,325,000 |
| | | | | | | | Special programs: | | |
| | | | | | | | General research support | | +2,436,000 |
| | | | | | | | Training | | 3,090,000 |
| | | | | | | | Direct operations: | | |
| | | | | | | | Intramural research | | 308,000 |
| | | | | | | | Regional and field activities | | 462,000 |

| | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|
| | | | | | | | Fort Worth and Lexington Clinical Centers. | | 323,000 |
| | | | | | | | Other | | 339,000 |
| | | | | | | | Subtotal | | 3,411,000 |
| | | | | | | | Total reductions | | 8,266,000 |
| | | | | | | | DEPARTMENT REDUCTIONS | | |
| Community mental health resource support. | 100,168,000 | 115,555,000 | 135,354,000 | 87,300,000 | +19,799,000 | 48,054,000 | Construction of community mental health centers. | | +10,000,000 |
| | | | | | | | Staffing of community mental health centers. | | +9,799,000 |
| | | | | | | | Subtotal | | +19,799,000 |
| | | | | | | | BUREAU OF THE BUDGET REDUCTIONS | | |
| | | | | | | | Construction of community mental health centers. | | 45,000,000 |
| | | | | | | | Staffing of community mental health centers. | | 3,054,000 |
| | | | | | | | Subtotal | | 48,054,000 |
| | | | | | | | Total reductions | | 28,255,000 |
| | | | | | | | DEPARTMENT REDUCTIONS | | |
| St. Elizabeths Hospital, salaries and expenses. | 36,104,000 | 40,163,000 | 38,477,000 | 37,863,000 | 1,686,000 | 614,000 | Treatment, rehabilitation, and supportive activities. | 200 | 1,107,000 |
| | | | | | | | Increase in lapse | | 260,000 |
| Less reimbursements | 25,373,000 | 27,517,000 | 27,463,000 | 26,786,000 | +54,000 | +677,000 | Reduction in ADP needs, following survey. | | 125,000 |
| | | | | | | | Recruitment program cutback | | 29,000 |
| New obligational authority | 10,731,000 | 12,646,000 | 11,014,000 | 11,077,000 | 1,632,000 | +63,000 | Travel | | 11,000 |
| | | | | | | | Reprograming | | 154,000 |
| | | | | | | | Subtotal | 200 | 1,686,000 |
| | | | | | | | BUREAU OF THE BUDGET REDUCTIONS | | |
| | | | | | | | Treatment, rehabilitation, training, research, and supportive activities. | 162 | 614,000 |
| | | | | | | | Total reductions | 362 | 2,300,000 |

See footnote at end of table.

HISTORY OF 1969 ESTIMATE—Continued

| Appropriation | 1968 appropriation [1] | 1969 | | | Department reduction from agency request | Budget Bureau reduction from Department submission | Explanation of difference | Positions | Amount |
|---|---|---|---|---|---|---|---|---|---|
| | | Estimate to Department | Department estimate to Budget Bureau | President's budget | | | | | |
| | (a) | (b) | (c) | (d) | (e) | (f) | | | |
| | | | | | | | DEPARTMENT REDUCTIONS | | |
| St. Elizabeths Hospital, buildings and facilities. | $1,237,000 | $19,992,000 | $1,332,000 | $1,302,000 | $18,660,000 | $30,000 | Deferral of construction of Security Building. | | $11,397,000 |
| | | | | | | | Deferral of renovation of Medical and Surgical Building. | | 4,601,000 |
| | | | | | | | Deferral of residential treatment center for adolescents and children. | | 2,637,000 |
| | | | | | | | Deferral of planning funds for general maintenance and shops building. | | 25,000 |
| | | | | | | | Subtotal | | 18,660,000 |
| | | | | | | | BUREAU OF THE BUDGET REDUCTIONS | | |
| | | | | | | | Eliminates planning money for a training and research center pending National Institute of Mental Health development of an overall plan for the Hospital. | | 30,000 |
| | | | | | | | Total reductions | | 18,690,000 |
| | | | | | | | BUREAU OF THE BUDGET REDUCTIONS | | |
| National health statistics | 8,317,000 | 10,008,100 | 10,008,100 | 9,501,000 | 0 | 507,100 | Vital statistics: | | |
| | | | | | | | Family growth survey | | 87,000 |
| | | | | | | | Other areas | 8 | 87,000 |
| | | | | | | | Health interview statistics | 3 | 45,300 |
| | | | | | | | Health examination statistics | 3 | 37,200 |
| | | | | | | | Health resources statistics: | | |
| | | | | | | | Hospital discharge survey | 5 | 53,000 |
| | | | | | | | Comprehensive manpower statistics | 5 | 47,000 |
| | | | | | | | Other areas | 3 | 40,700 |
| | | | | | | | Health statistics analysis: | | |
| | | | | | | | Socioeconomic studies | 1 | 13,000 |

| | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|
| | | | | | | | Other areas | 1 | 7,600 |
| | | | | | | | Professional and technical assistance: | | |
| | | | | | | | Assistance to State vital and health statistics activities. | 3 | 80,000 |
| | | | | | | | Other areas | 1 | 9,300 |
| | | | | | | | Total reductions | 33 | 507,100 |
| | | | | | | | DEPARTMENT REDUCTIONS | | |
| National Library of Medicine | 21,674,000 | 32,324,400 | 29,112,400 | 19,172,000 | $3,212,000 | 9,940,400 | Grants: | | |
| | | | | | | | Construction | | 400,000 |
| | | | | | | | Special scientific projects | | 50,000 |
| | | | | | | | Research | | 900,000 |
| | | | | | | | Library resources | | 500,000 |
| | | | | | | | Direct operations: | | |
| | | | | | | | Library operations | | 1,110,000 |
| | | | | | | | National Medical Audiovisual Center | | 140,000 |
| | | | | | | | Review and approval of grants and contracts. | | 112,000 |
| | | | | | | | Subtotal | | 3,212,000 |
| | | | | | | | BUREAU OF THE BUDGET REDUCTIONS | | |
| | | | | | | | Grants: | | |
| | | | | | | | Construction | | 4,600,000 |
| | | | | | | | Publications support | | 300,000 |
| | | | | | | | Direct operations: | | |
| | | | | | | | Library operations | 77 | 3,807,400 |
| | | | | | | | Toxicology information | 26 | 501,300 |
| | | | | | | | National Medical Audiovisual Center | 40 | 451,900 |
| | | | | | | | Research and support contracts | | 73,000 |
| | | | | | | | Review and approval of grants and contracts. | 29 | 177,500 |
| | | | | | | | Program direction | 5 | 29,300 |
| | | | | | | | Subtotal | 177 | 9,940,400 |
| | | | | | | | Total reductions | 177 | 13,152,400 |
| Buildings and facilities: | | | | | | | | | |
| 1. Appalachian health field station. | 0 | 5,310,000 | 5,310,000 | 5,310,000 | 0 | 0 | | | |
| 2. Animal breeding and holding facility, CDC. | 0 | 536,000 | 236,000 | 236,000 | 300,000 | 0 | Department approved estimate for purchase of land and fencing but deferred funds required for planning and design for future construction. | | 300,000 |

See footnote at end of table.

| Appropriation | 1968 appropriation [1] | 1969 | | | Department reduction from agency request | Budget Bureau reduction from Department submission | Explanation of difference | Positions | Amount |
|---|---|---|---|---|---|---|---|---|---|
| | | Estimate to Department | Department estimate to Budget Bureau | President's budget | | | | | |
| | (a) | (b) | (c) | (d) | (e) | (f) | | | |
| Buildings and facilities—Continued | | | | | | | | | |
| 3. Northeast marine health sciences laboratory-equipment. | 0 | $210,000 | $210,000 | $210,000 | 0 | 0 | | | |
| 4. Northwest marine health sciences laboratory-equipment. | 0 | 170,000 | 170,000 | 170,000 | 0 | 0 | | | |
| 5. Repairs and improvements: Bureau of Disease Prevention and Environmental Control. | $1,352,000 | 2,297,000 | 2,297,000 | 1,747,000 | 0 | $550,000 | Bureau of the Budget allowance represents scaling down of five proposed projects. | | $550,000 |
| 6. Outpatient clinic, Cincinnati, Ohio—Planning. | 0 | 72,000 | 72,000 | 72,000 | 0 | 0 | | | |
| 7. Repairs and improvements: Bureau of Health Services. | 925,000 | 2,828,000 | 2,828,000 | 2,200,000 | 0 | 628,000 | Bureau of the Budget allowance represents scaling down of replacement of buildings service equipment. | | 628,000 |
| 8. Additional multilevel parking NIH. | 100,000 | 1,410,000 | 1,410,000 | 1,410,000 | 0 | 0 | | | |
| 9. Neurology-allergy virus research facility, NIH. | 0 | 484,000 | 484,000 | 484,000 | 0 | 0 | | | |
| 10. Repairs and improvements, NIH. | 500,000 | 1,348,000 | 1,348,000 | 606,000 | 0 | 742,000 | Bureau of the Budget allowance represents deferral of 8 projects. | | 742,000 |
| 11. Repairs and improvements, NLM. | 75,000 | 125,000 | 125,000 | 50,000 | 0 | 75,000 | Bureau of the Budget allowance provided for modification of lighting systems in main reading room, but did not allow for improvements to the audiovisual center at Atlanta. | | 75,000 |
| 12. NIH animal center | 120,000 | 4,772,000 | 4,772,000 | 0 | 0 | 4,772,000 | Bureau of the Budget deferred construction of phase II since working drawings would not be complete until the latter part of fiscal year 1969. | | 4,772,000 |
| 13. Master utilities extension, NIH. | 0 | 2,977,000 | 2,977,000 | 0 | 0 | 2,977,000 | Bureau of the Budget deferred construction due to postponement of construction of new facilities which would be served by these utilities. | | 2,977,000 |
| 14. Mental health child research facility. | 0 | 1,235,000 | 1,235,000 | 0 | 0 | 1,235,000 | Bureau of the Budget deferred construction consistent with a policy of stringent budget constraints. | | 1,235 000 |

| | | | | | | | | |
|---|---|---|---|---|---|---|---|---|
| 15. Modernization of PHS hospitals. | 0 | 9,420,000 | 9,420,000 | 0 | 0 | 9,420,000 | Original request of $9,420,000 for new construction and modernization of the Carville Hospital was reduced by Bureau of the Budget to $5,500,000 to provide only for costs of new construction. Rather than divide the construction project into two phases, the Public Health Service recommended deferral. | 9,420,000 |
| 16. National Library of Medicine Annex, planning. | 0 | 900,000 | 900,000 | 0 | 0 | 900,000 | Bureau of the Budget deferred planning funds in view of stringent budget policy. | 900,000 |
| 17. Headquarters building, PHS—planning. | 0 | 2,400,000 | 2,400,000 | 0 | 0 | 2,400,000 | Bureau of the Budget determined that this project should more appropriately be funded by GSA. | 2,400,000 |
| 18. Motor vehicle facility, Ann Arbor, Mich. | 0 | 400,000 | 0 | 0 | 400,000 | 0 | Department recommended deferral in view of marginal priority in the context of a stringent 1969 budget policy. | 400,000 |
| 19. Arctic health research laboratory, design phase II. | 0 | 240,000 | 0 | 0 | 240,000 | 0 | Department recommended deferral as an item of marginal priority. | 240,000 |
| 20. Southeast radiological health laboratory. | 0 | 238,000 | 0 | 0 | 238,000 | 0 | Department recommended deferral as an item of marginal priority. | 238,000 |
| 21. Environmental health sciences center. | 0 | 1,500,000 | 0 | 0 | 1,500,000 | 0 | Department recommended deferral of additional planning funds since funds already available should be sufficient for planning activities likely to be undertaken in 1969. | 1,500,000 |
| 22. Repairs and improvements, National Institute of Mental Health. | 990,000 | 0 | 0 | 0 | 0 | 0 | | |
| 23. Dental health center addition. | 2,558,000 | 0 | 0 | 0 | 0 | 0 | | |
| 24. Central air pollution facility. | 1,815,000 | 0 | 0 | 0 | 0 | 0 | | |
| 25. Combined service facility, NIH. | 200,000 | 0 | p | 0 | 0 | 0 | | |
| 26. NIH incinerator facility | 2,080,000 | 0 | 0 | 0 | 0 | 0 | | |
| Total, buildings and facilities. | 10,715,000 | 38,872,000 | 36,194,000 | $12,495,000 | 2,678,000 | 23,699,000 | Total | 26,377,000 |
| | | | | | | | DEPARTMENT REDUCTION | |
| Scientific activities overseas (special foreign currency program). | 15,000,000 | 46,365,000 | 30,000,000 | 30,000,000 | 16,365,000 | 0 | Foreign health research | 16,365,000 |
| Retired pay of commissioned officers (indefinite). | 13,800,000 | 15,090,000 | 15,090,000 | 15,090,000 | 0 | 0 | | |

See footnote at end of table.

HISTORY OF 1969 ESTIMATE—Continued

| Appropriation | 1968 appropriation [1] | 1969 | | | Department reduction from agency request | Budget Bureau reduction from Department submission | Explanation of difference | Positions | Amount |
|---|---|---|---|---|---|---|---|---|---|
| | | Estimate to Department | Department estimate to Budget Bureau | President's budget | | | | | |
| | (a) | (b) | (c) | (d) | (e) | (f) | | | |
| SOCIAL AND REHABILITATION SERVICE | | | | | | | | | |
| Grants to States for maintenance payments. | $2,984,758,000 | $3,051,900,000 | $3,051,900,000 | $3,051,900,000 | ---------- | | | | |
| Work incentive activities | 40,000,000 | 135,000,000 | 135,000,000 | 135,000,000 | ---------- | | | | |
| | | | | | | | BUREAU OF BUDGET REDUCTION | | |
| Grants to States for medical assistance. | 1,807,642,000 | 2,132,500,000 | 2,132,500,000 | 2,118,300,000 | ---------- | $14,200,000 | Bureau of Budget cut was applied to medical assistance for the aged not receiving money payments. It is assumed additional savings will be possible under the Social Security Amendments of 1967, which makes it fiscally advantageous for States to transfer individuals from nursing homes to less expensive intermediate care facilities (when individuals' conditions warrant such action). | -------- | $14,200,000 |
| Social services, administration, training, and demonstration projects. | 466,900,000 | 594,800,000 | 594,800,000 | 594,800,000 | ---------- | | | | |
| Assistance for repatriated U.S. nationals. | 525,000 | 545,000 | 545,000 | 545,000 | ---------- | | | | |
| | | | | | | | BUREAU OF BUDGET REDUCTION | | |
| Grants for rehabilitation services and facilities. | 312,790,000 | 389,000,000 | 389,000,000 | 375,490,000 | ---------- | 13,510,000 | Innovation of rehabilitation services—did not allow funds for 51 new project grants. | -------- | 800,000 |
| | | | | | | | Construction and initial staffing of rehabilitation facilities and workshops—did not allow request for 7 construction project grants. | -------- | 2,410,000 |
| | | | | | | | Expansion grants—did not allow request for 20 new expansion grants. | -------- | 4,300,000 |
| | | | | | | | Training service grants—did not allow request for 25 new project grants. | -------- | 1,000,000 |

| | | | | | | | | |
|---|---|---|---|---|---|---|---|---|
| | | | | | | | Workshop improvement grants—did not allow request for 36 new grants. | 2,500,000 |
| | | | | | | | Migratory agricultural workers—did not allow funds for 52 projects. | 2,500,000 |
| | | | | | | | Total, Bureau of the Budget reduction | 13,510,000 |
| | | | | | | | DEPARTMENT REDUCTION | |
| Mental retardation | 33,698,000 | 66,698,000 | 58,698,000 | 30,056,000 | 8,000,000 | $28,642,000 | Community service facilities: | |
| | | | | | | | Construction grants | 5,000,000 |
| | | | | | | | Initial staffing grants | 3,000,000 |
| | | | | | | | Total, Department reduction | 8,000,000 |
| | | | | | | | BUREAU OF BUDGET REDUCTION | |
| | | | | | | | Hospital improvement grants | 2,000,000 |
| | | | | | | | Community service facilities: | |
| | | | | | | | Construction grants | 19,000,000 |
| | | | | | | | Initial staffing grants | 4,242,000 |
| | | | | | | | Construction of university affiliated facilities. | 3,400,000 |
| | | | | | | | Total, Bureau of Budget reduction | 28,642,000 |
| | | | | | | | Total reduction | 36,642,000 |
| | | | | | | | DEPARTMENT REDUCTION | |
| Maternal and child health and welfare. | 235,600,000 | 365,500,000 | 320,500,000 | 297,500,000 | 45,000,000 | 23,000,000 | Child welfare grants to States | 45,000,000 |
| | | | | | | | BUREAU OF BUDGET REDUCTION | |
| | | | | | | | Maternal and child health and crippled children's services: | |
| | | | | | | | Grants to States | 10,000,000 |
| | | | | | | | Special project grants | 2,000,000 |
| | | | | | | | Research, training, and evaluation | 700,000 |
| | | | | | | | Subtotal, health | 12,700,000 |
| | | | | | | | Child welfare services: | |
| | | | | | | | Grants to States | 9,000,000 |
| | | | | | | | Research and training | 1,300,000 |
| | | | | | | | Subtotal, child welfare | 10,300,000 |

See footnote at end of table.

HISTORY OF 1969 ESTIMATE—Continued

| Appropriation | 1968 appropriation [1] | 1969 | | | Department reduction from agency request | Budget Bureau reduction from Department submission | Explanation of difference | Positions | Amount |
|---|---|---|---|---|---|---|---|---|---|
| | | Estimate to Department | Department estimate to Budget Bureau | President's budget | | | | | |
| | (a) | (b) | (c) | (d) | (e) | (f) | | | |
| | | | | | | | Total, Budget Bureau reductions | | $23,000,000 |
| | | | | | | | Total reduction | | 68,000,000 |
| Development of programs for the aging. | $16,950,000 | $26,000,000 | $26,000,000 | $26,000,000 | | | | | |
| | | | | | | | BUREAU OF BUDGET REDUCTION | | |
| Rehabilitation research and training. | 63,937,000 | 79,200,000 | 79,200,000 | 67,925,000 | | $11,275,000 | Research, reduced number of new projects by 71. | | 4,250,000 |
| | | | | | | | Training, reduced number of teaching grants by 122, traineeships by 2,215, and fellowships by 16 (maintains the 1968 level). | | 5,600,000 |
| | | | | | | | Special centers—reduced amount for the 19 centers. | | 1,425,000 |
| | | | | | | | Total, Bureau of Budget reduction. | | 11,275,000 |
| | | | | | | | BUREAU OF BUDGET REDUCTION | | |
| Cooperative research or demonstration projects. | 3,150,000 | 6,550,000 | 6,550,000 | 5,000,000 | | 1,550,000 | Reduction applied as follows: | | |
| | | | | | | | Reduced number of new research projects by 5 (maintains 1968 level). | | 200,000 |
| | | | | | | | Innovative demonstrations | | 600,000 |
| | | | | | | | Directed research | | 750,000 |
| | | | | | | | Total, Bureau of Budget reduction. | | 1,550,000 |
| | | | | | | | BUREAU OF BUDGET REDUCTION | | |
| Research and training (special foreign currency program). | 5,000,000 | 8,500,000 | 8,500,000 | 7,500,000 | | 1,000,000 | Reduced the number of new projects by 5. | | 1,000,000 |

| | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|
| | | | | | | | DEPARTMENT REDUCTION | | |
| Social and Rehabilitation Service, salaries, and expenses. | 24,738,000 | 29,941,000 | 29,241,000 | 27,800,000 | 700,000 | 1,441,000 | Reduction of 75 positions applied as follows: | | |
| | | | | | | | Rehabilitation | (8) | |
| | | | | | | | Mental retardation | (50) | |
| | | | | | | | Assistance payments | (7) | |
| | | | | | | | Maternal and child health and family and child welfare service. | (7) | |
| | | | | | | | Executive direction and program services. | (3) | |
| | | | | | | | Total, Department reduction | (75) | 700,000 |
| | | | | | | | BUREAU OF THE BUDGET REDUCTION | | |
| | | | | | | | Reduction of 92 positions was applied in the following activities: | | |
| | | | | | | | Rehabilitation | (33) | |
| | | | | | | | Mental retardation | (11) | |
| | | | | | | | Maternal and child health and family and child welfare services. | (15) | |
| | | | | | | | Aging services | (33) | |
| | | | | | | | Total, Bureau of Budget reduction. | (92) | 1,441,000 |
| | | | | | | | Total reduction | 167 | 2,141,000 |
| Transfer from trust funds | (336,000) | (348,000) | (348,000) | (348,000) | | | | | |
| Correctional rehabilitation study | 800,000 | | | | | | | | |
| Total, Social and Rehabilitation Service. | 5,996,488,000 | 6,886,134,000 | 6,832,434,000 | 6,737,816,000 | 53,700,000 | 94,618,000 | Total reduction, Social and Rehabilitation Service. | 167 | 148,318,000 |

See footnote at end of table.

HISTORY OF 1969 ESTIMATE—Continued

| Appropriation | 1968 appropriation [1] | 1969 | | | Department reduction from agency request | Budget Bureau reduction from Department submission | Explanation of difference | Positions | Amount |
|---|---|---|---|---|---|---|---|---|---|
| | | Estimate to Department | Department estimate to Budget Bureau | President's budget | | | | | |
| | (a) | (b) | (c) | (d) | (e) | (f) | | | |
| SOCIAL SECURITY ADMINISTRATION | | | | | | | BUREAU OF THE BUDGET REDUCTION | | |
| Limitation on salaries and expenses (trust fund). | $716,428,000 | $814,945,000 | $814,945,000 | $778,145,000 | ---------- | $36,800,000 | Reduction in postentitlement workload estimates; partial elimination of request to restore quality reviews in the OASDI program, and increases in productivity of health insurance intermediaries and SSA organizational components in the health insurance program. Manpower reduction of 1,106 man-years taken in budgeted overtime. | -------- | $11,800,000 |
| | | | | | | | Disallowance of requested increase in the contingency reserve. | -------- | 25,000,000 |
| | | | | | | | Total, Bureau of the Budget reduction. | -------- | 36,800,000 |
| | | | | | | | BUREAU OF THE BUDGET REDUCTION | | |
| Limitation on construction (trust fund). | 0 | 10,150,000 | 10,150,000 | 0 | 0 | 10,150,000 | Request for 30 additional district office buildings was disallowed. | -------- | 10,150,000 |
| | | | | | | | DEPARTMENT REDUCTION | | |
| Payments for military service credits. | 105,000,000 | 135,000,000 | 120,000,000 | 105,000,000 | 15,000,000 | 15,000,000 | Agency Request to recover one-third of deficit between prior year appropriations and actuarial estimate of $120,000,000 annual installment required was denied. | -------- | 15,000,000 |

| | | | | | | | | |
|---|---|---|---|---|---|---|---|---|
| | | | | | | | BUREAU OF THE BUDGET REDUCTION | |
| | | | | | | | Request to reinstate original actuarial estimate of $120,000,000 was denied. | 15,000,000 |
| Payment to trust funds for health insurance for the aged. | 1,279,659,000 | 1,360,227,000 | 1,360,227,000 | 1,360,227,000 | 0 | 0 | | |
| Payments to trust funds for benefits to certain noninsured persons. | | 225,545,000 | 225,545,000 | 225,545,000 | 0 | 0 | | |
| | | | | | | | Total reductions, Social Security Administration. | 76,950,000 |
| Total, Social Security Administration: | | | | | | | | |
| General funds | 1,384,659,000 | 1,720,772,000 | 1,705,772,000 | 1,690,772,000 | 15,000,000 | 15,000,000 | | |
| Trust funds | 716,428,000 | 825,095,000 | 825,095,000 | 778,145,000 | 0 | 46,950,000 | | |
| SPECIAL INSTITUTIONS | | | | | | | | |
| American Printing House for the Blind. | 1,225,000 | 1,372,500 | 1,372,500 | 1,340,000 | | 32,500 | Reduction of $1.57 per capita in costs per pupil. | 32,500 |
| National Technical Institute for the Deaf. | 2,615,000 | 1,105,000 | 1,105,000 | 800,000 | | 305,000 | Revision of schedule of site preparation and construction. | 305,000 |
| Model Secondary School for the Deaf: | | | | | | | | |
| Salaries and expenses | 425,000 | 492,000 | 492,000 | 400,000 | | 92,000 | Reduced because substantial portion of previous year's funds not yet expended. | 10 92,000 |
| Construction | 275,000 | 1,455,000 | 1,455,000 | 445,000 | | 1,010,000 | Site development and facility planning | 1,010,000 |
| Total | 700,000 | 1,947,000 | 1,947,000 | 845,000 | | 1,102,000 | | 10 1,102,000 |
| | | | | | | | BUREAU OF BUDGET REDUCTIONS | |
| Gallaudet College: | | | | | | | | |
| Salaries and expenses | 2,919,000 | 4,341,000 | 4,341,000 | 3,785,000 | 0 | 556,000 | Additional faculty and supporting staff, administrative and custodial staff. | 10 103,000 |
| | | | | | | | Commodities and services price increase estimate. | 32,000 |
| | | | | | | | Leave for faculty seeking doctorates (fellowships). | 155,000 |
| | | | | | | | Advisory council and faculty travel | 22,000 |
| | | | | | | | Faculty orientation program | 38,000 |
| | | | | | | | Microfilming for registrar and for business office equipment improvements. | 3,000 |
| | | | | | | | Kendall School improvements | 36,000 |
| | | | | | | | Library books, stacks, and periodicals | 12,000 |
| | | | | | | | Equipment improvements for the college, research, and the nursery school. | 112,000 |
| | | | | | | | Physical plant preventive maintenance | 43,000 |
| | | | | | | | Subtotal, salaries and expenses | - 10 556,000 |

See footnote at end of table.

| Appropriation | 1968 appropriation [1] | 1969 | | | Department reduction from agency request | Budget Bureau reduction from Department submission | Explanation of difference | Positions | Amount |
|---|---|---|---|---|---|---|---|---|---|
| | | Estimate to Department | Department estimate to Budget Bureau | President's budget | | | | | |
| | (a) | (b) | (c) | (d) | (e) | (f) | | | |
| | | | | | | | BUREAU OF BUDGET REDUCTIONS | | |
| Construction | $2,196,000 | $1,745,000 | $1,745,000 | $675,000 | 0 | $1,070,000 | Planning: | | |
| | | | | | | | Administrative and classroom building | | $90,000 |
| | | | | | | | Kendall School new construction | | 35,000 |
| | | | | | | | Construction: | | |
| | | | | | | | Library addition | | 585,000 |
| | | | | | | | Renovation of chapel hall | | 50,000 |
| | | | | | | | Kendall School conversion | | 10,000 |
| | | | | | | | Addition to the student union | | 300,000 |
| | | | | | | | Subtotal, construction | | 1,070,000 |
| Total, salaries and expenses and construction. | 5,115,000 | 6,086,000 | 6,086,000 | 4,460,000 | 0 | 1,626,000 | Total, Gallaudet College | 10 | 1,626,000 |
| | | | | | | | BUREAU OF BUDGET REDUCTIONS | | |
| Howard University: | | | | | | | | | |
| | | | | | | | Program increases for accommodation of increased enrollment and maintenance of quality instruction: | | |
| | | | | | | | Liberal Arts | | 103,199 |
| | | | | | | | Medicine | | 50,000 |
| | | | | | | | Dentistry | | 50 |
| | | | | | | | Staff Benefits | | 5,600 |
| Salaries and expenses | 15,534,000 | 18,632,000 | 18,632,000 | 18,330,000 | 0 | 302,000 | Activities in support of the instructional program: | | |
| | | | | | | | Computer center | 5 | 35,801 |
| | | | | | | | University libraries | 2 | 33,388 |
| | | | | | | | Operation and maintenance of physical plant | | 73,962 |
| | | | | | | | Total, Bureau of Budget reduction | 7 | 302,000 |
| | | | | | | | DEPARTMENT REDUCTIONS | | |
| Construction | 3,926,000 | 25,267,000 | 24,529,000 | 2,209,000 | 738,000 | 22,320,000 | Medical-Dental Library addition (construction) | | 400,000 |
| | | | | | | | Powerplant facilities electrical distribution (construction) | | 85,000 |
| | | | | | | | Women's dormitory No. 7 | | +376,000 |
| | | | | | | | Men's dormitory No. 4 | | 629,000 |

| | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|
| | | | | | | | Total, Department reduction | | 738,000 |
| | | | | | | | BUREAU OF BUDGET REDUCTION | | |
| | | | | | | | University hospital (construction) | | 21,970,000 |
| | | | | | | | Powerplant facilities electrical distribution (construction). | | 250,000 |
| | | | | | | | President's house | | 100,000 |
| | | | | | | | Total, Bureau of Budget reduction. | | 22,320,000 |
| Freedmen's Hospital | [1] 6,937,000 | 9,034,000 | 8,782,000 | 8,739,000 | 252,000 | 43,000 | Department deduction: | | |
| | | | | | | | Nursing staff | 25 | 115,000 |
| | | | | | | | Dietary staff | 6 | 27,000 |
| | | | | | | | Building and maintenance | 6 | 32,000 |
| | | | | | | | Subtotal | 37 | 174,000 |
| | | | | | | | Alterations: | | |
| | | | | | | | Parking lot lights | | 6,000 |
| | | | | | | | Sprinkler system in storage area | | 5,000 |
| | | | | | | | Provision of added storage area | | 12,000 |
| | | | | | | | Floor tile replacement | | 2,000 |
| | | | | | | | Secondary exit in medical records department. | | 2,000 |
| | | | | | | | Survey and plumbing for future use of annex. | | 30,000 |
| | | | | | | | Air conditioning of interns home and W Street building. | | 21,000 |
| | | | | | | | Subtotal | | 78,000 |
| | | | | | | | Total reduction by Department | 37 | 252,000 |
| | | | | | | | Budget Bureau reduction: | | |
| | | | | | | | Reduced allowance for disposables | | 28,000 |
| | | | | | | | Reduction of supplies for metabolic screening program. | | 15,000 |
| | | | | | | | Total reduction | | 43,000 |
| Total, Special Institutions | 36,052,000 | 64,443,500 | 62,453,500 | 36,723,000 | 1,990,000 | 25,730,500 | Total reduction, Special Institutions. | 121 | 27,720,500 |

See footnote at end of table.

| Appropriation | 1968 appropriation [1] | 1969 | | | Department reduction from agency request | Budget Bureau reduction from Department submission | Explanation of difference | Positions | Amount |
|---|---|---|---|---|---|---|---|---|---|
| | | Estimate to Department | Department estimate to Budget Bureau | President's budget | | | | | |
| | (a) | (b) | (c) | (d) | (e) | (f) | | | |
| OFFICE OF THE SECRETARY | | | | | | | BUREAU OF THE BUDGET REDUCTION | | |
| Salaries and expenses, Office of the Secretary. | $7,179,000 | $11,061,000 | $11,061,000 | $10,705,000 | 0 | $356,000 | Disallowed 27 new positions and related costs, Office of the Secretary: | | |
| Transfers from trust funds | (1,211,000) | (1,653,000) | (1,653,000) | (1,459,000) | 0 | (194,000) | Office of the Secretary | 1 | $17,000 |
| | | | | | | | Health and scientific affairs | 13 | 221,000 |
| | | | | | | | Planning and evaluation | 2 | 33,000 |
| | | | | | | | Legislation | 2 | 32,000 |
| | | | | | | | Special projects | | 65,000 |
| | | | | | | | Subtotal | 18 | 368,000 |
| | | | | | | | Office for Civil Rights | 9 | 182,000 |
| | | | | | | | Total, Bureau of the Budget reduction. | 27 | 550,000 |
| | | | | | | | BUREAU OF THE BUDGET REDUCTION | | |
| Salaries and expenses, Office of Field Coordination. | 2,161,000 | 3,262,000 | 3,262,000 | 2,908,000 | 0 | 354,000 | Disallowed 20 positions for establishing area HEW offices in critical locations; 3 positions connected with professionalization of personnel management in the field; 2 positions for increased public information workload; 22 positions for field secretarial and clerical workload increases; and 4 headquarters positions in support of field activities. | 51 | 810,000 |
| Transfers from trust funds | (1,815,000) | (2,835,000) | (2,835,000) | (2,379,000) | 0 | (456,000) | | | |
| | | | | | | | BUREAU OF THE BUDGET REDUCTION | | |
| Salaries and expenses, Office of the Comptroller. | 6,748,000 | 9,535,000 | 9,535,000 | 9,144,000 | 0 | 391,000 | Decrease of 7 positions in financial management. | 7 | 391,000 |
| Transfers from trust funds | (991,000) | (1,516,000) | (1,516,000) | (1,335,000) | 0 | (181,000) | Decrease of 24 positions in audit | 24 | 181,000 |
| | | | | | | | Total, Bureau of the Budget reduction. | 31 | 572,000 |

| | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|
| | | | | | | | BUREAU OF THE BUDGET REDUCTION | | |
| Salaries and expenses, Office of Administration. | 2,427,000 | 3,464,000 | 3,464,000 | 3,312,000 | 0 | 152,000 | Disallowed 17 new positions and related costs: | | |
| Transfers from trust funds -- | (271,000) | (368,000) | (368,000) | (352,000) | 0 | (16,000) | Personnel and training | 3 | 31,000 |
| | | | | | | | General services | 3 | 29,000 |
| | | | | | | | Executive office | 4 | 40,000 |
| | | | | | | | State merit systems | 7 | 68,000 |
| | | | | | | | Total, Bureau of the Budget reduction. | 17 | 168,000 |
| | | | | | | | BUREAU OF THE BUDGET REDUCTION | | |
| Surplus property utilization | 1,158,000 | 1,254,000 | 1,254,000 | 1,186,000 | 0 | 68,000 | Disallowed 4 positions for improved screening and 1 position for increased workload in real property. | 5 | 68,000 |
| | | | | | | | BUREAU OF THE BUDGET REDUCTION | | |
| Salaries and expenses, Office of the General Counsel. | 1,935,000 | 2,139,000 | 2,139,000 | 2,125,000 | 0 | 14,000 | Food and Drug Division | 1 | 14,000 |
| Transfers from trust funds | (1,373,000) | (1,375,000) | (1,375,000) | (1,375,000) | 0 | 0 | | | |
| | | | | | | | BUREAU OF THE BUDGET REDUCTION | | |
| Educational broadcasting facilities. | 133,000 | 13,487,000 | 13,487,000 | 13,087,000 | 0 | 400,000 | Reduction of $400,000 for a study of telecommunications needs in health and education. | ---- | 400,000 |
| Public broadcasting program | 4,000,000 | 20,000,000 | 20,000,000 | 20,000,000 | 0 | 0 | | | |
| Higher education for international understanding. | 0 | 30,918,000 | 30,918,000 | 10,820,000 | 0 | 20,098,000 | | | |
| | | | | | | | BUREAU OF THE BUDGET REDUCTION | | |
| | | | | | | | Grants for undergraduate programs in international studies. | ---- | 10,200,000 |
| | | | | | | | Grants for centers for advanced international studies. | ---- | 9,600,000 |
| | | | | | | | Center for International Studies | 15 | 298,000 |
| | | | | | | | Total, Bureau of the Budget reduction. | 15 | 20,098,000 |
| Total, Office of the Secretary | 25,741,000 | 95,120,000 | 95,120,000 | 73,287,000 | 0 | 21,833,000 | | | |
| Trust fund transfers | (5,661,000) | (7,747,000) | (7,747,000) | (6,900,000) | 0 | (847,000) | Total reduction | 147 | 22,680,000 |

[1] Includes proposed supplementals.

Note: Allowances for National Institutes of Health are made by the Office of the Secretary and the Bureau of the Budget on an activity basis, rather than by appropriation. National Institutes of Health distributes these allowances by appropriation and this results, on occasion, in increases as well as decreases, but does not represent specific Office of the Secretary or Bureau of the Budget actions. The National Institutes of Health overall activity summary, however, shows progressive decreases

SUBCOMMITTEE RECESS

Senator HILL. The subcommittee will stand in recess until 10 o'clock tomorrow morning.

(Whereupon, at 12:20 p.m., Monday, April 8, the subcommittee recessed, to reconvene at 10 a.m., Tuesday, April 9.)

# DEPARTMENTS OF LABOR, HEALTH, EDUCATION, AND WELFARE, AND RELATED AGENCIES APPROPRIATIONS FOR FISCAL YEAR 1969

TUESDAY, APRIL 9, 1968

U.S. SENATE,
SUBCOMMITTEE OF THE COMMITTEE ON APPROPRIATIONS,
*Washington, D.C.*

The subcommittee met at 10 a.m., in room 1224, New Senate Office Building, Hon. Lister Hill (chairman) presiding.

Present: Senators Hill and Cotton.

## DEPARTMENT OF HEALTH, EDUCATION, AND WELFARE

### FOOD AND DRUG ADMINISTRATION

**STATEMENT OF JAMES L. GODDARD, M.D., COMMISSIONER**
**ACCOMPANIED BY:**
**WINTON B. RANKIN, DEPUTY COMMISSIONER**
**E. RAYMOND LANNON, ASSISTANT COMMISSIONER FOR ADMINISTRATION**
**JOHN H. FINLATOR, DIRECTOR, BUREAU OF DRUG ABUSE CONTROL**
**E. PACKARD ANDERSON, DIRECTOR, DIVISION OF FINANCIAL MANAGEMENT**
**JAMES B. CARDWELL, DEPUTY ASSISTANT SECRETARY, BUDGET**

APPROPRIATION ESTIMATE

SALARIES AND EXPENSES

For necessary expenses not otherwise provided for, of the Food and Drug Administration, including reporting and illustrating the results of investigations; purchase of chemicals, apparatus, and scientific equipment; payment in advance for special tests and analyses and adverse reaction reporting by contract; payments of fees, travel, and per diem in connection with studies of new developments pertinent to food and drug enforcement operations; compensation of informers; not to exceed $45,000 for miscellaneous and emergency expenses of enforcement activities, to be authorized or approved by the Secretary and to be accounted for solely on his certificate; purchase of not to exceed [seventeen] *thirty* passenger motor vehicles for police-type use which may exceed by $300 each the general purchase price limitation for the current fiscal year; payment for publication of technical and informational materials in professional and trade journals; and rental of special purpose space in the District of Columbia or elsewhere; [$66,000,000] *$69,801.000.*

## Explanation of Language

The provision relating to the purchase of vehicles is necessary in order to permit FDA to exceed the statutory (5 U.S.C.A. 78a) cost limitations on thirty vehicles which are essential to FDA undercover work. This language is similar to authority granted to other Federal law enforcement agencies. Purchase of the requested autos will allow undercover agents to investigate and apprehend persons suspected of manufacturing and distributing dangerous drugs without revealing their identity through the use of recognizable police-type vehicles.

### AMOUNTS AVAILABLE FOR OBLIGATION

| | 1968 | 1969 |
|---|---|---|
| Appropriation | $66,000,000 | $69,801,000 |
| Transfer to "operating expenses, public buildings service," General Services Administration (space rental) | −67,000 | |
| Cut back from 1968 President's budget required by H.J. Res. 888 | −2,417,000 | |
| Total currently authorized for obligations | 63,516,000 | 69,801,000 |
| Plus proposed release of reserve for increased pay and postal costs | 2,109,000 | |
| Total available for obligation | 65,625,000 | 69,801,000 |
| Disposition of cut back: | | |
| Increased pay and postal costs | 2,109,000 | |
| To be returned to the Treasury | 308,000 | |
| Total cutback | 2,417,000 | |

### OBLIGATIONS BY ACTIVITY

| | 1968 estimate | | 1969 estimate | | Increase or decrease | |
|---|---|---|---|---|---|---|
| | Positions | Amount | Positions | Amount | Positions | Amount |
| Medical evaluation | 768 | $12,353,000 | 774 | $13,398,000 | +6 | +$1,045,000 |
| Scientific research and evaluation | 893 | 11,156,000 | 928 | 11,993,000 | +35 | +837,000 |
| Education and voluntary compliance | 106 | 1,329,000 | 128 | 1,831,000 | +22 | +502,000 |
| Regulatory compliance | 2,369 | 27,134,000 | 2,393 | 27,824,000 | +24 | +690,000 |
| Drug abuse control | 466 | 7,594,000 | 526 | 8,330,000 | +60 | +736,000 |
| Executive direction and administrative support | 499 | 6,059,000 | 512 | 6,425,000 | +13 | +366,000 |
| Total obligations | 5,101 | 65,625,000 | 5,261 | 69,801,000 | +160 | +4,176,000 |

### OBLIGATIONS BY OBJECT

| | 1968 estimate | 1969 estimate | Increase or decrease |
|---|---|---|---|
| Total number of permanent positions | 5,101 | 5,261 | +160 |
| Full-time equivalent of all other positions | 41 | 41 | |
| Average number of all employees | 4,597 | 4,746 | +149 |
| Personnel compensation: | | | |
| Permanent positions | $43,993,000 | $46,273,000 | +$2,280,000 |
| Positions other than permanent | 144,000 | 144,000 | |
| Other personnel compensation | 377,000 | 377,000 | |
| Total personnel compensation | 44,514,000 | 46,794,000 | +2,280,000 |
| Personnel benefits | 3,644,000 | 3,888,000 | +244,000 |
| Travel and transportation of persons | 2,033,000 | 2,122,000 | +89,000 |
| Payment to interagency motor pools | 643,000 | 665,000 | +22,000 |
| Transportation of things | 357,000 | 395,000 | +38,000 |
| Rent, communications, and utilities | 1,685,000 | 1,874,000 | +189,000 |
| Printing and reproduction | 561,000 | 567,000 | +6,000 |
| Other services | 6,876,000 | 7,793,000 | +917,000 |
| Services of other agencies | 506,000 | 506,000 | |
| Supplies and materials | 2,111,000 | 2,196,000 | +85,000 |
| Samples | 779,000 | 804,000 | +25,000 |
| Equipment | 1,792,000 | 2,073,000 | +281,000 |
| Lands and structures | 59,000 | 59,000 | |
| Insurance claims and indemnities | 20,000 | 20,000 | |
| Unvouchered | 45,000 | 45,000 | |
| Total obligations by object | 65,625,000 | 69,801,000 | +4,176,000 |

*Summary of changes*

| | |
|---|---|
| 1968 enacted | $66,000,000 |
| Transfer to "Operating expenses, Public Buildings Service," General Services Administration (space rental) | —67,000 |
| Cut back from 1968 President's budget required by H.J. Res. 888 | —2,417,000 |
| Plus proposed release of reserve for increased pay and postal costs | 2,109,000 |
| 1968 total estimated obligations | 65,625,000 |
| 1969 estimated obligations | 69,801,000 |
| Total change | +4,176,000 |

| | Base | | Change from base | |
|---|---|---|---|---|
| | Positions | Amount | Positions | Amount |
| Increases: | | | | |
| A. Built-in: | | | | |
| 1. Annualization of 173 new positions authorized in 1968 | | | | $803,000 |
| 2. 1 extra day of pay in 1969 | | | | 191,000 |
| 3. Annualization of 1968 pay act costs | | | | 660,000 |
| B. Programs: | | | | |
| 1. Medical evaluation | 768 | $12,353,000 | 6 | 1,341,000 |
| 2. Scientific research and evaluation | 893 | 11,156,000 | 35 | 755,000 |
| 3. Education and voluntary compliance | 106 | 1,329,000 | 22 | 481,000 |
| 4. Regulatory compliance | 2,369 | 27,134,000 | 24 | 227,000 |
| 5 Drug abuse control | 466 | 7,594,000 | 60 | 467,000 |
| 6. Executive direction and administrative support | 499 | 6,059,000 | 13 | 234,000 |
| Total program increases | | | 160 | 3,505,000 |
| Gross increase | | | 160 | 5,159,000 |
| Decreases: | | | | |
| A. Nonrecurring items of equipment, supplies and transportation costs | | | | —301,000 |
| B. Nonrecurring contracts | | | | —682,000 |
| Total decreases | | | | —983,000 |
| Total net changes requested | | | +160 | +4,176,00 |

## Explanation of Changes

### Increases

*Built-in*

1. An increase of 57 man-years and $803,000 is the additional cost in 1969 to support 173 positions authorized in 1968. This increase provides $661,000 for personnel compensation and benefits and $132,000 for other expenses.

2. An increase of $191,000 is to support the one extra day of pay (261) in 1969 for base General Schedule and Wage Board employees.

3. Annualization of the 1968 pay act costs $660,000 and provides funds for full-year costs of the Postal Revenue and Federal Salary Act of 1967.

*Medical evaluation*

A program increase of six positions and $1,341,000 is requested to strengthen intramural and extramural programs, including expansion of oral contraceptive research, adverse reaction reports from private physicians, and studies on same-name drug products available from more than one manufacturer.

*Scientific research and evaluation*

A program increase of 35 positions and related costs in the amount of $755,000 is requested to strengthen activities aimed at reducing the microbiological contamination in foods and to increase the capabilities of the National Center for Drug Analysis.

*Education and voluntary compliance*

A program increase of 22 positions and related costs of $481,000 is requested to initiate an industry self-certification program on food products and to publish and disseminate drug labeling information and to develop training programs and conferences in connection with food and drug programs.

*Regulatory compliance*

A program increase of 24 positions and related costs in the amount of $227,000 is requested to strengthen the drug plant inspection program, implement the industry self-certification program and reduce contamination in domestic and imported products.

*Drug abuse control*

A program increase of 60 positions and related costs in the amount of $467,000 is requested to expand the field investigation and records accountability programs, strengthen psychosociological research in drug abuse and provide additional training of investigational staff.

*Executive direction and administrative support*

An increase of 13 positions and related costs in the amount of $234,000 is requested to strengthen management and supporting staff services.

DECREASES

*Nonrecurring expenses relating to 1968 program*

An amount of $301,000 represents one-time equipment, supplies and transportation costs included in the 1968 program.

An amount of $682,000 represents the nonrecurring contracts and related costs with the National Academy of Sciences in evaluating the efficacy of drugs marketed before 1962, which will be completed in FY 1968.

EXPLANATION OF TRANSFERS

| | 1968 estimate | 1969 estimate | Purpose |
|---|---|---|---|
| Transfer to "Operating expenses, Public Buildings Service," General Services Administration | $67,000 | ---------- | Rental of space. |

MEDICAL EVALUATION

| | 1968 estimate | | 1969 estimate | | Increase or decrease | |
|---|---|---|---|---|---|---|
| | Positions | Amount | Positions | Amount | Positions | Amount |
| Personnel compensation and benefits | 768 | $8,033,000 | 774 | $8,510,000 | +6 | +$477,000 |
| Other expenses | | 4,320,000 | | 4,888,000 | | +568,000 |
| Total | 768 | 12,353,000 | 774 | 13,398,000 | +6 | +1,045,000 |
| Programs: | | | | | | |
| Drugs: | | | | | | |
| Availability | 420 | 5,954,000 | 425 | 6,201,000 | +5 | +247,000 |
| Hazards | 161 | 4,312,000 | 161 | 5,022,000 | | +710,000 |
| Abuse | 5 | 60,000 | 7 | 78,000 | +2 | +18,000 |
| Veterinary | 130 | 1,405,000 | 130 | 1,447,000 | | +42,000 |
| Foods: Microbiological and chemical contamination | 21 | 257,000 | 20 | 270,000 | −1 | +13,000 |
| Cosmetics | 6 | 81,000 | 6 | 84,000 | | +3,000 |
| Devices | 13 | 144,000 | 13 | 150,000 | | +6,000 |
| Hazardous substances | 12 | 140,000 | 12 | 146,000 | | +6,000 |
| Total | 768 | 12,353,000 | 774 | 13,398,000 | +6 | +1,045,000 |

INTRODUCTION

This activity encompasses the components of FDA that are directly concerned with the evaluation of the safety and efficacy of drugs and devices; substances in foods, drugs, and cosmetics; household substances; New Drug Applications (NDAs) and claims for exemption of Investigational New Drugs (INDs); and other responsibilities described in this narrative. The activity consists entirely of programs within the Bureau of Medicine and the Bureau of Veterinary Medicine. Responsibility for the medical evaluation of FDA-regulated products designed for direct human consumption resides in the Bureau of Medicine; the Bureau of Veterinary Medicine is responsible for drugs and drugs in feeds for animals. A fractional part of the Bureau of Medicine's resources (less than five percent) is devoted to other programs, such as the surveillance of hazardous substances, therapeutic devices, and cosmetics.

RESOURCES BY ORGANIZATION

| | 1968 estimate | | 1969 estimate | | Increase or decrease | |
|---|---|---|---|---|---|---|
| | Positions | Amount | Positions | Amount | Positions | Amount |
| Bureau of Medicine | 621 | $10,731,000 | 627 | $11,732,000 | +6 | +$1,001,000 |
| Bureau of Veterinary Medicine | 147 | 1,622,000 | 147 | 1,666,000 | ..... | +44,000 |
| Total | 768 | 12,353,000 | 774 | 13,398,000 | +6 | +1,045,000 |
| Availability of drugs | 420 | 5,954,000 | 425 | 6,201,000 | +5 | +247,000 |

One of the major objectives in this activity is to insure the safety and efficacy of drugs, and this is accomplished in part by premarket clearance of IND's and NDA's.

Before initiating clinical investigations of new drugs, manufacturers must claim exemption from the ban on interstate distribution of all unapproved new drugs, so that they can send drugs to clinical investigators for testing. This exemption claim, commonly referred to as an IND, is actually an investigational plan. Since clinical tests on humans may begin as soon as receipt of the IND is acknowledged by FDA, prompt review of the IND is essential to ensure that the tests proposed are safe. In addition to this initial review, the two bureaus review IND amendments and progress reports and maintain surveillance over IND's until investigations are completed or terminated. FDA may recommend that testing be halted until additional proof of a drug's safety is furnished by the investigator or by the manufacturer.

When these clinical trials are completed, manufacturers may submit an NDA proposing that a drug be approved for sale to the general public, either in prescription or over-the-counter form. At this point, the NDA is reviewed to verify that the drug is safe and effective and the proposed labeling is accurate. Approval of the NDA authorizes commercial distribution of the drug. The function of evaluating IND's and NDA's is included under the program of "Drug Availability" in this budget.

By June 1967, FDA had completely eliminated the backlog of NDA's that had exceeded the 180-day action time limit. The impact of the National Academy of Sciences/National Research Council (NAS/NRC) review of drugs marketed from 1938 through 1962 will reach the Bureau of Medicine late in 1968 and will continue in 1969. This review will increase the number of IND's, NDA's and NDA Supplement to be reviewed. Until the results of these early NAS/NRC studies became available FDA anticipated that it would be able to reduce the IND–NDA supplement backlog in 1969. The additional $247,000 requested will provide for: the annualization of the 1968 position increase; the annualization of the pay increase effected by the passage of the Postal Revenue and Federal Salary Act of 1967; and support the five new positions required to process the increased workload shown below:

SELECTED WORKLOAD

| | 1967 actual | 1968 estimate | 1969 estimate |
|---|---|---|---|
| 1. Investigational new drugs—IND's: IND's completely reviewed | 671 | 700 | 850 |
| 2. New drug applications—NDA's: NDA action completed | 500 | 600 | 620 |
| 3. New drug application supplements: | | | |
| NDA supplement action completed | 1,100 | 1,100 | 1,200 |
| Supplements approved | 212 | 300 | 350 |

The number of NDAs approved and the concomitant number of new drugs marketable has increased from 35 in 1965 to 83 in 1967 and is estimated at 100 per year in 1968 and 1969.

| | 1968 estimate | | 1969 estimate | | Increase or decrease | |
|---|---|---|---|---|---|---|
| | Positions | Amount | Positions | Amount | Positions | Amount |
| Drug hazards | 161 | $4,312,000 | 161 | $5,022,000 | ..... | +$710,000 |

FDA maintains surveillance of marketed drugs to insure that no unforeseen harmful side effects appear in users after drugs are cleared for general use. This surveillance program is multi-faceted: it includes adverse-reaction reports from hospitals and, in 1969, from private physicians; a constant influx of records and reports from drug manufacturers on any side effects that have been reported to them; epidemiology studies to detect any correlations between illnesses and drug usage; and drug research studies on both animals and humans.

An increase of $710,000 in 1969 will be devoted to expanding a program of extramural medical-scientific research. Of that amount, $36,000 will provide for the annualization of the pay increase effected by the passage of the Postal Revenue and Federal Salary Act of 1967. The balance of $674,000 will be used for three important projects: $274,000 for additional clinical studies (long-range and short-term) of the possible side effects of oral contraceptives; $100,000 more for epidemiological studies and the adverse-reactions reporting network; and $300,000 to begin research into the biologic equivalency of same generic name drug products available from more than one manufacturer. This research is a prerequisite to the development of equivalency standards for the resolution of the problem of generic versus brand-name drugs. Biologic equivalency involves the degree to which preparations from different manufacturers with the same basic ingredient exhibit the same therapeutic effect when administered in the same dosage form under the same route and conditions.

| | 1968 estimate | | 1969 estimate | | Increase or decrease | |
|---|---|---|---|---|---|---|
| | Positions | Amount | Positions | Amount | Positions | Amount |
| Drug abuse | 5 | $60,000 | 7 | $78,000 | +2 | +$18,000 |

The Bureau of Medicine is called upon to assist the Bureau of Drug Abuse Control in determining the effect of psychotoxic drugs on human behavior. The Bureau conducts medical investigations of the causes and circumstances of drug dependence resulting from over-use of certain prescription drugs, such as amphetamines and barbiturates. Two additional positions and $18,000 are requested in 1969 to permit expansion of this program.

| | 1968 Estimate | | 1969 Estimate | | Increase or decrease | |
|---|---|---|---|---|---|---|
| | Positions | Amount | Positions | Amount | Positions | Amount |
| Veterinary drugs | 130 | $1,405,000 | 130 | $1,447,000 | ..... | +$42,000 |

FDA's objective is to insure that drugs for animals are safe, effective, and properly labeled. Veterinary products must meet those standards if food derived from treated animals is to be safe and wholesome.

FDA's major problem in this area today is the increasing use of both veterinary drugs and medicated feeds in animals eventually destined for human consumption. A survey now being conducted by the National Academy of Sciences on antibiotics in meat and milk products should constitute a basis for more intensive regulatory efforts in this area. However, the basic need is for (1) an increased research capability in FDA itself that will permit the identification of residue potential and (2) for more effective surveillance of residues actually prevailing now.

FDA has notified the veterinary-drug industry that NDAs must be submitted on all the drugs fomerly classified as "Generally Regarded As Safe" for which NDAs had never been required before. Recent evidence indicates that some of these drugs are not as safe as originally presumed. In 1969, workload volume is expected to increase over 1968. However, since the efficacy of all the drugs in question will already have been determined in connection with the NAS/NRC review, the time needed to evaluate these NDAs will not be as long as that for the customary NDA. Consequently, the Bureau proposed to handle the workload increase with its existing resources. An increase of $42,000 will provide for annualization costs of the 1968 program.

SELECTED WORKLOAD

| | 1967 actual | 1968 estimate | 1969 estimate |
|---|---|---|---|
| 1. Review of medicated feed applications: | | | |
| Medicated feed applications reviewed | 6,186 | 6,800 | 8,500 |
| Medicated feed applications approved for marketing | 2,989 | 4,230 | 5,200 |
| 2. New drug applications (NDA's): | | | |
| NDA's reviewed, action completed | 171 | 125 | 1,000 |
| NDA's approved for marketing | 16 | 50 | 400 |
| 3. New drug application supplements: | | | |
| NDA supplement actions | 699 | 700 | 1,200 |
| Supplements approved | 134 | 200 | 600 |
| 4. Veterinary investigational drugs (VID's): Original and supplemental submissions | 1,204 | 1,285 | 1,800 |

## Other Programs

The microbiological and chemical contamination program will be reduced by one position and the position reprogrammed into the availability of drugs program. Minor monetary increases as shown on the table introducing this activity are due to annualization costs of the 1968 programs: No program increases are requested.

SCIENTIFIC RESEARCH AND EVALUATION

| | 1968 estimate | | 1969 estimate | | Increase or decrease | |
|---|---|---|---|---|---|---|
| | Positions | Amount | Positions | Amount | Positions | Amount |
| Personnel compensation and benefits | 893 | $8,421,000 | 928 | $8,914,000 | +35 | +$493,000 |
| Other expenses | | 2,735,000 | | 3,079,000 | | +344,000 |
| Total | 893 | 11,156,000 | 928 | 11,993,000 | +35 | +837,000 |
| Programs: | | | | | | |
| Foods: | | | | | | |
| Microbiological contamination | 88 | 1,035,000 | 115 | 1,545,000 | +27 | +510,000 |
| Chemical contamination | 481 | 5,686,000 | 481 | 5,759,000 | | +73,000 |
| Economic | 76 | 926,000 | 76 | 1,009,000 | | +83,000 |
| Drugs: | | | | | | |
| Availability | 6 | 91,000 | 6 | 91,000 | | |
| Hazards | 162 | 2,458,000 | 170 | 2,627,000 | +8 | +169,000 |
| Abuse | 25 | 265,000 | 25 | 266,000 | | +1,000 |
| Cosmetics | 42 | 521,000 | 42 | 522,000 | | +1,000 |
| Hazardous substances | 13 | 174,000 | 13 | 174,000 | | |
| Total | 893 | 11,156,000 | 928 | 11,993,000 | +35 | +837,00 |

## Introduction

This activity includes the Bureau of Science, which is FDA's scientific research and evaluation arm; the Office of the Associate Commissioner for Science, which is responsible for the coordination of research programs within the Agency and with those of other agencies; and the science information program. Program increases in this area in 1969 center around the support of FDA's regulatory functions. Additional resources will be employed to keep pace with growing regulatory demands for more sample analyses, more scientific data, and more laboratory methods.

RESOURCES BY ORGANIZATION

| | 1968 estimate | | 1969 estimate | | Increase or decrease | |
|---|---|---|---|---|---|---|
| | Positions | Amount | Positions | Amount | Positions | Amount |
| Bureau of Science | 858 | $10,735,000 | 891 | $11,546,000 | +33 | +$811,000 |
| Associate Commissioner for Science | 35 | 421,000 | 37 | 447,000 | +2 | +26,000 |
| Total | 893 | 11,156,000 | 928 | 11,993,000 | +35 | +837,000 |
| Microbiological contamination of foods | 88 | 1,035,000 | 115 | 1,545,000 | +27 | +510,000 |

One of FDA's highest priorities in 1969 is a stepped-up offensive against the poor manufacturing practices that lead to bacterial contamination in food. One of the offshoots of this campaign will be a ten to twenty percent increase in the number of samples collected for microbiological analysis. Once the industry self-certification program described on page 29 is operative, even more samples will be collected: the Bureau of Science predicts a total workload of about 15,000 samples a year by 1972.

At the present time, however, the 79 microbiologists in the 17 Districts cannot handle more than 8,000 samples a year at the most. Last year, in fact, about 2,500 overflow samples were sent to Washington for analysis by headquarters microbiologists who must take time from more complex projects to perform this relatively routine work. This situation must be corrected. Since it is becoming more and more difficult to recruit microbiologists, the only way to handle this swelling workload is to devise a different way of analyzing samples.

FDA believes that the most efficient way to analyze samples is to abandon its historical policy of using professional bacteriologists for all of this work and substitute the use of analytical teams in a centralized facility. A team of one bacteriologist and several technicians will probably be able to analyze as many as 1,200 samples a year, with the technicians performing the routine work while the bacteriologist supervises his team and testifies in court cases. With an additional 21 positions and $427,000, including $110,000 for analytical equipment, FDA proposes to establish a centralized microbiological facility as an adjunct to one of its field laboratories. Studies are under way now to determine the best site. Once the facility is operative, Districts may be able to release some of their microbiologist positions, and a certain number of these positions can then be transferred to the central facility. It is likely that some microbiologists (GS–11 and above) can be replaced by technicians (GS–7 and below). Eventually, all food samples requiring microbiological examination will be processed outside of headquarters. The headquarters scientists will then be able to devote their full time and attention to more sophisticated research and evaluation projects, and at the same time the overall cost to FDA for sample analyses will be reduced.

The Bureau of Science will play a key role in the new self-certification program for industry because scientific judgments are essential to the development of guidelines for sound manufacturing procedures. With an additional four positions and $55,000, the Bureau can assist in the promulgation of standards that can be used by a firm that has qualified to certify its own products. Included in this request is a proposed contract to conduct an ecological survey on viruses.

All of FDA's programs in this area hinge upon the availability of pertinent data to assist Agency scientists in their work. An additional 2 positions and $26,000 are needed to put badly-needed microbiological data in more accessible form for use in scientific research and in regulatory investigations. These positions and funds will be incorporated into the Agency's science-information system.

| | 1968 estimate | | 1969 estimate | | Increase or decrease | |
|---|---|---|---|---|---|---|
| | Positions | Amount | Positions | Amount | Positions | Amount |
| Chemical contamination of foods | 481 | $5,686,000 | 481 | $5,759,000 | ..... | +$73,000 |

Pesticides and natural poisons continue to be potentially the most dangerous chemical contaminants in our food supply. As pesticides become more complex and more potent, what we know about them proves to be merely a foundation for what we have to learn. The trend in pesticide use has led away from inorganic chemicals, which were stable and relatively easy to identify. It has swung to organic chemicals, which are more toxic and more likely to change to different forms by combination with other chemicals or by decomposing under the influence of sunlight, weathering, and even the body's metabolism. Some of them are not rapidly disposed of in the metabolic process, so that they tend to remain active for a long time in the tissues of plants, animals, and humans.

All of this means that FDA must continue its research in many different areas: new chemicals entering the marketplace, residues formed by a degradation of chemicals, the inter-action of pesticides with environmental factors such as pollutants and even drugs, the changes in chemicals in different raw agricultural products, and the long-term toxic effects of small amounts of chemicals in contrast to the immediate poisoning effects of heavy dosages.

At the same time, FDA will continue its study of other chemical contaminants: the various food additives which enter the nation's food supply deliberately, such as preservatives, flavors, colors, and those that enter incidentally, such as from packaging materials and chemicals used to process and prepare raw materials. There are no program increases proposed in this area. The increase of $73,000 reflects the annualization of FY 1968 positions.

| | 1968 estimate | | 1969 estimate | | Increase or decrease | |
|---|---|---|---|---|---|---|
| | Positions | Amount | Positions | Amount | Positions | Amount |
| Economic problems in foods | 76 | $926,000 | 76 | $1,009,000 | ---- | $+83,000 |

There are a number of foods on the market today that should be "standardized" so that the consumer can have confidence in their quality and composition, as well as the amount within the container. The importance of this program lies in the fact that delays in implementing food standards too often permit a gradual deterioration in product quality. Once the deterioration has taken place, with consequent public acceptance, it is extremely difficult to restore standards to a higher level. The agency requests $81,000 to conduct a consumer survey on attitudes toward frozen vegetables. The survey will tell FDA for example, just what the consumer expects in terms of kind and proportions of mixed vegetables. The survey will also provide information needed to define and support proposals to be made by FDA for new food standards or revisions of existing standards.

FOOD STANDARDS REGULATIONS PUBLISHED

| | 1967 actual | 1968 estimate | 1969 estimate |
|---|---|---|---|
| Total Federal Register publications | 88 | 45 | 45 |

As FDA takes the initiative in proposing food standards, it also needs to perform the necessary supporting work. When industry proposed all of the food standards and performed the back-up work for them, FDA was able to process more submissions. Now, however, data must be collected, analyzed, and verified by FDA scientists before a new standard can be offered. Some FDA-initiated standards often take longer than two years to process in order to cover several growing seasons.

The remaining increase of $2,000 is due to annualization of 1968 programs.

| | 1968 estimate | | 1969 estimate | | Increase or decrease | |
|---|---|---|---|---|---|---|
| | Positions | Amount | Positions | Amount | Positions | Amount |
| Drug hazards | 162 | $2,458,000 | 170 | $2,627,000 | +8 | +$169,000 |

FDA has established a National Center for Drug Analysis in the field to handle many of the drug samples collected in the various Districts. This center will provide for the rapid, accurate analysis of larger numbers and different types of drug samples taken directly from the marketplace. Furthermore, complex drugs which require more sophisticated analysis can be handled at this center rather than at headquarters, where scientists must be drawn from important research and evaluation projects. FDA anticipates that eventually more than 100,000 drug samples will be analyzed at the new facility every year. The key to the success of this facility is automation, which will increase FDA's analytical output without a large increase in cost. Four additional positions and $48,000 are requested to develop methods of drug analysis that can be automated.

Recently there has been an increase in the production and use of radio-pharmaceuticals in both the diagnosis and treatment of disease. A radio-pharmaceutical is a radioactive material that is used as a drug. One use for such a drug, for

example, is in the diagnosis and control of thyroid malfunctions. When the drug is impure, the impurities may go to other organs with consequent undesired or even fatal effects. Experience at the National Institutes of Health in the assay of such drugs has revealed unacceptable deviations from specifications in about 20 percent of the lots tested in 1962 and 30 percent in 1966. To minimize this potential hazard to the dispenser and to the patient, better manufacturing practices are necessary to guarantee the purity of these drugs. With two positions and $89,000, including $50,000 for the purchase of special equipment, FDA plans to conduct studies that will lead to reliable methods for detecting impure radiopharmaceuticals. Another two positions and $29,000 are required for special studies of drugs to ascertain their physical and microchemical characteristics and to determine the generic equivalency. This increase includes $5,000 for the purchase of new equipment. The remaining $3,000 increase is a result of the annualization of 1968 programs.

### Other Programs

Minor increases in programs shown on table introducing this activity are due to annualization costs of 1968 programs. No program increases are requested.

EDUCATION AND VOLUNTARY COMPLIANCE

| | 1968 estimate | | 1969 estimate | | Increase or decrease | |
|---|---|---|---|---|---|---|
| | Positions | Amount | Positions | Amount | Positions | Amount |
| Personnel compensation and benefits | 106 | $1,103,000 | 128 | $1,291,000 | +22 | +$188,000 |
| Other expenses | | 226,000 | | 540,000 | | +314,000 |
| Total | 106 | 1,329,000 | 128 | 1,831,000 | +22 | +502,000 |
| Programs: | | | | | | |
| Foods: | | | | | | |
| Microbiological contamination | 19 | 193,000 | 36 | 346,000 | +17 | +153,000 |
| Chemical contamination | 23 | 269,000 | 23 | 270,000 | | +1,000 |
| Sanitation | 5 | 50,000 | 5 | 51,000 | | +1,000 |
| Economic | 6 | 86,000 | 6 | 86,000 | | |
| Drugs: | | | | | | |
| Hazards | 22 | 379,000 | 32 | 778,000 | +10 | +399,000 |
| Abuse | 8 | 65,000 | 5 | 48,000 | −3 | −17,000 |
| Veterinary | 5 | 73,000 | 3 | 38,000 | −2 | −35,000 |
| Cosmetics, devices, and hazardous substances | 18 | 214,000 | 18 | 214,000 | | |
| Total | 106 | 1,329,000 | 128 | 1,831,000 | +22 | +502,000 |

### Introduction

This activity comprises the Agency's educational and informational programs, which are designed to tell both industry and the public about FDA's role and about the products that come under FDA's jurisdiction. The Assistant Commissioner for Education and Information (ACEI) has the responsibility to reach the general public, while the Bureau of Voluntary Compliance (BVC) directs its efforts toward industry compliance, with an emphasis on urging businesses toward greater self-regulation by helping them establish or improve their own internal quality control procedures to make their products better and safer.

RESOURCES BY ORGANIZATION

| | 1968 estimate | | 1969 estimate | | Increase or decrease | |
|---|---|---|---|---|---|---|
| | Positions | Amount | Positions | Amount | Positions | Amount |
| Bureau of Voluntary Compliance | 64 | $613,000 | 83 | $816,000 | $19 | +$203,000 |
| Assistant Commissioner for Education and Information | 42 | 716,000 | 45 | 1,015,000 | +3 | +299,000 |
| Total | 106 | 1,329,000 | 128 | 1,831,000 | +22 | +502,000 |
| Microbiological contamination of foods | 19 | 193,000 | 36 | 346,000 | 17 | 153,000 |

Contaminated food can be fatal, and the toll it takes, we believe, is systematically under-reported. In many instances it is a contributing cause in death although the primary cause is reported as something else. Microbiological contamination is becoming more and more difficult for the consumer to detect, because modern food-processing methods can disguise some of the commonly-known warning signs.

Ironically, however, the solution to this serious health problem is a relatively simple one, because most cases of microbiological contamination occur as a result of poor food handling. All too often food is exposed to bacteria and other sources of contamination by the time it reaches the consumer's table. To eliminate Salmonellosis and other food-borne illnesses, industry must follow basic good manufacturing practices in the various production and marketing phases. There are several ways to help industry improve its food-handling and production procedures.

FDA has found that one of the most effective methods is to take an educational program directly to industry personnel concerned with quality control and manufacturing procedures. Workshops and conferences are held to discuss the relationship between insanitary conditions and microbiological contamination, and quality control procedures and sanitary precautions to prevent these conditions are presented as means of eliminating these health hazards. An additional three positions and $15,000 will enable FDA to increase the number of District workshops on these subjects. The table below indicates workload figures in this area.

| | Fiscal year 1967 actual | Fiscal year 1968 estimate | Fiscal year 1969 estimate |
|---|---|---|---|
| Conferences | 18 | 54 | 62 |
| Participating firms | 1,000 | 1,700 | 2,200 |
| Industry representation | 2,874 | 3,900 | 5,100 |

Another way of improving food handling is to see to it that industry operating employees understand and adhere to the proper procedures for keeping food safe. With an additional four positions and $47,000, FDA can develop materials in support of an expanded program for in-plant training of industry personnel. This increase will enable FDA to establish 15 more training courses, which will reach 375 representatives of 74 firms.

A third way FDA can help industry assure the quality of its products is by going directly to an individual firm on a consulting basis to help it implement a comprehensive quality-assurance program. In 1969 FDA plans to qualify an estimated 100 firms into the self-certification program. To qualify for this program, a firm must have demonstrated to FDA the potential effectiveness of its own quality-assurance procedures.

An additional 10 positions and $91,000 will be used to work with industry in order to assist them in improving their own manufacturing practices and product-sampling so that they can qualify for self-certification. If this program indicates that industry is able to reduce the incidence of microbiological contamination through self-regulation, the net effect will be a significant lessening of a major potential hazard to the nation's health and a reduction in the number of inspections and sample analyses that FDA has to make to insure that food is not being contaminated before it reaches the home.

| | 1968 estimate | | 1969 estimate | | Increase or decrease | |
|---|---|---|---|---|---|---|
| | Positions | Amount | Positions | Amount | Positions | Amount |
| Drug hazards | 22 | $379,000 | 32 | $778,000 | +10 | +$399,000 |

The problem of quality and production control is far more critical in the drug industry than in the food industry; improper handling of drugs can be fatal when it leads to incorrect dosage amounts, label mix-ups, or cross-contamination. Here again, education and training in the area of quality assurance will undoubtedly reduce the frequency of these errors. Drug firms lose a great deal of money and prestige when they are forced to recall their products; consequently,

most are willing to cooperate in programs that will familiarize them with FDA's standards for good manufacturing practices. With an additional seven positions and $105,000, BVC can coordinate conferences, seminars, and workshops throughout the country and can support in-plant training and advisory activities and the new intensified program for over 250 prescription-drug firms in 1969.

A Drug Labeling Compendium is now being developed as a new tool for FDA's regulatory efforts. The Compendium will provide the Agency's field units with current drug labeling information that was never available in the past. Furthermore, FDA will be honoring a commitment to disseminate approved labeling information more widely by making the Compendium available to other Federal and State agencies and to international health organizations. An additional three positions and $294,000 are required to continue the development, publication, and distribution of this valuable reference work.

| | 1968 estimate | | 1969 estimate | | Increase or decrease | |
|---|---|---|---|---|---|---|
| | Positions | Amount | Positions | Amount | Positions | Amount |
| Other programs | 65 | $757,000 | 60 | $707,000 | −5 | −$50,000 |

The expansion of the microbiological contamination program in BVC will be financed in part by diverting resources from other program areas in this budget activity—the drug abuse and veterinary drug areas. By 1969, FDA will have established initial contact with almost all of the firms producing psychotoxic drugs and will not need to devote as much effort to providing them with information as it has in the first few years of the drug abuse control program. By the same token, BVC can curtail a portion of its veterinary drug program because State and local authorities will be assuming more responsibility in the area of medicated feeds.

Other programs shown on the table on page 23 remain either at the same level in 1969 or receive only minor increases for mandatory items.

REGULATORY COMPLIANCE

| | 1968 estimate | | 1969 estimate | | Increase or decrease | |
|---|---|---|---|---|---|---|
| | Positions | Amount | Positions | Amount | Positions | Amount |
| Personnel compensation and benefits | 2,369 | $21,812,000 | 2,393 | $22,401,000 | +24 | +$589,000 |
| Other expenses | | 5,322,000 | | 5,423,000 | | +101,000 |
| Total | 2,369 | 27,134,000 | 2,393 | 27,824,000 | +24 | +690,000 |
| PROGRAMS | | | | | | |
| Foods: | | | | | | |
| Microbiological contamination | 442 | 5,237,000 | 478 | 5,772,000 | +36 | +535,000 |
| Chemical contamination | 308 | 3,503,000 | 245 | 2,819,000 | −63 | −684,000 |
| Sanitation | 325 | 3,744,000 | 311 | 3,624,000 | −14 | −120,000 |
| Economic | 66 | 758,000 | 69 | 801,000 | +3 | +43,000 |
| Drugs: | | | | | | |
| Hazards | 950 | 10,718,000 | 1,012 | 11,599,000 | +62 | +881,000 |
| Abuse | 42 | 523,000 | 42 | 529,000 | | +6,000 |
| Veterinary | 102 | 1,149,000 | 102 | 1,161,000 | | +12,000 |
| Cosmetics | 15 | 167,000 | 15 | 169,000 | | +2,000 |
| Devices | 53 | 596,000 | 53 | 603,000 | | +7,000 |
| Hazardous substances | 66 | 739,000 | 66 | 747,000 | | +8,000 |
| Total | 2,369 | 27,134,000 | 2,393 | 27,824,000 | +24 | +690,000 |

## Introduction

The components which make up this activity are directly concerned with industry's compliance with the laws and regulations administered by FDA. Included in this area are the Associate Commissioner for Compliance, the Bureau of Regulatory Compliance, and the FDA District Offices.

The Associate Commissioner for Compliance serves as the coordination point for activities of operating units concerned not only with direct compliance ac-

tivities, but voluntary compliance efforts as well. This office is also responsible for the issuance of regulations which constitute the basis for all regulatory operations. The Bureau of Regulatory Compliance gives advice to the other FDA operational units on compliance work and also provides statistical, technical, and legal information to them along with program planning guidelines and other assistance. The 17 District Offices are FDA's operating arm in all facets of regulatory compliance throughout the United States. FDA's traditional functions under the law have been to inspect production and distribution facilities periodically and to analyze samples of their production to assure safety and efficacy of products that reach the consumer.

A net increase of 24 positions and $690,000 is needed to fund the food-industry self-certification program and the intensified drug inspection program, both of which are described in this section of the budget. The balance of the resources needed to finance these programs in their initial stages will become available as a result of the reallocation of positions and funds from other program areas within this activity. This shift in emphasis will assure that maximum attention is given to problems of the highest priority in the Agency.

In 1969, FDA District Directors will take the initiative in fostering partnerships with State and local authorities in the cooperative planning of regulatory activity, and in offering training and guidance for State program development. Efforts will be coordinated in surveillance programs and regulatory work in the areas of pesticide residues, medicated feeds, warehouse storage, canneries, and bakeries, among others, to assure the highest consumer protection.

A program-reporting system has been adopted for use in the field to assure that changes in the character and scope of regulatory programs can be planned and controlled in terms of accomplishments toward program goals rather than types of activity. FDA has studied its field inspection and sampling surveillance activities to identify more effective methods of detecting health hazards and more meaningful means of reporting field regulatory work. As a result, FDA will be able to deploy its resources where they are most needed.

RESOURCES BY ORGANIZATION

| | 1968 estimate | | 1969 estimate | | Increase or decrease | |
|---|---|---|---|---|---|---|
| | Positions | Amount | Positions | Amount | Positions | Amount |
| Districts | 2,225 | $25,142,000 | 2,244 | $25,759,000 | +19 | +617,000 |
| Assistant Commissioner for Compliance | 30 | 384,000 | 30 | 387,000 | ---- | +3,000 |
| Bureau of Regulatory Compliance | 114 | 1,608,000 | 119 | 1,678,000 | +5 | +70,000 |
| Total | 2,369 | 27,134,000 | 2,393 | 27,824,000 | +24 | +690,000 |
| Microbiological contamination of foods | 442 | 5,237,000 | 478 | 5,772,000 | +36 | +535,000 |

The major health problems in the regulation of food production and distribution relate to the bacterial contamination of products offered on the market. Probably the most acute health problem in the food area today is Salmonella contamination. It is estimated that the occurrence of the disease exceeds one million cases a year. The effects of Salmonella poisoning are most hazardous to the very young and very old. Products contaminated with Salmonella and other bacterial hazards are generally associated with poor manufacturing conditions and practices at the production level.

FDA's objective in this area is to contact industries where bacterial contamination presents a serious potential problem. The purpose is to assure that 90% of the firms are complying with FDA's Good Manufacturing Practices standards (GMP's) by 1973. Initially the main thrust of this program will go toward those products which are most susceptible to contamination by Salmonella.

The resources that will be reallocated to this area will lead to the implementation of an industry self-certification program. This program, which relies upon close cooperation between FDA and industry, will produce the highest degree of consumer protection possible within the Agency's allotted resources. It will involve sharing of information and the establishment of quality assurance systems in plants as a prerequisite to firms' acceptance into the new program. The quality assurance system must meet certain FDA requirements. It consists of three elements: (a) good manufacturing practices, (b) self-inspection, and (c) a statistically valid system for sampling and analyzing products. By 1973 this

program will be operating in 3,200 plants. FDA's inspection activity will then be able to assure consumer protection more adequately by checking quality-control records and by periodically inspecting these plants. The table below indicates how the industry self-certification program will be phased into FDA's present regulatory schedule:

| | 1967 actual | 1968 estimate | 1969 estimate |
|---|---|---|---|
| Plants in self-certification program | | | 100 |
| Inspections | 6,320 | 7,100 | 7,200 |
| Sample collections and analyses | 8,720 | 9,800 | 11,000 |

To initiate this program, it will be necessary to develop and strengthen the GMP's that will govern the various participating firms. Comprehensive inspection, consultation, and analysis programs are planned to insure the implementation of self-certification by the participating firms. Toward this goal, a reorientation of 35 positions and $521,000 from other food regulatory work related to sanitation and pesticide residues is planned in the field in 1969. No new field positions are requested for this program in that year. One additional position and $14,000 are requested for the Bureau of Regulatory Compliance at headquarters to aid in developing the necessary guidance material for the self-certification program.

| | 1968 estimate | | 1969 estimate | | Increase or decrease | |
|---|---|---|---|---|---|---|
| | Positions | Amount | Positions | Amount | Positions | Amount |
| Chemical contamination of foods | 308 | $3,503,000 | 245 | $2,819,000 | −63 | −$684,000 |

Recent market-basket studies designed to reflect actual consumption show that more pesticides are being ingested today than were five or ten years ago.

In the past, FDA has attempted to monitor the pesticide residues in agricultural products by collecting and analyzing an increasing number of samples. By 1967, the Agency was examining 25,000 samples per year—but this only constituted an estimated 1% of the interstate shipments in this country. In 1968, the emphasis in the pesticide surveillance program has been shifted from sheer volume to more selective and representative sampling techniques. These new techniques will enable the Agency to maintain effective controls over pesticide residues in raw agricultural products while reducing the actual number of sample analyses made in the District laboratories. As a result, 63 positions and $684,000 in the field can be diverted to programs centering around microbiological contamination (discussed above) and drug hazards.

Not all of the resources in the chemical contamination area are devoted to pesticide problems. Work will continue in the study and control of poisons that exist or develop in food, with particular emphasis on Aflatoxins.

| | 1968 estimate | | 1969 estimate | | Increase or decrease | |
|---|---|---|---|---|---|---|
| | Positions | Amount | Positions | Amount | Positions | Amount |
| Sanitation in food | 325 | $3,744,000 | 311 | $3,624,000 | −14 | −$120,000 |

Food sanitation programs are aimed at insanitary industry practices which do not have direct health-hazard implications but which produce esthetically unacceptable products. The general rate of violative conditions has remained at about 10% in recent years. In 1969, the Districts will focus their attention on decomposed raw materials and on insanitary manufacturing conditions. Given the priority considerations in the areas of drug hazards and microbiological contamination of food, however, it will be necessary to reduce the sanitation program by 14 positions and $120,000 in 1969 so that man-years can be devoted to those other high-priority programs.

| | 1968 estimate | | 1969 estimate | | Increase or decrease | |
|---|---|---|---|---|---|---|
| | Positions | Amount | Positions | Amount | Positions | Amount |
| Economic problems in food | 66 | $758,000 | 69 | $801,000 | +3 | +$43,000 |

The increasing popularity of pre-packaged foods has made the consumer more dependent than ever before on the descriptive material that comes with the food he buys. Experience indicates that package information on ingredients, size, weight, and the like can often be misleading or even false. The recently enacted Fair Packaging and Labeling Act requires FDA to promulgate implementing regulations in the food, drug and cosmetic areas. The enactment also demands extensive liaison among FDA, Federal Trade Commission, and the Department of Commerce. Numerous inquiries will be made by affected industries about compliance with the new law and its regulations. To deal constructively with these inquiries, to fulfill our liaison responsibilities, and to administer the promulgation of proposed and final regulations, FDA will require an increase of three positions and 43,000 for 1969.

| | 1968 estimate | | 1969 estimate | | Increase or decrease | |
|---|---|---|---|---|---|---|
| | Positions | Amount | Positions | Amount | Positions | Amount |
| Drug hazards | 950 | $10,718,000 | 1,012 | $11,599,000 | +62 | +$881,000 |

To insure the safety and integrity of the nation's drug supply, a comprehensive regulatory program is necessary. FDA's goal in this area is to cut back the number of drugs that do not meet health standards until they comprise less than one percent of the dosage units marketed. To accomplish this, FDA must continue to strengthen its regulatory programs in the field. Only by dealing directly with drug processor is it possible to reduce the drug hazards associated with improper potency, cross-contamination, and labeling mix-ups, because these are all the result of poor manufacturing procedures. Probably half of the manufacturers inspected every year continue to violate FDA's standards for good manufacturing practices. A reduction in this rate will lead to a reduction in the number of drug recalls.

A new program of intensified drug-plant inspections is planned for implementation on a pilot basis in 1969. The concept of an intensified inspection breaks away from the traditional approach that FDA has taken in its past inspections. That approach was aimed primarily at finding a violative product against which FDA could act in its enforcement role. Industries were expected to comply with the law out of fear of punitive actions that followed discovery of a violative product. However, over a period of years this approach did not seem to reduce the number of violations uncovered; therefore, a new affirmative concept has been developed which places an FDA inspector in the role of a consultant-advisor to a drug manufacturer. The inspector-advisor will, in effect, conduct operations analyses to insure that a manufacturer adheres to the Good Manufacturing Practices recommended by FDA. His efforts will be supported by extensive sample analyses of products. The inspector will be trained not only in the enforcement aspects of FDA's mission but will be re-oriented toward a philosophy of openly discussing problems and observations with plant management. The inspector will have the authority to discuss any deficiencies he encounters except those involving labeling content, which will continue to be handled centrally. This new approach will eventually lead to a second phase in FDA's intensified-coverage programs, wherein the participating plants will be assisted and encouraged to develop a self-inspection and quality-control program within acceptable FDA specifications.

FDA will conduct intensified drug inspections for the first time in 1969, covering more than 250 of the approximately 900 prescription-drug manufacturers in this country. The second and third phases of this program will extend this type of coverage to all of these firms by 1971. As these plants increasingly adhere to Good Manufacturing Practices standards and develop their own self-inspection techniques, FDA will be able to divert resources from the surveillance

of these firms into other areas where the risks of unsafe products reaching the market are correspondingly greater. The table below indicates how the Intensified Inspection Program will be phased into FDA's current regulatory schedules:

| | 1967, actual | 1968, estimate | 1969, estimate |
|---|---|---|---|
| Prescription drugs: | | | |
| Intensive coverage (plants) | | | 250 |
| Inspections | [1] 2,430 | [1] 1,350 | 900 |
| Sample collections [2] | 24,960 | 45,800 | 55,000 |
| Sample examinations | 24,960 | 32,800 | 35,000 |
| Nonprescription drugs: | | | |
| Inspections | [1] 3,186 | [1] 1,700 | 1,610 |
| Sample collections | 7,413 | 6,400 | 5,950 |
| Sample analyses | 7,413 | 6,400 | 5,950 |

[1] The reporting system used in the field was changed in 1967; consequently, figures for 1967 included some operations now being reported as sample collections in 1968.
[2] Sample collection figures include many samples which will be analyzed by the Bureau of Science at the National Center for Drug Analysis rather than in field laboratories.

The first phase of the intensified inspection program will be funded in part by resources drawn from other field operations presently underway. FDA will divert 42 positions and $373,000 from the pesticide residue surveillance sampling program to support this activity; however, an additional 18 new field positions and $480,000 are needed in 1969 to fund mandatory increases and to permit full implementation of this program rather than merely an extension of present operations. Also, two positions and $28,000 are needed by the Bureau of Regulatory Compliance to provide direction to the program, issue compliance guidelines material, and evaluate the resulting data gathered from the field.

| | 1968 estimate | | 1969 estimate | | Increase or decrease | |
|---|---|---|---|---|---|---|
| | Positions | Amount | Positions | Amount | Positions | Amount |
| Other regulatory programs | 278 | $3,174,000 | 278 | $3,209,000 | ..... | +$35,000 |

An additional $35,000 is needed to fund various mandatory and annualization expenses connected with the veterinary drug, cosmetic, devices and hazardous substances programs referred to in the table which opens this section. No program increases are requested.

DRUG ABUSE CONTROL

| | 1968 estimate | | 1969 estimate | | Increase or decrease | |
|---|---|---|---|---|---|---|
| | Positions | Amount | Positions | Amount | Positions | Amount |
| Personnel compensation and benefits | 466 | $4,721,000 | 526 | $5,288,600 | +60 | +$567,600 |
| Other expenses | ..... | 2,873,000 | ..... | 3,041,400 | ..... | +168,400 |
| Total | 466 | 7,594,000 | 526 | 8,330,000 | +60 | +736,000 |
| Programs: | | | | | | |
| Criminal investigations | 256 | 4,005,500 | 286 | 4,331,800 | +30 | +326,300 |
| Drug accountability investigations | 176 | 2,352,500 | 201 | 2,589,400 | +25 | +236,900 |
| Drug abuse research and statistics | 23 | 1,126,000 | 28 | 1,294,800 | +5 | +168,800 |
| Information and State program development | 11 | 110,000 | 11 | 114,000 | ..... | +4,000 |
| Total | 466 | 7,594,000 | 526 | 8,330,000 | +60 | +736,000 |

## Introduction

The Food and Drug Administration's obligation under the Drug Abuse Control Amendments of 1965 is to bring an end to the misuse of stimulant, depressant, and hallucinogenic drugs, and to halt the production and distribution of counterfeit drugs.

FDA's long-range objective is to reduce irregularities in the distribution of controlled drugs to a level of less than two percent of the firms that legally produce those drugs. At the same time, the Agency is developing an investigative program sufficient to ferret out and punish illicit "underground" drug makers and distributors. Operating under the assumption that drug abuse is partly the result of ignorance of the dangers involved, FDA will continue to furnish as much information on dangerous drugs to the public as it can, with particular emphasis on reaching susceptible target groups like teen-agers, truck-drivers, or even housewives.

All of these programs are centered in the Bureau of Drug Abuse Control (BDAC), which is responsible for enforcement action to stop the illegal traffic in drugs. BDAC's efforts fall into three basic categories: (a) surveillance of the legal channels of distribution through accountability investigations or "audits" to determine where drugs are diverted into illegal channels; (b) undercover activities to detect and apprehend those who are illegally producing or distributing these drugs; and (c) information activities to develop statistical data, educational material, and knowledge of the psychological and sociological causes of drug abuse.

In less than two years of operation under the Drug Abuse Control Amendments, the Food and Drug Administration's experiences have already begun to illustrate more fully the total impact of the drug abuse problem in the United States. The following statistics as of January 1, 1968, attest to that fact:

There have been 694 arrests under Federal warrants for criminal violations under the Drug Abuse Control Amendments.

In addition, BDAC has participated in over 300 arrests under State or local warrants, in cooperation with State and local officials.

43% of those arrested were persons with prior criminal records and 16% of those arrested were armed at time of arrest. 60% were cases involving hallucinogens.

Out of 1,100 accountability investigations, 108 firms had violations serious enough to warrant seizure of the inventory of drugs. An additional 47 of the firms were cited at a formal hearing.

Of all firms investigated, 57% had a deficiency in their recordkeeping.

The Bureau has overseen the review of over 5,000 combination drugs and has made the decision that 750 had potential for abuse and were subject to control under the Drug Abuse Control Amendments.

Total drugs presently under control number 1,600.

The Agency has found that only through prompt, vigorous, and strict enforcement of the requirements of the law and through intensive educational and research methods can the drug abuse problem and the resulting abnormal and antisocial behavior be curbed.

RESOURCES BY ORGANIZATION

| | 1968 estimate | | 1969 estimate | | Increase or decrease | |
|---|---|---|---|---|---|---|
| | Positions | Amount | Positions | Amount | Positions | Amount |
| Field offices | 399 | $5,612,000 | 444 | $6,146,000 | +45 | +$534,000 |
| Headquarters | 67 | 1,982,000 | 82 | 2,184,000 | +15 | +202,000 |
| Total | 466 | 7,594,000 | 526 | 8,330,000 | +60 | +736,000 |
| Criminal investigations | 256 | 4,005,500 | 286 | 4,331,800 | +30 | +326,300 |

An absolute necessity in the control of drug abuse is an effective criminal investigative program. This will reduce—if not eliminate—the illegal production, counterfeiting, and trafficking of controlled drugs. This program involves conducting undercover investigations to develop cases against illicit traffickers, and working up through these traffickers to their sources in order to detect and eliminate points of diversion or illegal production. There exists, as a major and increasing problem, the availability and abuse of drugs that have not as yet been demonstrated to have appropriate medical use for large portions of the populations. This problem is particularly acute in the case of the drug LSD, and current news reports are full of instances of abuse of many other chemical compounds. Experience in the use of these compounds has been found to be as high as 5–10% in certain population groups. An increase of 30 positions and $232,000

will provide partial relief in investigating the current backlog of complaints and the increasing incidence of reported drug violations.

As a result of the criminal investigations that result from these and other leads, more than 21,900,000 dosage units of drugs are expected to be removed from illegal channels in 1969 involving more than 300 prosecutive cases.

*Criminal investigational output*

| Fiscal year: | *Complaints investigated* |
|---|---|
| 1967 | 2,028 |
| 1968 | 2,835 |
| 1969 | 3,458 |

The constant danger surrounding BDAC agents necessitates the use of special equipment and resources for their operations. Requested increases in these special areas include a $22,300 increase for money to purchase evidence from illicit peddlers of controlled drugs; $54,000 for 30 additional undercover cars, so that agents may do their undercover criminal investigations without their identity being disclosed; and $18,000 to support estimated uncontrollable overtime of new agents and the increased investigational activity of the present field staff.

| | 1968 estimate | | 1969 estimate | | Increase or decrease | |
|---|---|---|---|---|---|---|
| | Positions | Amount | Positions | Amount | Positions | Amount |
| Drug accountability | 176 | $2,352,500 | 201 | $2,589,400 | +25 | +$236,900 |

The Drug Abuse Control Amendments require strict accountability for all controlled drugs during their movement from the basic manufacturer to final sale by the pharmacist to the ultimate consumer. The problems in drug abuse arise in large part from the diversion of therapeutically important products, such as barbiturates and amphetamines, from legitimate channels to illicit ones. Only by a thorough, detailed examination of a drug firm's records and business procedures is it possible to detect whether or not controlled drugs are going where they should. These exhaustive inspections are called "accountability investigations." In 1969, BDAC anticipates that its 1,497 accountability investigations will uncover information that will lead to about 150 civil actions. To complement BDAC's activities, State agencies will conduct similar investigations of 1,330 local pharmacies to assure that their records adequately account for the receipt and sale of controlled drugs and to uncover any illegal diversion at the local level. BDAC agents will work closely with these cooperating law-enforcement agencies to assure that this major potential for the illegal sale of drugs is kept under close scrutiny. An increase of 25 positions and $236,900 is requested to meet these responsibilities in 1969.

*Estimates of drug accountability workload*

| Fiscal year: | *Accountability audits and investigations* |
|---|---|
| 1967 | 660 |
| 1968 | 1,134 |
| 1969 | 1,497 |

| | 1968 estimate | | 1969 estimate | | Increase or decrease | |
|---|---|---|---|---|---|---|
| | Positions | Amount | Positions | Amount | Positions | Amount |
| Drug abuse research and statistics program | 23 | $1,126,000 | 28 | $1,294,800 | +5 | +$168,800 |

BDAC's research and statistics program is an essential element of FDA's campaign against drug abuse. The Bureau's studies encompass the disciplines of medical, social, psychological, physical, and biological research. The scope of the Agency's research activities in this area has been defined in a Memorandum of Understanding between FDA and the National Institute of Mental Health, PHS. These two agencies coordinate their research plans carefully, and

ach has distinct areas of responsibility. The Memorandum specifically stipulates hat FDA will rely on NIMH research tools wherever possible "to gauge attitudes oward and knowledge about drugs and drug abuse in relation to social class nd economic groupings." For example, one study planned by FDA for 1969 will levelop communication techniques on the effect of LSD on brain function and daptive abilities: another study will attempt to reveal psychological patterns f values and anxiety reduction in academic failures related to drug abuse; and nother project will train the community pharmacist so that he may be properly dvised on the action, use, and dangers of the indiscriminate use of drugs, etc.

To date, 12 contracts totalling $400,000 have been let with research organizaions. The Bureau has also established a cooperative operation with the U.S. Air Force at Holloman Air Force Base in working with chimpanzees on an xperimental basis. The Bureau has two researchers stationed there. In addiion, the Advisory Committee working under the executive direction of BDAC as reviewed over 5,000 combination drugs and has ruled that 740 were subject o abuse.

An increase of five positions and $168,800 will provide for additional research studies initiated within FDA as well as for increased capabilities for monitoring contractual projects.

| | 1968 estimate | | 1969 estimate | | Increase or decrease | |
|---|---|---|---|---|---|---|
| | Positions | Amount | Positions | Amount | Positions | Amount |
| nformation and State program development | 11 | $110,000 | 11 | $114,000 | ---- | +$4,000 |

The two elements of this program are related in that they both promote action by individuals or organizations outside of the Federal government to fight the national drug abuse problem.

To date over 1,000 public appearances have been made by Bureau personnel to speak on the drug abuse problem and FDA's program to combat it. An additional 80 TV and radio appearances have been made. Four professional-quality films have been produced, and copies in each field office are being loaned to nongovernment organizations for their own drug abuse programs.

Select professional organizations are regularly informed of FDA's activities in the drug abuse area. These groups include pharmacists, hospital administrators, chemical suppliers, pharmaceutical wholesalers and manufacturers, law enforcement officers, and state and local forensic chemists.

The State Development Program involves two phases: the training of State and local criminal investigators in the special problems of drug abuse, and the training of the State boards of pharmacy to conduct accountability investigations. To date over 18,000 law enforcement officers have attended BDAC classes. The other phase of State programs currently has 22 States that have an agreement with FDA to conduct accountability investigations of retail pharmacies in their respective states.

The increase of $4,000 is due to annualization of 1968 pay costs.

EXECUTIVE DIRECTION AND ADMINISTRATIVE SUPPORT

| | 1968 estimate | | 1969 estimate | | Increase or decrease | |
|---|---|---|---|---|---|---|
| | Positions | Amount | Positions | Amount | Positions | Amount |
| Personnel compensation and benefits | 499 | $4,068,000 | 512 | $4,276,000 | +13 | +$208,000 |
| Other expenses | | 1,991,000 | | 2,149,000 | ---- | +158,000 |
| Total | 493 | 6,059,000 | 512 | 6,425,000 | +13 | +366,000 |
| Subactivities: | | | | | | |
| Executive direction | 130 | 1,829,000 | 135 | 1,917,000 | +5 | +88,000 |
| Administrative support | 369 | 4,230,000 | 377 | 4,508,000 | +8 | +278,000 |
| General services | 214 | 2,019,000 | 218 | 2,142,000 | +4 | +123,000 |
| Managemen systems | 84 | 1,566,000 | 87 | 1,677,000 | +3 | +111,000 |
| Personnel | 71 | 645,000 | 72 | 689,000 | +1 | +44,000 |
| Total | 499 | 6,059,000 | 512 | 6,425,000 | +13 | +366,000 |

INTRODUCTION

This activity includes the components of the Agency which provide policy guidance, direction, supervision, program planning and implementation, and administrative support.

The Office of the Commissioner is responsible for the establishment of policy, as well as formulation and promulgation of the Agency-wide plans and programs.

The Office of the Assistant Commissioner for Administration provides administrative and other support on an Agency-wide basis in the area of financial management, record controls, printing and distribution, facilities planning, supply management, data processing, management services, personnel, and training.

| | 1968 estimate | | 1969 estimate | | Increase or decrease | |
|---|---|---|---|---|---|---|
| | Positions | Amount | Positions | Amount | Positions | Amount |
| Executive direction | 130 | $1,829,000 | 135 | $1,917,000 | +5 | +$88,000 |

Included in this area are the immediate office of the Commissioner, the Regional Assistant Commissioners, the immediate office of the Assistant Commissioner for Administration, and the functions of planning, budgeting, policy management, legislative and governmental services, hearing examiners, and field coordination.

The immediate office of the Commissioner consists of the staff involved in the day-to-day operations at the top level of the Agency. In order to strengthen these activities, a total of five positions and $88,000 is requested. Of this amount, $25,000 is for staff costs relating to new positions; $40,000 for non-staff costs; and $23,000 for annualization of 1968 increase.

In the above total, three positions are requested to enhance the Federal-State programs. These programs involve coordination with District Offices to provide technical or staff assistance to the Districts in conducting approximately 34 training sessions for State and local officials; assumption of complete reponsibility for coordinating the functions and activities of the Food Standards Committee's activities; development and implementation of guidelines for early state participation in rule-making; provision of staff work to obtain State resource data necessary for long-range planning; coordination of development of guidelines to implement contract programs in selected areas with the States; analyses of proposed FDA programs; recommendations to BRC concerning state and local participation; and the commission of 140 State officials to enforce the provision of the Food, Drug, and Cosmetic Act.

One position is requested to establish a full-time Equal Employment Opportunity function. This position will entail some travel to the field to ensure that equal employment opportunity is being satisfactorily afforded at all locations. In addition, the position will be used to develop additional instructions to ensure effective compliance with the program.

*Planning and Budgeting*

The planning and budgeting function is concerned with the development, implementation, and evaluation of program and financial long-range plans for the Agency and the formulation and execution of the budget. A planning-programming-budgeting system has been implemented within the Agency; to further support this program there is a continuing need to conduct cost-benefit and cost-effectiveness studies on selected Agency programs and to evaluate periodically Agency program progress. One additional position is needed to assist in these program studies and to perform detailed program analysis and evaluation.

| | 1968 estimate | | 1969 estimate | | Increase or decrease | |
|---|---|---|---|---|---|---|
| | Positions | Amount | Positions | Amount | Positions | Amount |
| Administrative support | 369 | $4,230,000 | 377 | $4,508,000 | +8 | +$278,000 |

This area encompasses fiscal management, general services, management systems, data processing, and personnel management and training. In order to

strengthen these activities, eight positions and $278,000 are needed. Of this amount, $77,000 is for staff costs relating to new positions, $92,000 for non-staff costs; and $109,000 for annualization of 1968 increases. The detailed requirements are discussed below.

| | 1968 estimate | | 1969 estimate | | Increase or decrease | |
|---|---|---|---|---|---|---|
| | Positions | Amount | Positions | Amount | Positions | Amount |
| General services | 214 | $2,019,000 | 218 | $2,142,000 | +4 | +$123,000 |

The expansion of the Agency's total program will generate additional workload in the administrative areas. An increase in resources will help to assure that assistance is provided on a timely basis. In this area a total of four positions is needed to handle the workload.

One position is required to carry out adequately the storeroom function. The procurement of many supply items makes it desirable to purchase at one time a large quantity in order to take advantage of the discount. That fact, plus normal program growth, has increased the demands for a larger variety of items that must be stocked and available for issue.

Three positions are needed in fiscal operations. The workload continues to increase steadily, and the present level of effort does not permit processing the number of fiscal documents within the required time. Workload data is shown on the following page.

| | 1967 actual | 1968 estimate | 1969 estimate |
|---|---|---|---|
| Voucher examination: Items | 37,149 | 45,000 | 54,000 |
| Accounting: Items | 201,110 | 224,100 | 296,160 |

| | 1968 estimate | | 1969 estimate | | Increase or decrease | |
|---|---|---|---|---|---|---|
| | Positions | Amount | Positions | Amount | Positions | Amount |
| Management and data processing systems | 84 | $1,566,000 | 87 | $1,677,000 | +3 | +$111,000 |

The Agency has recently developed its own data processing capabilities. The system provides the Agency with program and administrative data for planning-programming-budgeting and other managerial purposes. In order to meet increasing demands for computerized services, three positions are needed to work in the programing phase so that available raw data can be put in the proper format for computer processing. In addition, there will be increasing needs for special computer services that should be handled by contracts. The contracts that should be negotiated will include such items as (1) automated instrumentation in support of District Office laboratories and (2) the label files which are needed to meet the requirements of Fair Packaging and Labeling Act.

| | 1968 estimate | | 1969 estimate | | Increase or decrease | |
|---|---|---|---|---|---|---|
| | Positions | Amount | Positions | Amount | Positions | Amount |
| Personnel management and training | 71 | $645,000 | 72 | $689,000 | +1 | +$44,000 |

One position is requested to establish a field visitation program. A personnel specialist is needed for field visits to provide assistance and guidance in handling and eliminating personnel problems. Since almost half of the Agency's personnel are in the field, FDA should establish a scheduled, systematic visitation program to discuss and resolve problems at the local level. The current personnel resources are not adequate to permit scheduled visitations to the field. With 27 field activities, the addition of this position would be a step towards accomplishing that goal.

NEW POSITIONS REQUESTED, FISCAL YEAR 1969

| | Grade | Annual salary |
|---|---|---|
| Medical evaluation | | |
| Medical officer | GS–15 | $19,017 |
| Pharmacologist | GS–15 | 18,404 |
| Medical officer (2) | GS–14 | 35,906 |
| Pharmacologist | GS–14 | 15,841 |
| Chemist | GS–12 | 11,843 |
| Total (6) | | 101,011 |
| Scientific research and evaluation: | | |
| Microbiologist | GS–15 | 18,404 |
| Biological science administrator | GS–13 | 13,507 |
| Chemist (2) | GS–13 | 27,014 |
| Information specialist | GS–13 | 13,507 |
| Microbiologist (2) | GS–13 | 27,014 |
| Systems analyst | GS–13 | 13,507 |
| Chemist (2) | GS–12 | 23,686 |
| Microbiologist (3) | GS–12 | 34,383 |
| Virologist | GS–12 | 11,461 |
| Microbiologist | GS–11 | 9,657 |
| Program analyst | GS–11 | 9,657 |
| Chemist | GS–9 | 9,399 |
| Microbiologis (4) | GS–9 | 32,216 |
| Biologist | GS–7 | 6,734 |
| Chemist (2) | GS–7 | 16,168 |
| Microbiologist (4) | GS–7 | 26,936 |
| Secretary-stenographer | GS–6 | 6,137 |
| Biological aide (3) | GS–5 | 16,695 |
| Clerk-typist (3) | GS–4 | 14,985 |
| Total (35) | | 331,067 |
| Education and voluntary compliance: | | |
| Deputy Assistant Commissioner | GS–15 | 18,404 |
| Quality control manager | GS–13 | 13,507 |
| Food and drug officer | GS–12 | 11,461 |
| Public information specialist | GS–12 | 11,461 |
| Quality control specialist (2) | GS–12 | 22,922 |
| Writer | GS–12 | 11,461 |
| Food and drug officer | GS–11 | 9,657 |
| Quality control specialist | GS–11 | 9,657 |
| Food and drug assistant (3) | GS–9 | 23,088 |
| Industry information specialist | GS–9 | 8,054 |
| Clerical operation supervisor | GS–6 | 6,137 |
| Clerk | GS–5 | 5,565 |
| Secretary | GS–5 | 5,565 |
| Clerk (3) | GS–4 | 14,985 |
| Clerk-typist (2) | GS–3 | 8,932 |
| Clerk-typist | GS–2 | 4,108 |
| Total (22) | | 184,964 |
| Regulatory compliance: | | |
| Food and drug officer (2) | GS–13 | 27,014 |
| Inspector | GS–13 | 13,507 |
| Food and drug officer | GS–12 | 11,461 |
| Chemist (4) | GS–11 | 43,780 |
| Inspector (3) | GS–11 | 28,971 |
| Chemist | GS–9 | 9,399 |
| Inspector (3) | GS–9 | 24,162 |
| Inspector (2) | GS–7 | 13,468 |
| Clerk (5) | GS–5 | 27,825 |
| Laboratory technician (2) | GS–5 | 11,130 |
| Total (24) | | 210,717 |
| Drug abuse control: | | |
| Clinical psychologist | GS–14 | 15,841 |
| Educational psychologist | GS–14 | 15,841 |
| Agent (3) | GS–13 | 40,521 |
| Agent inspection officer | GS–13 | 13,507 |
| Legal officer (2) | GS–13 | 27,014 |
| Agent (6) | GS–12 | 68,766 |
| Program analyst (2) | GS–12 | 22,922 |
| Agent (6) | GS–11 | 57,942 |
| Agent (5) | GS–9 | 40,270 |
| Do | GS–7 | 33,670 |
| Agent (7) | GS–5 | 38,955 |
| Clerk-stenographer (9) | GS–5 | 50,085 |
| Clerk-stenographer (12) | GS–4 | 59,940 |
| Total (60) | | 485,274 |

NEW POSITIONS REQUESTED, FISCAL YEAR 1969—Continued

| | Grade | Annual salary |
|---|---|---|
| Executive direction and administrative support: | | |
| Equal employment opportunity officer | GS–11 | 9,657 |
| Program analyst (2) | GS–11 | 19,314 |
| Employee relations specialist | GS–9 | 8,054 |
| Programer (2) | GS–9 | 16,108 |
| Legislative analyst | GS–7 | 6,734 |
| Clerk (2) | GS–5 | 11,130 |
| Do | GS–4 | 9,990 |
| Do | GS–3 | 8,932 |
| Total (13) | | 89,919 |
| Total, new positions, all activities (160) | | 1,402,952 |

INTRODUCTION OF ASSOCIATES

Senator HILL. The subcommittee will come to order.

We will be glad to have you proceed in your own way, Doctor.

Dr. GODDARD. Thank you, Senator. I have with me Deputy Commissioner Winton B. Rankin on my right. Mr. Finlator on my far right, Director of Bureau of Drug Abuse Control. Mr. Packard Anderson Director, Division of Financial Management. And Mr. Cardwell.

INNOVATIVE APPROACHES TO BUDGET

Mr. Chairman, let me thank you for this opportunity to discuss FDA's budget requirements for the coming year.

Although this year's budget contains few major program increases, it does incorporate some innovative approaches to the work assigned us. Terms such as "self-certification" and "intensified inspection" reflect new attitudes toward some of the problems that have been confronting FDA for a long time, and they describe some new methods for solving those problems.

BUDGET REQUEST INCREASES

We are asking for an increase of 267 positions and $5,376,000 in 1969. Of that amount, $671,000 is for built-in increases from the preceding year; $4,705,000 is for program increases. The additional resources will be used for the most part in the key areas of drug hazards, drug abuse, and microbiological contamination of foods.

BUDGET BUREAU REDUCTIONS

Senator HILL. You speak about your asking this much. You mean the budget is giving you this much?

Dr. GODDARD. Yes, sir.

Senator HILL. Did you ask for more than the budget gave you?

Dr. GODDARD. Yes, sir, we did.

Mr. CARDWELL. FDA requested $3,951,000 more for salaries and expenses. There were also some differences on building and facilities.

DRUG HAZARDS

Dr. GODDARD. We proposed an increase of 85 positions and $2.4 million in the drug hazards area primarily for a pilot program of intensified drug plant inspection.

Our inspectors will make an in-depth review of potential problem areas in the drug firm's manufacturing cycle and provide direct on-site assistance to the drug firm. We intend to be assured that its manufacturing practices and its quality control systems are reliable and that inadequacies have been corrected.

### National Center for Drug Analysis

Last year we took the initial steps in setting up a centralized facility for the analyses of drug samples taken directly from the marketplace. These samples are collected by inspectors from the various districts and analyzed by our National Center for Drug Analysis. Large numbers of drugs can be examined by using assembly-line techniques; a relatively fast assessment can be made of the quality of a drug or group of drugs in the marketplace. This surveillance activity should eventually provide for the examination of at least 100,000 drug samples each year. Advanced research is to be performed at the Center to improve procedures and equipment for drug analyses with particular emphasis given to methods for "automated" drug analysis.

Senator Hill. You use the word "automated."

Dr. Goddard. Yes, sir, these are methods which can be modified for automated analysis of drug samples. These techniques can handle several hundred chemical examinations per hour as opposed to the more standard technique of several per hour with one technique.

### Program Expansions

We are going to continue to expand our adverse reaction network, our epidemiology projects, and our drug research program in 1969.

### Drug Efficiency Evaluations

We also made strides last year in evaluating the efficacy of drugs marketed between 1938 and 1962. By 1969, the National Academy of Sciences/National Research Council will have reviewed almost all of the 3,600 drug products marketed during that time. A great deal remains to be done, of course, to implement their findings.

### Presentations

I should like to deposit for the record a series of presentations made on January 23, 1968, which describes the review and our procedures.

Senator Hill. It will be received for the record.

(The presentations follow:)

### Completing the Task

(By James L. Goddard, M.D., Commissioner of Food and Drugs)

Presented at the Drug Efficacy Review Conference sponsored by the Food and Drug Administration, Department of Health, Education, and Welfare Auditorium, Washington, D.C., January 23, 1968

I am pleased to welcome you to this meeting, and I trust it will be of help to you, in your professional capacities and in your associations. Our timing is necessarily tied to FDA's plan of action on the drug efficacy review reports. Our first such action is a notice published in the Federal Register today naming certain drugs for which there is no evidence of efficacy.

Realizing that this first action will receive considerable attention, and that it will raise questions as to how FDA will handle other actions, we wanted to take advantage of this opportunity to give you all the information we can at this time.

We do have a plan for action, as you will hear. I want to repeat what I have said on many occasions: we intend to act; we will complete the task Congress gave us in 1962.

It is not a small task, as everyone has recognized. It has even been described as an impossible task—but this view is not permitted to those of us in the Food and Drug Administration. The job cannot be too big or too complex to be done.

The magnitude of the task and made apparent to me shortly after becoming Commissioner.

It was obvious that the Agency did not have sufficient medical manpower to carry out the efficacy review itself. We needed the help of the broader scientific community and a means of bringing to this assignment the Nation's best scientific and medical knowledge. With those needs in mind, it seemed plain enough that one organization was uniquely equipped to carry out the review—the National Academy of Sciences-National Research Council.

We were indeed grateful when the Academy agreed in May 1966 to undertake this task, and this gratitude is even greater today. Between the time of my original conversation with Dr. Seitz in 1966 and receipt of the first reports from the Academy last fall, the finest scientific and medical minds in America have given many months of dedicated and objective study to this important project.

We are honored today to have with us Dr. Keith Cannan, former Chairman of the National Research Council's Division of Medical Sciences. It was under Dr. Cannan's leadership that this organization undertook the study.

We are indebted to the advisory committee set up under the chairmanship of Dr. William S. Middleton, Dean Emeritus of the University of Wisconsin School of Medicine, and chairman of the NRC Drug Research Board. This committee selected the members of the review panels, developed the guidelines to be followed by the panels in making their judgments, and coordinated the recommendations from the panels for submission to FDA.

The guidelines were drafted by an ad hoc group under the guidance of Dr. Alfred Gilman, Professor and Chairman of the Department of Pharmacology at the Albert Einstein College of Medicine. The draft guidelines were offered for discussion at an Academy conference in July 1966. At that time, representatives of the drug industry, the professional and scientific community, and other interested parties were invited to comment.

Another ad hoc committee developed the categories of drug usage in which the drugs were grouped for review. This work was guided by Dr. Walter Riker, Professor and Chairman of the Department of Pharmacology, Cornell University Medical Center.

By agreement, members of the panels shall remain anonymous, save to their colleagues, but we must still gratefully acknowledge the contribution they have made to the improvement of drug therapy.

Throughout this review Duke Trexler, Executive Secretary of the Drug Research Board, has been a guiding force.

The Food and Drug Administration, the drug industry, physicians, pharmacists, and interested citizens have been going about their affairs these past 20 months with an awareness that the NAS/NRC drug efficacy review was underway. There have been varying degrees of awareness, of course. In my own talks before various groups around the country, I have frequently alluded to the study and its implications for the future. The purpose, of course, was to prepare everyone concerned for the action phase which follows submission of the panel reports.

That is our primary reason for calling this meeting. We have worked out an orderly procedure for taking action on the panel reports, and we wish to share that information with you. While we are determined to take the necessary and appropriate action on the reports, we are quite aware that our action calls for a reaction by the affected and interested parties. It is our intention to act in an orderly manner so that the reaction can be equally orderly.

I hope this will be the case. It will be if we keep in mind our fundamental objective—better patient care. That objective has been the guiding principle for the experts who have been making the scientific and medical judgments in the study. In the final, difficult moments of judgment they have asked and answered the question: "What is the best of all possible decisions in the interest of patient care?"

The FDA intends to carry on in the same spirit of objectivity. In doing so we will be aware of the business judgments to be made. We will strive to make it possible for those business judgments to be based upon a clear understanding of the scientific and medical judgments before us.

This is not a new idea for any of us. We are constantly revising our thinking in light of new scientific evidence. We are used to change. Change is the norm; status quo is the exception. So changes in our thinking about these drugs will not surprise anyone.

I am confident that we can cooperate to complete this task successfully. Let us decide to do that.

Thank you.

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NEWS RELEASE—FTC AND FDA UPDATE THEIR AGREEMENT FOR COORDINATED WORK TO PROTECT CONSUMERS

FEDERAL TRADE COMMISSION,
OFFICE OF INFORMATION,
*Washington, D.C., January 23, 1968.*

The Federal Trade Commission and the Food and Drug Administration have updated their 1954 agreement to coordinate their administrative and legal functions in order to furnish maximum protection to the consuming public.

Copies of the Agreement are attached as well as the remarks of Charles A. Sweeny, Director, Bureau of Deceptive Practices, Federal Trade Commission.

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REMARKS OF CHARLES A. SWEENEY, DIRECTOR, BUREAU OF DECEPTIVE PRACTICES, FEDERAL TRADE COMMISSION

I consider it entirely appropriate that the Federal Trade Commission be represented at this meeting and am highly honored to be its representative.

I am sure you are all familiar with the fact that in appearances before Congressional Committees, and on other occasions, Chairman Paul Rand Dixon has from time to time referred to earnest discussions he has been having with Dr. Goddard pursuant to their mutually shared determination that the activities of the two agencies be coordinated to the fullest extent possible in the public interest

I am sure, too, that most of you are familiar with the announcement last July 6 that the Commission was initiating a Trade Regulation Rule proceeding regarding the advertising of nonprescription systemic analgesic drugs. One of the proposals was that it would be a violation of the Federal Trade Commission Act to disseminate any advertisement for such a product which:

"Contains any representation with respect to efficacy or safety which contradicts, or in any manner exceeds, the warnings, statements or directions for use appearing on the label or in the labeling of such product."

It is my privilege to contribute to your program today the information that as the latest development in this trend the Federal Trade Commission and the Food and Drug Administration have formalized, in writing, an understanding with respect to liaison and working relationships.

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LIAISON AGREEMENT—FEDERAL TRADE COMMISSION, FOOD AND DRUG ADMINISTRATION

It is recalled that the Secretary of the Department of Health, Education, and Welfare and the Chairman of the Federal Trade Commission entered into an agreement in June 1954, "for the purpose of avoiding duplication of work and to promote uniformity and consistency of action in areas where both agencies have a concern and the actions of one agency may affect proceedings by the other."

The practical effect of that agreement was to assign primary responsibility for preventing misbranding of foods, drugs, devices and cosmetics to the Food and Drug Administration; primary responsibility with respect to the regulation of the truth or falsity of all advertising (other than labeling) of such products being assigned to the Federal Trade Commission.

Developments, including changes in statutory authority and the nature of regulatory problems encountered since that date demonstrate an urgent need for updating that agreement.

It is becoming increasingly clear that we must assure, in this vital field of public health, that the statutory authorities and procedures, and the manpower and other resources, available to each agency are so employed as to afford maximum protection to the consumer. This means joint planning of coordinated pro-

grams, exchange of information and evidence to the extent permitted by law, by the staffs of both agencies in appropriate undertakings, and the careful selection of the procedure of either agency (or simultaneously by both) promising greatest benefit to the public.

In approaching the subject of liaison as it relates to the advertising of over-the-counter drugs, we are cognizant that from a regulatory viewpoint such drugs fall into several categories as follows:

(a) Post-1962 drugs which the Food and Drug Administration has reviewed under the NDA procedure and for which a determination with respect to both safety and efficacy has been made.

(b) Post-1938 but pre-1962 drugs which the Food and Drug Administration has reviewed under the NDA procedure for safety but not efficacy.

(c) Pre-1938 drugs and those post-1938 drugs not heretofore subject to the NDA procedure and which the Food and Drug Administration has not otherwise formally evaluated as to safety or efficacy.

(d) Drugs whose safety or efficacy or both has been determined by the Federal Trade Commission or by the Food and Drug Administration in an enforcement proceeding. This category would include, for example, efficacy determinations resulting from Federal Court litigation under the Federal Food, Drug, and Cosmetic Act, and proceedings brought under the Federal Trade Commission Act. Some of these will be reviewed under the NDA procedure.

(e) Drugs involved in the current NAS–NRC efficacy review.

With respect to the advertising of drugs the following guiding principles will govern interagency liasion:

A. For pre-1938 and those post-1938 non-prescription drugs which the Administration has not evaluated as to safety and efficacy, liaison fully employing the scientific and legal staffs of both agencies will determine how best to proceed against any practices raising questions of law violations subject to the jurisdiction of both agencies. Particular consideration will be accorded determinations resulting from legal proceedings by either agency, bearing in mind the relative degrees of proof necessary to support, and the differing remedies provided by, seizure actions, injunctions, and prosecutions under the Federal Food, Drug, and Cosmetic Act, and Federal Trade Commission cease and desist orders, and the possible applicability of the doctrine of res judicata.

B. For products subject to NDA or certification procedures, the Commission will ordinarily accept the Administration's determinations and will attempt corrective action under the Federal Trade Commission Act with respect to claims in advertising which are inconsistent with such determinations. For those drugs covered by the NAS–NRC efficacy review, FDA will make the panel reports available to FTC, together with FDA's actions on the reports, and FTC will ordinarily accept the FDA determinations in its advertising actions. Examples are:

(a) Safety and efficacy claims for post-1962 over-the-counter drugs.

(b) Safety claims for post-1938 pre-1962 over-the-counter drugs which were handled as new drugs during that period and the efficacy claims for these drugs as validated by the NAS–NRC review.

(c) Claims for over-the-counter antibiotic preparations certified under the provisions of Section 507 of the Federal Food, Drug, and Cosmetic Act.

C. With respect to the safety and efficacy of prescription drugs the control of advertising as well as labeling is the responsibility of the Food and Drug Administration.

Approved:

JAMES L. GODDARD, M.D.,
*Commissioner of Food and Drugs.*
PAUL RAND DIXON,
*Chairman, Federal Trade Commission.*

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## LEGISLATIVE BACKGROUND FOR THE EFFICACY REVIEW

(by William W. Goodrich, Assistant General Counsel, Food and Drug Division, Department of Health, Education, and Welfare)

Presented at the Drug Efficacy Review Conference sponsored by the Food and Drug Administration, Department of Health, Education, and Welfare Auditorium, Washington, D.C., January 23, 1968

The most basic provisions of the Kefauver-Harris Drug Amendments of 1962 were those which require that all drugs be proved effective as well as safe for their intended uses.

Secretary Ribicoff, testifying in September 1961 on Senator Kefauver's bill, called attention to a number of drugs that had been cleared through the "new drug" procedures on consideration of safety alone, and which were being promoted to the medical profession without adequate support of clinical data. He called this indefensible.

First on his list of such drugs, interestingly enough, were citrus bioflavonoid compounds which are the subject of the first efficacy review to be reported by FDA by the NAS–NRC Drug Efficacy Review groups. The NAS, like the Secretary in 1961, classifies these drugs as ineffective for any purpose. And now, more than six years after the Department's views were laid on the record, the agency has started the process to remove them from the market.

How the agency was to deal with the problem of reclearance of claims of effectiveness for all of the previously approved new drugs, those marketed between 1938 and 1962, became one of the central points of controversy before the Kefauver bill was enacted into law.

The bill as first reported by the Senate Judiciary Committee on July 19, 1962, left the definition of what was a new drug unchanged. An article was a "new drug" if it was not generally recognized by qualified experts as *safe* for its intended use. This definition did not include efficacy. And it would not have required efficacy review for any drug unless its safety was in question.

Sections 505(d) and (e), 21 U.S.C. 355(d) and (e), were amended, however, to authorize the Secretary to withhold approval and to withdraw approval of applications for new drugs (those not generally recognized as safe) if there was a lack of substantial evidence that the drug would have the effect it purported or was represented to have or if the labeling of the drug was false or misleading in any particular.

The practical effect of this, as explained in the Committee's Report, S. Rep. 1744, Part 1, page 17, was to make it unnecessary that "many 'old' established drugs might have to go through the burdensome new drug clearance procedure even though their safety was unquestioned." The Committee said that the FDA should exercise its power to proceed by seizure against any safe drugs for which unsupported claims of effectiveness were being made.

On August 3, 1962, President Kennedy wrote to Senator Eastland enclosing drafts of amendments to the reported bill which he regarded as essential to consumer protection. The purpose, the President explained, was "to help assure the American people that *any drug on the market today* is safe and effective for its intended use." (Emphasis added.)

Amendment 4 offered by the President was entitled "Effectiveness and Safety of New Drugs." The explanation of the amendment was as follows (108 Cong. Rec. 15696, August 6, 1962) :

DEFINITION OF "NEW DRUG"

Section 8 of S. 1552 does not add to the definition of the term "new drug" in existing law the concept of "effectiveness." This is necessary in order to assure that all new drugs will have to be proved effective as well as safe for the uses for which they are offered as is provided in the Harris bill. (H.R. 11581)

The Harris bill also contains appropriate transitional provisions which would require a commercially established drug to go through the "new drug" process only (a) where we find that there is substantial doubt as to its efficacy, (b) where the new-drug clearance has been withdrawn on other grounds, or (c) where an amended new-drug application is submitted. With these provisions, it would make clear that the amendment to the definition of "new drug" would not require the resubmission of all the thousands of "new drugs" hitherto cleared for the market in order to obtain reclearance for efficacy.

STANDARD OF PROOF OF EFFECTIVENESS

Section 8 of S. 1552 requires "substantial evidence" of effectiveness to be submitted with each new-drug application. This standard of proof is inadequate in terms of assuring that drugs that reach the market have been shown to be effective for the claims made for them.

ADDITIONAL GROUNDS FOR SUSPENSION OR WITHDRAWAL OF APPROVED NEW-DRUG APPLICATIONS

Section 8(c) of S. 1552 authorizes the Secretary after notice and opportunity for hearing, to suspend the effectiveness of a new-drug application when new evidence raises a "substantial doubt" as to the safety of the product.

. . . . . In addition, the Harris bill extends this authority to suspend when—

* * * * * * *

(c) A substantial doubt of efficacy exists.

The Senate Committee accepted the recommendation, amending the definition of "new drug" to introduce the "not generally recognized as effective" concept, and coupled this with transitional provisions (a "grandfather" clause) to deal with previously cleared drugs which were not generally recognized as effective for their intended uses. Under the bill as reported on August 21, 1962, S. Rep. 1744, Part 2, pp. 5–8, the Committee explained that the new definition of "new drug" would "require that all claims for effectiveness, whether made initially in a new drug application or at any time thereafter, must be supported by 'substantial evidence' which term is defined in the substitute amendment."

The effect of this amendment on drugs already on the market was explained under the discussion of the transitional provisions. On this, the Committee said:

***Under the amendment, a drug which is on the market and has gone through the new-drug procedure would not have to be resubmitted for clearance of existing label claims with respect to effectiveness of the drug unless approval of the new drug is withdrawn or suspended under the act or unless an amendment or supplement to the effective new-drug application is filed (in which event only the changed labeling would be reevaluated).

Secondly, under this transitional provision the new grounds for withdrawing approval of a new drug already on the market under the new authority relating to drug effectiveness would not apply until two years after the bill is enacted unless approval of the new drug is withdrawn or suspended earlier on other grounds.

Thirdly, in the case of a drug on the market which was never subject to the new-drug procedure before, the amendments to the new-drug definition relating to drug effectiveness would not apply to existing labeling claims.

This same explanation appears in the House Committee Report, H.R. Rep. 2464, p. 12, and in the Conference Committee Report, H.R. Rept. 2526, p. 22–23.

This plainly shows that any drug had ever been subject to the new drug clearance procedures would be subject to reevaluation and withdrawal on its claims of effectiveness. A two-year delay was provided for the holders of new drug applications to assemble any needed evidence to support the claims they were making, and the Department was authorized beginning October 10, 1964, to initiate proceedings for the withdrawal of approval of any previously approved new drug on the grounds that there was a lack of substantial evidence to support the claims.

Since the Congressional purpose is so clearly expressed, the question arises whether the legislative language actually adopted failed to accomplish the purpose and left undisturbed the drug manufacturers' rights to continue in perpetuity the promotion of some drugs generally recognized as safe on October 10, 1962, with unsupported claims of effectiveness.

We think the "grandfather" clause did not do this.

Subparagraph (c)(3) of the transitional provisions, Section 107 of P.L. 87–781, dealt with all drugs that had been cleared through the new drug procedures. It provided that these drugs did not have to be recleared by the fresh submission of new drug applications so long as no changes in the claims were made. Any changed use or condition of use did have to be cleared. This appears in subparagraph (c)(3)(A.). The next subparagraph (c)(3)(B) authorized the Department after a lag-period of two years to initiate withdrawal proceedings against any such drug, even though the claims were not changed, on the grounds that there was a lack of substantial evidence of efficacy.

The last part of the "grandfather" clause, Subparagraph (4), applied to drugs on the market on October 9, 1962, which were not on that date "new drugs" (drugs which were generally recognized as safe for their intended uses), *and* which were not covered by an effective application. Those drugs were given permanent protection from the new drug efficacy requirements, so long as no changes

were made either in the drug or in its labeling. All of the legislative history explains that this was limited to drugs which had "never previously" been subject to new drug clearance.

Consistent with this legislative mandate we have sought and obtained a scientific reappraisal of every drug now on the market that was once cleared through the new drug procedures. We propose to move with this scientific support on a drug class basis to modernize these drugs, both as to composition and claims, to assure effectiveness in clinical use and in self-medication. Those that are ineffective will be removed from the market. Those that are effective, but require labeling or compositional changes, will be brought into compliance. Those that are possibly effective or probably effective will be given a reasonable delay for assembling medical evidence, and then brought into compliance.

We have available as to accomplish the high purpose of making "every drug on the market today" safe and effective for its intended uses a variety of administrative and judicial sanctions.

We hope none will be required.

Instead, we think the drug industry—large and small—recognizes that marketing drugs carries responsibilities to the patient and his physician as well as to the law.

This demands that all claims for effectiveness conform to the substantial medical evidence. Consultants drawn from the best of the Nation's experts are completing their reviews and offering their judgments as to the validity of current promotional claims.

We hope the industry will join us in translating those judgments into promotional messages as promptly as possible.

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REMARKS OF DR. KEITH CANNAN (FORMER CHAIRMAN OF NATIONAL RESEARCH COUNCIL'S DIVISION OF MEDICAL SCIENCES)

Dr. R. Keith Cannan: Thank you, Commissioner Goddard, for your generous remarks.

When we first engaged ourselves with this undertaking I anticipated that we would soon be in troubled waters. But I feel considerably relaxed this morning, and this is in large measure, I think, Commissioner, to the cooperation and support that we have always had from the Food and Drug Administration, and I would extend that also to industry that has given us good cooperation and has exhibited much restraint.

I think I might almost extend it to the press, also. Although maybe I am overestimating our newsworthiness.

I think you are all familiar with the origin and purposes of the Academy study, otherwise you would not be here today. But just by the way of background, in three sentences, it was in July 1966 the Academy signed a contract with the Food and Drug Administration to undertake an evaluation of all drugs that had received new drug applications—had approved new drug applications—in 1938 and 1962, and all drugs that the industry wished to retain on the market.

At the same time, in July, the industry was invited by the Food and Drug Administration to submit presentations of all those drugs that it wished to have evaluated by the Academy, and to present an orderly—to make an orderly presentation of the claims and therapeutic indications.

That was in July. By the end of September, the Academy had organized itself, developed a staff, developed the guidelines which you have heard and are familiar with, I think, and appointed a policy committee, and appointed the membership of some 27 panels of experts.

And by the end of September, also, the great majority—the great bulk—of the industry's presentations were already in the hands of the Food and Drug Administration.

So it was at that time, 15 months ago, that we really got under way.

Now how is the task shaping up? 237 pharmaceutical firms submitted presentations on some 3,600 or slightly more drug formulations. The majority of these drugs had multiple claims, multiple therapeutic indications of effectiveness. The policy of our study has been to independently evaluate each individual claim, either explicitly formulated or implicit in the wording of the inserts.

Now, the number of multiple claim drugs—Many of them have claims in different areas of therapeutic situation, and therefore had to be channeled to multiple panels. A few drugs, for example, went to as many as ten or 15 panels.

But this time, on overall, I would estimate—and this is, ladies and gentlemen, not a statistic for manipulation; it's a guesstimate—that something like 10,000 independent therapeutic judgments had to be made on this body of material presented to us.

Where are we today? In an audit that we made just a week ago, we estimated that some 89 per cent of these individual therapeutic judgments have now already been made. Something like 47 per cent of the reports from panels on individual drugs have been edited, bibliographies checked, and the whole process of organizing the reports into coherent statements has been made.

What remains to be done is primarily a phase of consolidation of this great mass of material—consolidation of multiple panel inputs into coherent reports on individual drugs.

We still hope that the great bulk of this work will be completed by June the 30th of this year, but there will be certainly some spillover beyond that time.

Just a word on what the reports look like: Each—for each therapeutic indication a categorical classification has been made of degree of effectiveness. You recall the guidelines—effective; probably effective; possibly effective; ineffective. These are the four main categories, and we inevitably added a fifth category. Effective, or probably effective—but—and then qualified our categorization.

And these have been made, as I said, for all claims, whether they are explicitly stated or merely implied in the package inserts and labeling.

Where effectiveness has been qualified, the reports will contain a justification for the qualification. Some of these justifications are quite extensive and run into several pages. Some are more succinct.

In many cases the panels are recommending modification in the wording of inserts, to conform to the judgments that they have made. And often the reports will be accompanied by general comments on classes of drugs and classes of therapeutic effect.

Now, it has been said occasionally that the recommendations of the Academy will be that such and such a drug shall be removed from the market. But when you contemplate that it is—the claims, the indications are the things that have been evaluated, and not the drug, it will be only in that unusual situation in which all claims have been rejected that the Academy's report can be interpreted as a recommendation that the drug shall be removed from the market.

We feel that these extended reports are a valuable contribution to the therapeutic literature, and we hope—and the Food and Drug Administration hopes also—that they will in due course be widely disseminated.

Now, how and when are we transmitting these reports to the Food and Drug Administration?

Some three months ago, at the request of FDA, we submitted 21 reports that happened to be "on ice" at that time, and ready for transmittal. They were not a representative sample of the kinds of reports; they just happened to be there, and they were sought by the FDA so that they might have the opportunity of getting a feel for the kind of machinery that they would have to develop in order to handle this great mass of material in orderly fashion.

And so these first 21 reports are not a random sample from which one should extrapolate in order to get anticipation of the kinds of results—of reports—and the kinds of determinations that have been made.

Today we have some well over a hundred additional reports essentially ready for transmission into the Food and Drug Administration. They will be delayed only for formal transmission. Thereafter, we hope in rapid succession to send batches of a hundred or more formally transmitted to FDA.

When will these reports be released to the public? The panels have worked under a cloak of confidence throughout the study, and as I have indicated that confidence has been respected and the panels have not felt harassed; the integrity of the study has not in any way been subject to distraction.

These reports will be submitted in confidence to the Food and Drug Administration in the sequence that I have described. On the other hand—And, I might say, the Academy will not itself release any information on the substance of the reports. It has been agreed, however, with the Food and Drug Administration, that the reports will be released to interested parties verbatim, intact. In other words, no attempt will be made to precise the substance of the reports. They will be available to you as they have been transmitted from the study.

The timing of the release must be up to the Food and Drug Administration so that they can obtain orderly control of this continuing input of new material. But I think I can assure you, Commissioner, that the Food and Drug Administration

is just as anxious to get these into the public domain, as we in the Academy are to have them released.

Meanwhile, the offices of the Academy and all their counsellors, panel members, and so on, have been urged to refer all inquiries respecting the reports to the Food and Drug Administration. This perhaps is a posture of Olympian detachment, but I think you will agree on reflection that any other course would be a babel of voices that would lead to confusion.

Thank you.

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### Prescription Drug Advertising and Promotional Labeling

(By Dr. Robert S. McCleery, Bureau of Medicine, Food and Drug Administration)

Presented at the Drug Efficacy Review Conference sponsored by the Food and Drug Administration, Department of Health, Education and Welfare Auditorium, Washington, D.C., January 23, 1968

NAS/NRC efficacy study panels have labored arduously and assiduously in the public interest. They have studied the available data on each of this great group of potentially-therapeutic agents, and they have proposed parameters for safe and effective use. Their studious considerations may lead, among other actions, to a revision, or creation, of package labeling for each drug.

It would be difficult to overemphasize the importance of the potential that the panels' work provides for improvement of the quality of care that can be offered by the medical profession. As significant as the approaching revisions are, in themselves, they will achieve their full impact of increasing the precision with which physicians use these drugs primarily through the manufacturers' promotional activities by their detail men, journal advertisements, direct mail, etc.

Changes that occur in labeling of prescription drugs as a result of NAS/NRC reviews, and of the subsequent actions by the FDA, will be taken into account in our future monitoring activities. From the standpoint of the Division of Medical Advertising, the adjusted package labelings will have the same status as authorized labelings that have been submitted as supplements to new drug applications, for example.

Under the regulations, a reasonable time is permitted to elapse before promotional labeling and journal advertising must reflect package labeling changes. The regulations do require prompt revisions, however. Ordinarily, we assume that promotional labeling and advertisement can be made consistent with revised package labeling within 90 days from the date that labeling is approved or placed into effect under the provisions of Regulation 130.9(d). We expect to continue to use the 90-day period as a working guide in our surveillance programming for these drugs.

As a final point, we do not wish to mislead anyone into believing that FDA surveillance over prescription drug promotion is 100%, or that it will be 100% in relation to drugs that have come under the NAS/NRC review program. However, we can assure you that we will sample the promotional activities on this group of prescription drugs, and that we will apply the same concepts in judgment of them as you have come to expect on the promotion of other prescription drugs.

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### Administrative Medicine

(By Herbert L. Ley, Jr., M.D., Director, Bureau of Medicine)

To be presented at the Drug Efficacy Review Conference, HEW Auditorium, January 23, 1968

Dr. Goddard has called this a task to be completed. The Bureau of Medicine now has the responsibility within FDA of reviewing the reports received from the National Academy of Sciences/National Research Council, recommending the action to be taken and reviewing the submitted data, including original and supplemental new drug applications.

To accomplish this task, we have formed a Task Force headed by Dr. Paul A. Bryan, Deputy Director of our Office of Marketed Drugs. This Task Force will have available the resources of the entire Bureau of Medicine and will

utilize those specialists in each of the Offices and members of our Advisory Boards to complete this task within the three years we have alloted this problem. Of course the review and processing of the NDA's and other submissions for many drug products will be completed prior to that time.

You may have already seen the announcement on bioflavinoids which was published in the Federal Register today.

The reports which we receive from the National Academy of Sciences/National Research Council Drug Efficacy Study will be routed from the Director for NAS/NRC Liaison, Dr. Ralph Smith, to the Task Force for the implementation of the necessary review. Based on the Academy's recommendation and their review, the report will be assigned to one of the four following categories. These are:

1. Those drugs generally recognized as safe and effective for the labeled indications and marketed for a material period of time and to a material extent would be considered to be not new drugs. The labeling conditions under which the drugs will be classified as "not new," and any other conditions essential to this determination will be published.

A task force decision to classify a drug as a "not new drug" is not to be construed by the manufacturer as a statement that the new drug status of the article is determined once and for all. FDA reserves the right to require a manufacturer at any time to furnish the Agency with full information about such a drug that would have a bearing on its new drug status.

2. Abbreviated supplemental or abbreviated original NDA's will be required for certain drugs for which any or all of the following criteria apply:

a. A lack of scientific evidence or of NAS endorsement of efficacy for the indications presented;

b. Concern regarding toxicity or possible serious side effects;

c. Evidence of lack of or reasonable doubt of biologic equivalency of various brands of the same drugs;

d. Use of the drug in treatment, management or prevention of serious illness in which lack of biologic equivalency would pose a hazard to health.

This group may include the reports listed "effective," "effective but," some of the "probably effective" and some of the "possibly effective" reports. The abbreviated NDA's will consist of:

a. Labeling and formula submissions;

b. Statement concerning compliance with GMP and any special controls that may be needed;

c. Statement on conformance with USP or NF specifications, or when needed, additional specifications in the NDA file;

d. Statement regarding where the drug is manufactured;

e. Blood level studies or other appropriate tests, where required.

The requirements for an abbreviated NDA will be determined following review of the Drug Efficacy Study recommendation by the Task Force.

3. Those drugs for which clinical studies or other evidence is needed to prove effectiveness will require the submission of more complete NDA information. Drugs in this category will include the majority of those drug reports listed as "possibly effective."

4. Approval will be withdrawn of new drug applications for those drugs regarded as "ineffective."

When necessary, full disclosure labeling and additional specifications to be required will be developed from the preliminary review. Each manufacturer holding an NDA will be provided with a copy of the Academy recommendation regarding his product.

Following this initial review and judgment by the Task Force, a meeting will be requested with representatives of the manufacturers holding a new drug application for the products involved in the study and any other manufacturers who may be affected. At this meeting the Academy's report on the NDA's being considered will be distributed to all interested parties together with our recommendations regarding the drug.

An appropriate Federal Register statement containing our recommendations regarding the drug and our intent will be prepared and published.

On the basis of the Federal Register statement and discussion with interested manufacturers, additional submissions regarding the drug being considered will be received. Those submissions of a complete NDA will be handled according to

the new drug procedure in the Office of New Drugs, Bureau of Medicine. Regular submission of supplemental NDA's will be handled by the Office of Marketed Drugs. Those submissions of labeling formulation of drugs regarded as not new drugs will be reviewed for compliance with the Federal Register statement by the Task Force. Those submissions of an abbreviated NDA will be reviewed by the Task Force and appropriate action, either approval or nonapproval, taken.

If the abbreviated NDA is not approved, an original NDA must be submitted to the Office of New Drugs. FDA handling of all of the submissions will be coordinated by the Task Force. We will not attempt to send letters to those manufacturers who have not expressed their intention to comply. Our Field District offices will be requested to visit those firms who do not reply to the Federal Register announcements to obtain material for review in order to determine the degree of compliance or noncompliance.

District offices will also be inspecting other affected firms to determine their degree of compliance with this program as well as the other requirements of the Act.

While we hope to achieve maximum voluntary compliance, appropriate legal action will be taken where necessary to insure that compliance with this program is achieved.

Mr. Hauser and Mr. Goodrich will have more to say on this subject.

## Public Notice on NDA Withdrawals

By Julius Hauser, Assistant for Regulations, Office of the Associate Commissioner for Compliance, Food and Drug Administration

Presented at the Drug Efficacy Review Conference sponsored by the Food and Drug Administration, Department of Health, Education, and Welfare Auditorium, Washington, D.C., January 23, 1968.

This discussion is concerned with the procedures that will be employed by the Food and Drug Administration to furnish public notice and information concerning the proposed withdrawal of new drug approvals. There have been few such actions in the past. Interest in these proceedings is heightened in anticipation of actions on the reports of the National Academy of Sciences-National Research Council review of claims of effectiveness for drugs "deemed approved" between 1938 and October 10, 1962.

It is not now the intent of FDA to promulgate regulations establishing a new set of fixed procedures for withdrawing approval of new drug applications or for furnishing public notice and information concerning such action. We believe that existing provisions of law and regulations furnish generally sufficient authority to FDA, protection of the rights of applicants and the public, and satisfactory procedures with respect to actions withdrawing approvals of NDA's, revocation of orders withdrawing NDA approvals, notice of proposed actions, and information concerning them. Specifically, sections 505 (e), (f), (g) and (h) of the F. D. & C. Act and most of sections 130.14 through 130.34 of the regulations present the rules concerning such actions. Section 130.14 of the New Drug Regulations provides that notice of opportunity of a hearing on a proposal to withdraw approval of a new drug application will be published in the FEDERAL REGISTER and that such hearings will be open to the public except for portions containing information concerning a method or process entitled to protection as a trade secret. Section 130.34 of the regulations provides that notices of withdrawal of approval of an application will be published in the FEDERAL REGISTER. Other provisions of law and regulations relating to the disclosure of information are contained in the Public Information Act (Public Law 90–23) and the Department of Health, Education, and Welfare's regulations thereunder (45 CFR Part 5), section 301(j) of the Federal Food, Drug, and Cosmetic Act, FDA's regulation on disclosure of official records and information (21 FR Part 4), and section 130.32 of the New Drug Regulations.

These existing provisions of law and regulations furnish an adequately defined yet flexible framework for proceedings to implement the conclusions reached on the basis of the NAS-NRC review of drug effectiveness. For example, when FDA concludes that an article is ineffective for any drug purpose, a variety of procedures may be employed within this framework with a view to the withdrawal of all NDA approvals and removal of the drug from the market. One approach is illustrated by the recent action withdrawing approval of all NDA's for drugs

for human use containing bithionol. Although this action was based on a question of drug safety, the same procedure may be employed on a question of drug effectiveness.

In the bithionol case, FDA corresponded directly with each of the eight applicants who had new drug approvals for bithionol preparations, informed them of the proposed action and invited a written waiver of an opportunity for a hearing unless the firm wanted a hearing. Only one of the eight firms did not submit such a waiver. Following this correspondence, FDA published in the FEDERAL REGISTER of July 19, 1967, notice of opportunity for hearing to this one applicant and any other interested person who would be adversely affected by an order withdrawing approval of the named applicant's product and all other drugs for human use containing bithionol. The FEDERAL REGISTER statement included a concise presentation of the question of safety underlying the proposed action. It gave notice that promulgation of the proposed order will cause all drugs for human use containing any bithionol to be new drugs for which no approval is in effect. Subsequently, when no one wanted a hearing, FDA published in the FEDERAL REGISTER of Ocober 31, 1967, an order withdrawing approval of all of the subject NDA's, naming them, setting out the grounds for the action and stating that "upon promulgation of this order, all drugs for human use containing any bithionol will be regarded as new drugs for which no approval is in effect." It should be noted that this action established a basis for removing from the market on a new drug charge not only the drugs which were specifically the subject of prior new drug approvals, but any "me too" drugs. With industry cooperation it was accomplished without litigation but furnished through FEDERAL REGISTER publication full information and opportunity for any interested person to contest the action.

An alternate approach, differing only in detail from the bithionol action, is illustrated by the proposed action on drugs for human use containing rutin, quercetin, hesperidin or bioflavonoids, which should be the subject of a FEDERAL REGISTER statement today. This statement may be summarized as follows: It furnishes the information that FDA has concluded that there is no evidence that rutin, quercetin, hesperidin or bioflavonoids are effective for use in man for any condition. It discloses that the Commissioner intends to publish a notice of opportunity for a hearing on a proposal to withdraw approval of all NDA's for drugs containing these substances. It gives notice that such an order will classify all drugs containing any of these components as new drugs for which an approval is not in effect. It invites the holders of new drug approvals and any other person who may be adversely affected by the proposed action to a meeting with FDA to discuss the procedures and to identify and resolve any problems. Presumably, this FEDERAL REGISTER statement will be followed by publication in the REGISTER of notice of opportunity for a hearing and in due course an order withdrawing approval of all such NDA's.

FDA is not limited within the framework of the existing provisions of law and regulations to the procedures followed in the bithionol and rutin situations. The rules permit the Commissioner to publish in the FEDERAL REGISTER notice of opportunity for a hearing on a proposal to withdraw new drug approvals when there is a question of drug safety or effectiveness without advance correspondence or preliminary meetings. However, we believe it is desirable not only to seek the fullest cooperation of the drug industry in removing ineffective drugs from the market and unsubstantiated claims from drug labeling, but also for this Administration to show a reasonable consideration for the problems of industry in connection with these actions. This, of course, does not mean that we are committed to any undue delay in actions necessary to assure the safety and effectiveness of drugs.

The procedures to require removal of unsupported claims from the labeling of useful drugs "deemed approved" under the new drug provisions are similar although more involved than those described for removing worthless drugs from the market. In general, FDA will try to accomplish these objectives without interfering with the continuing availability of useful drugs. However, the cooperation of drug manufacturers may be necessary to avoid a temporary discontinuance of drug marketing. Withdrawal of NDA approvals is needed to establish a strong basis for requiring needed labeling changes in "me too" drugs as well as those specifically covered by NDA approval. Under transitional provisions of the Act a drug "deemed approved" prior to October 10, 1962, becomes subject to the amended definition of "new drug" that includes the concept of effectiveness only when the NDA approval is withdrawn. For these reasons,

FDA may withdraw approval of a useful drug that includes unsupported claims in its labeling and simultaneously approve a supplemental application with labeling including only those claims for which the drug is effective. Continuity of marketing need not be broken. This procedure would facilitate regulatory proceedings against any brand of the same drug, in the generic sense, on a charge that the article is a new drug for which an application is not approved.

An example of this kind of procedure is illustrated more or less by recent actions involving potassium salt preparations intended for oral ingestion by man. These actions are covered by a notice of opportunity for hearing published in the FEDERAL REGISTER of May 8, 1965, proposing to withdraw approval of new drug applications for potassium chloride tablets, the order withdrawing approval of these applications published in the FEDERAL REGISTER of September 17, 1965, and the related statement of policy published as section 3.15 of the regulations in the FEDERAL REGISTER of April 24, 1965. As in the case of the actions involving withdrawal of new drug approvals for worthless drugs, the actions limiting the claims for useful drugs may be developed with variations in detail within the established framework of law and regulations. In all cases, publication in the FEDERAL REGISTER will be utilized to inform interested persons of the action proposed, the basis for it and the implications of the proposed order with regard to the continued marketing of a drug, the need to submit supplemental NDA's, and any requirement for the submission of original NDA's. When original new drug applications are required, the FEDERAL REGISTER statement may indicate those parts of an NDA that may ordinarily be considered sufficient for an approval, taking into account the fact that the drug may not be altogether novel. The FEDERAL REGISTER publications will, of course, furnish full opportunity for the applicant and any person who may be adversely affected by the proposed order to have a hearing and judicial review as required by law. The FEDERAL REGISTER statements may provide for informal conferences for discussion of the procedures and implications of the proposed action. FEDERAL REGISTER statements may elaborate the drug labeling required for approval of a supplemental NDA, an original NDA, or that will permit continued marketing of a drug without a new drug approval.

In conclusion, we find that existing provisions of law and regulations provide a clear yet flexible framework within which FDA can employ reasonable procedures to accomplish the purposes of the NAS-NRC review of drug effectiveness. FDA will welcome constructive industry cooperation in this program. We will also welcome industry suggestions concerning procedures that will expedite the accomplishment of the objectives to assure the effectiveness of marketed drugs.

### DRUG ABUSE

Dr. GODDARD. Drug abuse continues to be a problem. The susceptibility of young people to psychotoxic drugs makes its urgent for FDA to halt the underground traffic in these drugs, and, at the same time, make every effort to reveal their potential harm.

### BUDGET REQUEST INCREASE AND BUDGET BUREAU REDUCTION

The initial budget proposed an increase of 59 positions and $800,000 in 1969 for our drug abuse programs. That increase would permit additional accountability and criminal investigations, more training for the investigative staff, and a slight buildup in our research program.

Senator HILL. How much did you ask for in this item?

Dr. GODDARD. I don't have that. May I submit that for the record, Senator?

Senator HILL. You may submit that.

(The information follows:)

### FDA'S ORIGINAL REQUEST FOR DRUG ABUSE CONTROL PROGRAMS

FDA's original request to the Bureau of the Budget in the Drug Abuse Control program category was 624 positions and $9,423,000, which represented an increase of 72 positions and $998,000. The Bureau of the Budget reduced this request by 12 positions and $300,000.

RESEARCH AND ILLEGAL SALES

Mr. CARDWELL. The FDA request for drug abuse was reduced by $17,000 for drug abuse research; $63,000 for investigation and sample analyses relating to distribution of such drugs, $63,000 for criminal investigations, and $157,000 related to the illegal sale of such drugs.

Dr. GODDARD. Over and above the present request.

Mr. CARDWELL. Yes, sir.

1968 REDUCTIONS OF EXPENDITURES

Senator HILL. How much were you all cut by the reductions the Congress made in the budget?

Dr. GODDARD. Last year?

Senator HILL. Yes.

Mr. ANDERSON. $2,417,000, Mr. Chairman, under the provisions of House Joint Resolution 888.

Senator HILL. Where did most of that cut take place?

Dr. GODDARD. Mostly out of contracts and deferred employment.

Senator HILL. When you speak of contracts give me an example.

Dr. GODDARD. We did not contract for certain studies in the Bureau of Medicine on drugs that had been proposed. We reduced our hospital reporting system contract. I can give you the exact other studies that were involved. Some in the Bureau of Science were not funded as well.

REDUCTION BY BUDGET ACTIVITY

Mr. ANDERSON. We have a table which shows the reduction by budget activity, under House Joint Resolution 888, which we can supply for the record.

Senator HILL. Suppose you do that.

(The table follows:)

HEW DEPARTMENT RESERVE BY PROGRAM ACTIVITY, 1968

| Activity | Personnel compensation and benefits | Other | Total |
|---|---|---|---|
| Medical evaluation | $174,000 | $357,000 | $531,000 |
| Scientific research and evaluation | 300,000 | 252,000 | 552,000 |
| Education and voluntary compliance | 3,000 | 23,000 | 26,000 |
| Regulatory compliance | 751,000 | 303,000 | 1,054,000 |
| Drug Abuse control | (192,000) | 118,000 | (74,000) |
| Executive direction and administrative support | 185,000 | 143,000 | 328,000 |
| Total | 1,221,000 | 1,196,000 | 2,417,000 |

DRUG ABUSE: AMENDMENT

Dr. GODDARD. An amendment to the budget is proposed to establish tighter controls on the use of drugs subject to abuse as well as to curtail further the illegal traffic in these drugs. The amendment will require 107 additional positions and $1,200,000.

MICROBIOLOGICAL CONTAMINATION OF FOOD

Food contamination constitutes a major health hazard in this country. A lack of reliable baseline data makes it difficult for us to estimate the toll that food-borne illnesses take in this country every year, but

we do know there is a needless amount of suffering and needless amount of time lost from the job.

We have a continuing problem with salmonellosis, for example. We know that 20,000 people become ill from it every year, but we suspect that as many as 20 times that number of cases go unreported. In fact, I would say that that is a conservative estimate of the unreported number. We are pursuing not only salmonella, but other microbial contaminants, such as staphylococcus, shigella, and the mycotoxins.

I think that the food industry—with concrete and practical assistance from FDA in the form of workshops, conferences, and specific onsite recommendations—can go a long way toward eliminating salmonella and all the other forms of microbiological contamination.

### Self-Certification Program Qualifications

In time, many firms will be able to qualify for our self-certification program. This program will allow them to maintain and verify the quality of their own products.

Senator Hill. You say in time. What time do you contemplate?

Dr. Goddard. We are talking about expanding this program from its pilot stage in 1968 to include additional firms in 1969, but it will be, in fact, 1970 before we could really have much capability to handle the additional reports that firms would provide in large numbers. We do program 100 additional firms to enter the self-certification program in fiscal year 1969. But there are over 30,000 food-processing firms in the United States. One cannot contemplate that all of these would ever be eligible, but certainly the largest firms with good quality control programs would be eligible over a period of time.

### Effect on Chicken Taste by Growth-Promoting Drugs

Senator Hill. You know, speaking about food, I don't know if this is a good illustration or not, you take the chicken you buy today, I don't think it tastes anything like it did when you were a boy. Am I right?

Dr. Goddard. Sir, I am not much of a chicken fancier. Coming from Georgia, that is bad, you know.

Senator Hill. You may not be a chicken fancier, that is the reason I indicated they don't taste like they did. Don't they use all kinds of drugs on them now to make them grow large more quickly?

Dr. Goddard. They do use growth-promoting drugs in chickens and other animals. These have to be cleared from the animals prior to marketing by allowing a period of time when the drug is withheld, usually less than 30 days.

Mr. Rankin. I would say 4 days or less.

Dr. Goddard. Whatever the clearance time of the drug that is required, these should not be present in any quantity at all when the animal is marketed.

Now, your point may be well taken that it produces certain changes in the characteristics of the animal because of growth acceleration.

Senator Hill. You say you were born and raised in Georgia and you don't eat chicken?

Dr. Goddard. I was not born and raised there. It was my adopted State.

Senator HILL. When did you go there?

Dr. GODDARD. I did not go there until I was assigned to the Communicable Disease Center. My children lived there, and some of my family live there now.

Sentaor HILL. You were well grown then?

Dr. GODDARD. Oh, yes.

Senator HILL. Go ahead, sir.

SELF-CERTIFICATION PILOT PROGRAM WITH GENERAL FOODS PLANT, DOVER, DEL.

Dr. GODDARD. I should like to leave with the committee documents which describe our pilot program with the Dover, Del., plant of General Foods.

Senator HILL. All right, sir.

(The document follows:)

A pilot plan for industry self-certification was set up today between a major food manufacturer and the Food and Drug Administration.

On signing the agreement, FDA's Commissioner James L. Goddard, M.D., said, "Our aim is to see if we can achieve better protection for the consumer through greater participation by industry and more efficient use of FDA resources."

The agreement covers Jell-O Gelatin and Jell-O Golden Egg Custard Mix, two of the many products made at the General Foods plant in Dover, Delaware.

C. W. Cook, Chairman and Chief Executive of General Foods Corporation, said, "General Foods is pleased to be a partner of the Food and Drug Administration in this important project. It typifies, we believe, the kind of voluntary collaboration between government and business for contructive purposes which, in the long run, will produce real benefits for the American people."

A major part of the agreement between the FDA and General Foods is the sharing of all pertinent records related to the two products. These include the firm's manufacturing evaluation and performance records, as well as qualitative formulas.

The FDA, in turn, will furnish the Dover plant with copies of any consumer or other complaints received by the agency concerning either of the two products. The agency will also make available to the Dover management copies of any plant inspection reports necessary to carry out the objectives of the project.

The one year plan, which goes into effect September 1, 1967, will be carried out by the FDA's Baltimore District headed by Maurice D. Kinslow.

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PILOT PLAN FOR QUALITY ASSURANCE SELF-CERTIFICATION BY THE JELL-O DIVISION, DOVER, DEL., PLANT OF THE GENERAL FOODS CORPORATION

INTRODUCTION

The purpose of this pilot study is to determine the feasibility of instituting an industry self-certification plan monitored by the Food and Drug Administration (FDA), Department of Health, Education, and Welfare. The ultimate aim is to achieve better protection for the consumer in the areas of health, sanitation, and economic risks.

This pilot plan covers only two products, Jell-O Gelatin Desserts and Jell-O Golden Egg Custard Mix. These two products have been chosen from the several products produced at the Dover plant in order to evaluate the practicability of the plan before attempting to bring all products under such a plan.

The Jell-O Gelatin Desserts represent a "non-critical" type product, i.e., one in which the potential health hazard to the consumer is minimal.

The Jell-O Golden Egg Custard Mix represents a "critical" type product, i.e., one in which the potential health hazard to the consumer is significant. Such significance results from the non-fat dry milk and dried eggs used in the product. These two ingredients have the potential for being contaminated with Salmonella.

Since this plan is designed to insure compliance with the terms of the Food, Drug and Cosmetic Act, it is expected that adherence to the plan by General

Foods Corporation (GF) and the Dover, Delaware, plant will result in the production of Jell-O Gelatin Desserts and Golden Egg Custard Mix that comply fully with the provisions of the FD&C Act.

All references in this pilot plan to raw materials, finished products, inspections, specifications and controls, reports, records, etc., refer only to the Dover Plant and to Jell-O Gelatin Desserts and Jell-O Golden Egg Custard Mix produced in the Dover Plant, unless otherwise stated.

GENERAL SECTION

The operators of the Dover, Delaware, plant of General Foods Corporation will be expected to comply to the best of their ability and knowledge with all provisions of the Food, Drug and Cosmetic Act and the Fair Packaging and Labeling Act and the applicable Regulations promulgated thereunder. GF is responsible for the acceptability of the labeling on these two products within the requirements of the law. If there is any question concerning any labeling, GF may ask FDA for comment before using such labeling.

This plan may be amended by agreement. Either party may submit a proposal for amending the plan. If GS submits a proposal to upgrade specifications and controls for either product, the proposed upgrading may be put into effect immediately. Either party may request and obtain immediate consideration of any urgent matter requiring a change in the plan. Other changes submitted by either party will be considered and acted upon in a timely manner.

Formula changes may be made at any time by GF, who will supply FDA with specifications and controls for any new ingredients where applicable. Either GF or FDA may withdraw from this plan by giving the other party a written notice of intention to do so.

The FDA will make such inspections of the establishment and such analysis of samples as are deemed necessary to maintain surveillance over the operation of the Dover, Delaware, plant. During such inspections FDA may inspect and review any or all of the records kept by the Dover plant relating to the firm's evaluation of products and performance within the agreed upon specifications and controls adopted for this pilot plan.

If an investigation by FDA, another Government agency, or GF reveals, in a product on the market, a deviation outside the agreed upon specifications and controls, such steps will be taken as are necessary to effect a correction. In some instances, particularly those involving health hazards, removal of the product from the market may be necessary.

It is understood that the specifications in appendix A and B have been agreed to by GF and FDA for the purposes of this pilot study only. No finding is made that deviation from these specifications would necessarily constitute a violation of the FD&C Act.

General Foods Corporation will not use this pilot study for any competitive advantage.

FDA agrees that all information in appendix A and B [1] and all data obtained pursuant to sections 3 and 4 of this agreement shall be kept confidential.

OBLIGATIONS OF DOVER, DELAWARE, PLANT JELLO-O DIVISION, GENERAL FOODS CORPORATION

1. The quality control program will include as a minimum the following controls:

a. Raw Materials Control:

(1) Adequate purchase specifications and procedures to assure compliance with specifications.

(2) Gross sanitary inspection of lot and carrier on receipt.

(3) Qualitative identification of all materials.

(4) An adequate bacteriological examination for all materials that have a potential for contamination with pathogenic organisms.

(5) Materials quarantined until released by Quality Control as appropriate to individual item; critical products until assay is completed.

(6) Storage practices and facilities adequate to prevent contamination and mix-up or loss of identity of ingredients at Dover plant.

[1] Appendix A & B are confidential and are not included as a part of this document.

b. Manufacturing or Process Controls:
(1) Sanitation
(a) Employees practice good personal hygiene with the plant providing the necessary facilities and supervision to accomplish this.
(b) Environment kept clean.
(c) Equipment and utensils kept clean.
(2) Composition Control
(a) Adequate control of identity and weights of all ingredients used.
(b) In-process tests where necessary.
(3) Health Hazard Control
(a) Bacteriological
(1) Periodic environmental samples.
(2) In-line samples where indicated.
(3) Isolation of process line, if necessary.
(4) Strict sanitary measures to prevent in-line contamination.
(b) Other
(1) Use necessary precautions to prevent any contamination.
(4) Quantity of Contents
(a) Check adequate line samples.
c. Finished Product Controls:
(1) Each batch or control increment coded to identify plant and production dates.
(2) Analysis for extraneous materials, health hazards, and quantity of contents as indicated by product.

2. The specific Quality Assurance and Quality Control Programs for the two products covered by this plan are attached hereto as Appendix A and B dated August 1, 1967.

The methods to be used in determining compliance with the specifications and controls in these programs are the applicable methods in the current editions of the *United States Pharmacopeia*, the *Methods of Analysis of the A.O.A.C.*, or bacteriological methods in the Food and Drug Administration's Bacteriological Analytical Manual. If methods other than these are used, either copies of the methods or literature references to such methods are included in Appendix A and B. FDA will use the methods indicated by "(FDA)" in Appendix A and B in checking compliance with the specifications and controls.

3. The Dover plant, Jell-O Division and/or General Foods Corporation will submit the following reports to the Director, Baltimore District, Food and Drug Administration:

a. Monthly summaries listing finished products and incoming raw materials that fail to meet the adopted specifications and controls. The following information should be reported. (To facilitate review, it would be preferable to group products by reason for failure to meet specifications):
(1) Period covered by report.
(2) Reason for failure to meet specifications.
(3) Product.
(4) Codes or lot numbers failing to meet specifications (for reason listed above).
(5) Total amount failing to meet specifications (units).
(6) Total production in lots and units.
(7) Percent of production failing to meet specifications (in lots and units).
(8) Disposition (by lots if not all the same).

b. Reports of inspections made by the Jell-O Division, Quality Assurance Department, or the Corporate Quality Assurance personnel will be submitted to FDA as they are completed. (Reports of inspections and analysis by the Dover plant Quality Control personnel need not be submitted but will be kept on file for review by FDA).

c. All complaints or reports received from any other Government agency (local, State or Federal) or from any consumer or trade source, concerning a product on the market that fails to meet the specifications and controls in Appendix A and B. If the report concerns the possibility of the product being a danger to health, this will be reported immediately along with General Foods planned follow-up investigation. All other complaints will be reported in a monthly statistical summary by foreign matter and package fill.

d. A list of all certified suppliers of non-fat dry milk and dried egg yolks to be up-dated as changes are made.

e. Reports of all suppliers that are de-certified for reasons related to the specifications and controls in Appendix A and B.

4. Records to be maintained by the Dover plant for a period of one year that are to be made available on request for examination by an authorized representative of FDA:

a. Analysis and examination of raw materials.
b. In-plant inspections and analysis.
c. Records of distribution of all products.
(1) For Golden Egg Custard Mix, distribution records are to be by codes.

OBLIGATIONS OF THE FOOD AND DRUG ADMINISTRATION

1. FDA will furnish to each of its Districts the coding information supplied by the Dover plant which will identify the products produced at Dover. Results of any and all analyses of these products will be reported to the Dover plant by the Baltimore District. Included will be any reports of analysis which reveals that the product became adulterated after shipment from Dover.
2. Any consumer, or other complaint, received by FDA concerning either of these two products which can be identified as being produced at the Dover plant will be reported to Dover, along with a report of any meaningful follow-up made.
3. FDA will submit to the Dover plant a copy of the FDA inspector's report of any inspection made at the plant covering these two products.
4. On finding any deviations from the adopted specifications and controls, FDA will ask the Dover plant for their analytical results and records on that code. All such findings which are made available in a timely manner will be considered by FDA in reaching a conclusion as to the significance of its own findings and any action that may be indicated.

AGREEMENT

The General Foods Corporation and the Food and Drug Administration accept the foregoing plan, which is to become effective September 1, 1967 and remain in effect for one year.

FOOD AND DRUG ADMINISTRATION.
GENERAL FOODS CORPORATION.

PROGRAM PERSONNEL

Dr. GODDARD. Self-certification initially involves more headquarters and field staff, but the payoff lies in the fact that each firm that qualifies under this program will become a true partner in FDA's consumer protection program.

BUDGET REQUEST INCREASE

We are requesting an increase of 79 positions and $1.2 million in 1969 for the overall microbiological contamination program, including scientific support and educational activities.

Senator HILL. The budget allowed you this money?

Dr. GODDARD. Yes; they allowed us this. We are also handling some of this by reprograming from lower priority areas.

OTHER PROGRAMS

The balance of our 1969 program increase—13 positions and $600,000—will take care of the additional administrative and technical support needed by the programs I have briefly outlined.

I would like to point out, gentlemen, that we have made reductions in other programs which will partially offset the program increases I have described to you. We have channeled 76 positions and $800,000 out of other areas—food sanitation and pesticide monitoring, for example—where we felt either that the priority is lower or where we have found we can do the job in a better but different way and thus

divert these resources into the key health areas of drug hazards and microbiological contamination.

Senator HILL. Do you think this will meet the need?

Dr. GODDARD. Within this budget; yes, sir. I might say, Mr. Chairman——

Senator HILL. I am not talking about within this budget. I mean the needs of the people?

Dr. GODDARD. No; it won't. A tight budget such as this always defers activity to further years, Senator.

Senator HILL. It means delay?

Dr. GODDARD. Delay in implementation. Also modification in the degree of coverage that is afforded. We have, however, in the reprograming, I think, made a significant saving, at the same time not reducing consumer protection, by new methods of sampling, new sampling techniques, schedules. I believe we are offering as much protection in the pesticide area as we have in previous years but at considerable savings in personnel and total cost, which then enables us to move those kinds of personnel into other higher priority areas.

## APPROPRIATION ESTIMATE

### "BUILDINGS AND FACILITIES

"For construction, alteration, and equipment of facilities, including acquisition of sites, and planning, architectural, and engineering services, [$1,150,000] *$100,000*, to remain available until expended[: *Provided*, That none of the funds contained in this paragraph shall be used to plan the facility, identified in the budget justifications as "Laboratory No. 2", to be located within a radius of fifty miles of the District of Columbia]."

### AMOUNTS AVAILABLE FOR OBLIGATION

| | 1968 | 1969 |
|---|---|---|
| Appropriation | $1,150,000 | $100,000 |
| Unobligated balance brought forward | 21,149,322 | 16,332,487 |
| Cutback required by H.J. Res. 888 (unobligated balance carried forward): | | |
| Reduction below obligation level in the 1968 President's budget | −9,000,000 | |
| Reduction because of unanticipated carryover balances | −5,827,487 | |
| Total cutback | −14,827,487 | |
| Other unobligated balances carried forward | −1,505,000 | −1,260,687 |
| Total obligations | 5,966,835 | 15,171,800 |
| Disposition of cutback: Carried forward for obligation in future years | 16,332,487 | |

### OBLIGATIONS BY ACTIVITY

| Description | 1968 estimate | 1969 estimate | Increase or decrease |
|---|---|---|---|
| Additional headquarters laboratory facilities | $5,452,943 | $3,779,000 | −$1,673,943 |
| Field facilities | 513,892 | 11,392,800 | +10,878,908 |
| Total | 5,966,835 | 15,171,800 | +9,204,965 |

### NEW OBLIGATIONAL AUTHORITY BY ACTIVITY

| Description | 1968 | 1969 |
|---|---|---|
| Research laboratory No. 2, planning | $950,000 | |
| Repairs and improvements | 200,000 | $100,000 |
| Total, new obligational authority | 1,150,000 | 100,000 |

OBLIGATIONS BY OBJECT

| | 1968 estimate | 1969 estimate | Increase or decrease |
|---|---|---|---|
| Other services | $746,000 | $1,280,000 | +$534,000 |
| Equipment | | 20,000 | +20,000 |
| Lands and structures | 5,220,835 | 13,871,800 | +8,650,965 |
| Total | 5,966,835 | 15,171,800 | +9,204,965 |

*Summary of changes*

| | |
|---|---|
| 1967 unobligated balance brought forward | $21,149,322 |
| 1968 enacted appropriation | 1,150,000 |
| Cutback required by House Joint Resolution 888 (unobligated balance carried forward): | |
| Reduction below obligation level in the 1968 Presidents budget | −9,000,000 |
| Reduction because of unanticipated carryover balance | −5,827,487 |
| Other unobligated balances | −1,505,000 |
| 1968 total estimated obligations | 5,966,835 |
| 1968 unobligated balance brought forward | 16,332,487 |
| 1969 requested appropriation | 100,000 |
| 1969 unobligated balance carried forward | −1,260,687 |
| 1969 estimated obligations | 15,171,800 |
| Total change | +9,204,965 |
| Increases: | |
| A. Built in: | |
| Unobligated balance brought forward | 16,332,487 |
| Less: 1969 unobligated balance carried forward | −1,260,687 |
| Subtotal, mandatory increases | 15,071,800 |
| B. Program: | |
| 1. Repairs and improvements to laboratory and field facilities | 100,000 |
| Subtotal, program increases | 100,000 |
| Total increases | 15,171,800 |
| Decreases: | |
| Research Laboratory No. 1 | 4,603,943 |
| Research Laboratory No. 2 | 421,000 |
| Repairs and improvements | 200,000 |
| FB No. 8 conversion | 228,000 |
| Field facilities | 513,892 |
| Total decreases | 5,966,835 |
| Total net changes requested | +9,204,965 |

EXPLANATION OF CHANGES

*Unobligated balance brought forward.*—A total of $16,332,487 from prior year appropriations is being brought forward into 1969. While some of this carry-over is due to construction delays, a significant amount is due to the FY 1968 planned expenditure reduction program which required that $11,919,000 be placed in the Reserve for Obligations to be incurred in subsequent years. Of the unobligated balance brought forward, $3,150,000 will be required for the planning and construction of the National Center for Drug Analysis; $529,000 remaining for planning of Research Laboratory No. 2; and $11,392,800 to complete the district

office modernization program including construction at Chicago, Denver, Philadelphia, San Francisco and Seattle.

*Repairs and improvements.*—$100,000 is requested to provide for a continuing R and I program of repairs and improvements to FDA controlled facilities.

JUSTIFICATION BY ACTIVITY

1. CONSTRUCTION OF HEADQUARTERS LABORATORY FACILITIES

| | 1968 estimate | 1969 estimate | Increase or decrease |
|---|---|---|---|
| Other services (planning, architectural services, etc.) | $421,000 | $679,000 | +$258,000 |
| Equipment | | 20,000 | +20,000 |
| Land and structures | 5,031,943 | 3,080,000 | −1,951,943 |
| Total obligations | 5,452,943 | 3,779,000 | −1,673,943 |

OBLIGATIONS BY PROJECT

| Project | 1968 estimate | 1969 estimate | Increase or decrease |
|---|---|---|---|
| National Center for Drug Analysis | | $3,150,000 | +$3,150,000 |
| Research laboratory No. 1 | $4,603,943 | | −4,603,943 |
| Research laboratory No. 2 [1] | 421,000 | 529,000 | +108,000 |
| FB No. 8 space conversion | 228,000 | | −228,000 |
| Repairs and improvements [2] | 200,000 | 100,000 | −100,000 |
| Total obligations | 5,452,943 | 3,779,000 | −1,673,943 |

[1] The National Center for Drug Analysis and research laboratory No. 2 are part of the Bureau of Science, located in Washington, D.C.

[2] A portion of these funds may be spent for repairs and improvements to field laboratory facilities.

NATIONAL CENTER FOR DRUG ANALYSIS

In FY 1969 the Food and Drug Administration proposes to reprogram funds appropriated for construction of the St. Louis district office, which has been abolished, and from other available sources to permit construction of the National Center for Drug Analysis, FDA's priority construction project. The reorganization establishing NCDA and abolishing the St. Louis district office was approved by the Secretary on May 29, 1967. FDA believes that routine mass testing of drugs can be done more efficiently at less cost in a single location using automated equipment, the newest assay techniques, and a constantly evolving technology. NCDA will permit FDA to determine accurately the proportion of defective drugs available for use by the consumer and select quickly, for special regulatory attention, those manufacturers who produce unacceptable proportions of defective drugs. It is estimated that NCDA will ultimately permit FDA to scrutinize more than 100,000 drug samples a year, instead of the 13,000 presently analyzed. The new NCDA facility will house approximately 150 analysts and supporting staff. Included in the $3,150,000 total estimated cost is $150,000 for planning and $3,000,000 for construction.

RESEARCH LABORATORY #1

Funding deficit problems will be resolved in FY 1968 through cost reduction alternatives and reprogramming of funds. It is expected that construction bids will be invited and construction will begin in FY 1968.

RESEARCH LABORATORY #2

Initial planning for this facility will start in FY 1968. In accordance with provisions of the FY 1968 appropriation language, construction of the facility will be outside a radius of fifty miles of the District of Columbia. Due to the time required for planning this major research facility, construction funds will not be required or requested until FY 1970.

FB#8 CONVERSION

It is anticipated that the conversion of 15,000 square feet of office to laboratory space will be completed by the end of FY 1968.

REPAIRS AND IMPROVEMENTS

In 1969, funds in the amount of $100,000 are requested for repairs and improvements to FDA controlled laboratory and field facilities. These funds will be used for non-recurring major repairs or replacement of building equipment and systems, longer-cycle recurring maintenance repairs such as the overall rehabilitation of roofing, and any betterment which affects the capacity or changes the basic design of the property. For example, it is necessary to convert an incinerator and a boiler at the Special Pharmacological Animal Laboratory in Beltsville, Maryland to meet the requirements of air pollution control legislation. In addition, field laboratory changes may be required as FDA moves toward centralization, at field points, of certain types of sample analyses.

2. CONSTRUCTION OF FIELD FACILITIES

| | 1968 estimate | 1969 estimate | Increase or decrease |
|---|---|---|---|
| Other services | $513,892 | | −$513,892 |
| Equipment | | | |
| Land and structures | | $11,392,800 | +11,392,800 |
| Total obligations | 513,892 | 11,392,800 | +10,878,908 |

OBLIGATIONS BY PROJECT

| Project | 1968 estimate | 1969 estimate | Increase or decrease |
|---|---|---|---|
| Chicago District Office | $122,158 | $3,450,330 | +$3,328,142 |
| Planning | 122,158 | | −122,158 |
| Construction and fixed equipment | | 3,450,300 | 3,450,300 |
| Denver District Office | 22,888 | 1,263,800 | +1,240,912 |
| Planning | 22,888 | | 22,888 |
| Construction and fixed equipment | | 1,263,800 | +1,263,800 |
| Philadelphia District Office | 319,372 | 2,715,000 | +2,395,628 |
| Planning | 319,372 | | −319,372 |
| Construction and fixed equipment | | 2,715,000 | +2,715,000 |
| San Francisco District Office | 20,000 | 2,326,000 | +2,306,000 |
| Planning | 20,000 | | +20,000 |
| Construction and fixed equipment | | 2,326,000 | +2,326,000 |
| Seattle District Office | 29,474 | 1,637,700 | +1,608,226 |
| Planning | 29,474 | | −29,474 |
| Construction and fixed equipment | | 1,637,700 | +1,637,700 |

DISTRICT OFFICES

FDA's district modernization and construction program encountered delays in FY 1968 due to changes in site locations and design clearance problems. Further, the FY 1968 reductions in obligations required that construction projects, proposed for that Fiscal Year, be deferred until 1969. Accordingly, it is now planned to obligate construction funds for the five district offices in FY 1969, on the assumption that planning activities will be concluded in FY 1968.

All funds for these offices have been appropriated and no additional funding requirements are anticipated at this time.

BUDGET REQUEST

Dr. GODDARD. For the "Buildings and facilities" appropriation, we request $100,000 to make necessary improvements and repairs to our existing headquarters and district office buildings.

Senator HILL. How near would the $100,000 meet the real needs?

Dr. GODDARD. In terms of the repairs, we think that will be adequate for this coming year.

Senator HILL. For the coming year?

Dr. GODDARD. Yes, sir.

Senator HILL. How about for the next 5 years?

Dr. GODDARD. No, sir. We have had considerable delay in our construction program. Part of this was at our own re-examination of the sites for proposed District laboratories, and, of course, the freeze on construction has changed the situation markedly, too. So we find ourselves still in quarters that are overcrowded and inadequate, both from the standpoint of the kind of work that is now being done and the safety of the employees, I am afraid, in some instances. But we have made modifications to the extent that we can. We are hopeful that some of these District buildings can now in the near future be started as far as construction is concerned.

STATUS REPORT

I have a status report if you would like to see it. As of March 31 of this year on the pending field facilities.

Senator HILL. We will put that in the record at this point.

(The report follows:)

CONSTRUCTION STATUS REPORT

Enclosed for your information is a report on the status of our Construction Program. Pertinent portions are being teletyped to the interested District Directors.

Regarding Beltsville Laboratory No. 1 and the Animal Care Building, we are still awaiting action on a fund Reprogramming Request and a Request for Approval to Award Construction Contract before authorizing GSA to issue invitations for construction bids.

Due to cost escalation during the process of the District Office construction program, we are faced with a considerable deficit in construction funds. However, we have determined that we can use portable equipment funds for construction purposes without a formal reprogramming action. On this basis, on March 12, we requested DHEW–OGS to proceed to completion of design despite the fact that the original construction funds allocation is in deficit to the estimated construction costs. DHEW has not yet forwarded this authority to GSA, and we are thus experiencing a delay in the design of Chicago and Philadelphia. Regarding Denver, San Francisco and Seattle, we are experiencing the normal problems of resolving an efficient and economical design.

[Enclosure.]

CONSTRUCTION PROJECT STATUS REPORT AS OF MARCH 31, 1968

| STATUS | PROJECT |
|---|---|
| *Headquarters* | |
| No action yet on FDA requests for approval to award construction contract and for reprograming action on additional $700,000. | Beltsville Lab No. 1 and Animal Care Facility |
| Prepared Organization and Mission portion of POR. Review entire proposed format for POR with DHEW on March 27 and 28. | National Center for Drug Analysis |
| *Field* | |
| FDA staff member at GSA, Region 5, on March 6 to discuss FDA design criteria. Some A–E work now being delayed pending resolving deficit for entire program (see Philadelphia comments below). | Chicago |
| A–E making corrections, requested by GSA, on completed working drawings and specifications. | Denver |
| DHEW, on March 15, suggested to GSA that A–E be paid for work to date and remaining contract be held in abeyance for present. | New Orleans |
| FDA forwarded to DHEW information and recommendation regarding course of action applicable to all construction projects regarding estimated funding deficits. Letter from DHEW has not gone to GSA and A–E intermediate working drawings cannot be approved. GSA has instructed A–E to incorporate furniture plans and specifications into the bidding documents. | Philadelphia |
| A–E nearing completion of Diagrammatics for building and site. GSA Architecture Review Committee will meet on April 8 regarding appearance and siting of building. FDR requested by GSA to send representative to meeting. | San Francisco |
| Intermediate working drawings not approved by GSA pending resubmission. A–E continues on working drawings. | Seattle |

DIFFERENCES IN DRUG PRICES

Dr. GODDARD. Mr. Chairman, that concludes my opening remarks. My staff and I will be happy to answer any questions that the members of the subcommittee may have.

Senator HILL. Let me ask a question.

We see it quite a bit in the press and in magazine articles about the difference in price, whether the drug is sold under the generic term or under a trade name.

What about that?

Dr. GODDARD. There is no question, Mr. Chairman, that there are differences in price, although we don't officially maintain any surveillance over pricing, as you well know.

ANTICIPATED ASSURANCE OF MARKET DRUGS

We are aware of these differences. Now, the key question that we have to be prepared to answer—and we have told Congress that by 1970 it is our intention to be in a position to assure the physician that he is free to prescribe any drug in the marketplace and it will do the job that it is supposed to do without price being a determining factor. Thus, he can select a drug with assurance. I cannot say today that we are in a position to be able to provide him with a full measure of assurance. We do not feel that there are substantial numbers of drugs, generic or otherwise, that pose problems, but we really don't have the scientific data to be able to answer the question with a high degree of certainty.

Now, drug prices vary a great deal, we know this. The question is not only a variance in manufacturers' prices but also variation that occurs at the retail level—the markup that occurs at that point in the distribution system. It is a difficult problem. It is going to be one of increasing concern to Congress as well as to the executive branch of Government as both Federal and State programs expand their coverage of drug cost. I suspect we will have to become more versed in prices as we go along.

Senator HILL. But you are working on the matter?

Dr. GODDARD. Yes, sir, we are working particularly on the question of biologic availability of all drugs to make sure that we can tell the physician that he can prescribe any drug that he wishes.

PENDING LEGISLATION

We are also trying to get a bill—we have a bill pending before the Congress—on a drug compendium as a first step to provide good information on all drugs in the marketplace. A supplement to that compendium would contain price information which many people feel would be helpful to the prescribing physician. We are hoping that the Congress will act on this measure. We feel it is an important step and provides the physician with complete information on all of the drugs available in the marketplace.

Senator HILL. When was this bill introduced?

Dr. GODDARD. This bill was part of the President's health message which came up here the month before last.

Senator HILL. Part of his health message?

Dr. GODDARD. Yes, sir.

Senator HILL. Has the House Committee or Senate Committee received the bill yet?

Dr. GODDARD. There have been no hearings by either committee.

INTENSIFIED DRUG PLANT INSPECTION

Senator HILL. I notice you are going to step up your pilot program of intensified drug plant inspection. Is that right?

Dr. GODDARD. Yes, sir. There are approximately 900 prescription-drug firms in the United States. We have rank ordered these firms using various criteria as far as recalls, quantity of product produced, inspection reports, and last available inspection report. We are going to take the first 250 on that list and intensify our coverage of

these firms to assure ourselves that they are producing the drugs in accordance with the good manufacturing practices as formulated by the agency. Increased numbers of samples of products will be obtained as well as more onsite inspection, correction of defects; follow-up of this will be mandatory. Through this mechanism we also hope that we can come closer to providing that measure of assurance I spoke of earlier as well as the other kinds of testing that will take place in laboratories and clinic settings.

### Statutory Inspection Mandate

The law requires us to inspect a drug firm once every 2 years. This intensified inspection means that these firms would not wait a full 2-year period. The first 250 would be inspected perhaps as many as two or three times the first year. The second year, if the budget permits, we would add another 300, and the third year we could catch up and take the last 350, approximately.

### Joint Undertakng With States

We are also working more with State agencies that have capability in the drug inspection area. The State of New Jersey, to mention one, has some 15 drug inspectors. Our New York office is working with the New Jersey State Department of Health and we have a joint program plan, a joint inspection effort, to again improve the quality of the product that enters the marketplace. Through these measures, we hope to extend our availability and make better use of our inspection force and their inspection force.

### microbiological contamination of food

Senator Hill. You spoke about the microbiological contamination of food.

Did the budget cut you much on that item?

Dr. Goddard. No. We reprogramed much of these funds into this area from other areas. It did not represent much of a cut as far as the Bureau of the Budget is involved. On that, Mr. Chairman, may I say we do a remarkable job in this country, considering the total volume of processed food that enters the marketplace, its variety, and the complexity of the processing that occurs. I am not trying to say that our food supply is unsafe, but merely that there are problems that are known to both us and industry.

### Industry Cooperation and Requested Assistance of National Academy of Science and National Research Council

In this connection, we have had excellent cooperation with the major food processors in the United States. They are working intensively to try to remedy any deficiencies that are uncovered.

At times, it is a puzzle to find the sources of contamination and how the finished product becomes involved. We don't have all the answers here. So we have asked the National Academy of Sciences, the National Research Council, to assist us. They have appointed a committee to advise both us and the food industry at large. I believe we are making

some progress in this area. But it is a difficult area and will require continued coverage in the years ahead.

### Effect of Refrigeration

Senator Hill. It has built up through the years; has it not?

Dr. Goddard. Yes, sir; although I would suspect that we as a nation are far better today than we were 30 or 40 years ago in terms of the quality of the food and the freedom from contamination by microbiological contamination. I don't believe our food illnesses are nearly as prevalent today as they were 40 years ago.

Senator Hill. Forty years ago we were not doing much about it, were we?

Dr. Goddard. A limited amount, but not as much was known then as is today. I think the major credit also goes to the difference in food-handling practices in the homes on the part of the housewife. You will recall, I am sure, it was the practice to leave food on the table in the middle of the day after the noon meal and simply cover it. Do you remember that?

Senator Hill. That is right.

Dr. Goddard. Today I think that is a rare practice except in some limited areas in the United States. This was particularly bad in the summertime, of course.

Senator Hill. It was an invitation to trouble, was it not?

Dr. Goddard. Yes, sir. When good refrigeration became available, that practice disappeared.

Senator Hill. Of course, in those times we didn't have the refrigeration that we do now.

Dr. Goddard. That is right.

### Impairment in Taste After Maturity

Senator Hill. You haven't told me yet about that chicken, why it tasted so much better when I was a boy than today.

Dr. Goddard. Wouldn't that be true of many other things, Senator?

Senator Hill. It might be.

Dr. Goddard. I am not nearly as fond of pie and cake as I used to be.

Senator Hill. Is there anything else you would like to add?

Dr. Goddard. No, sir, Senator. It has been a pleasure to work with you over the past 10 or 12 years that I have been testifying before this committee.

Senator Hill. It has always been good to have you here. You are always an intelligent witness. Anything you gentlemen would like to add?

Mr. Rankin. No, thank you, Senator.

Senator Hill. Do you know anything about this chicken business?

Mr. Rankin. I am afraid I can't help you on that.

Senator Hill. In my State, the poultry business has grown to beat the band.

Dr. Goddard. Yes, sir. Not as fast as Georgia.

Senator Hill. No; Georgia is the leading State, is it not?

Dr. Goddard. It is the leading State in the production of poultry.

Senator Hill. There is nothing you gentlemen would like to add?

TRANSFER TO DEPARTMENT OF JUSTICE OF BUREAU OF DRUG ABUSE CONTROL

Dr. GODDARD. We are, Mr. Chairman, pleased to report that the transfer has taken place of the Bureau of Drug Abuse Control to the Department of Justice. We have worked out the administrative details. Mr. Finlator was named yesterday as Associate Director for the new Bureau in the Department of Justice. We are proud of the accomplishments of this Bureau in the relatively short time it has been in operation.

Senator HILL. It has not been in operation too long?

Dr. GODDARD. No, sir; Mr. Finlator came with us 2 years and 1 month ago, I believe. The field force began working in May 1966 as I recall. I think it has compiled an outstanding record of accomplishment in such a short period of operation. I am confident that in the new location, combined with the Bureau of Narcotics, it will make an even greater contribution, and a greater impact on the problem of drug abuse, which is a persuasive problem in society.

Senator HILL. Your transfer has now taken place?

Mr. FINLATOR. As of yesterday.

Senator HILL. Is there anything you would like to say?

Mr. FINLATOR. No, sir; I don't think so.

Senator HILL. If there is nothing you gentlemen would like to add we would like to thank you very much.

Doctor, when did Mr. Larrick retire?

Dr. GODDARD. He retired, I believe in December 1965, and I was appointed on January 17, 1966.

Senator HILL. We thank you very much. We certainly appreciate your testimony.

## Office of Education

**STATEMENT OF HAROLD HOWE II, COMMISSIONER**
**ACCOMPANIED BY:**

**NOLAN ESTES, ASSOCIATE COMMISSIONER FOR ELEMENTARY AND SECONDARY EDUCATION**
**PETER P. MUIRHEAD, ASSOCIATE COMMISSIONER FOR HIGHER EDUCATION**
**GRANT VENN, ASSOCIATE COMMISSIONER FOR ADULT, VOCATIONAL, AND LIBRARY PROGRAMS**
**R. LOUIS BRIGHT, ASSOCIATE COMMISSIONER FOR RESEARCH**
**JAMES J. GALLAGHER, ASSOCIATE COMMISSIONER FOR EDUCATION FOR THE HANDICAPPED**
**BERNARD SISCO, ASSISTANT COMMISSIONER FOR ADMINISTRATION**
**DON DAVIES, ASSOCIATE COMMISSIONER FOR EDUCATIONAL PERSONNEL DEVELOPMENT**
**ROBERT LEESTMA, ASSISTANT COMMISSIONER FOR INTERNATIONAL EDUCATION**
**LEON SCHWARTZ, DEPUTY ASSISTANT COMMISSIONER FOR ADMINISTRATION**
**JOE G. KEEN, BUDGET OFFICER**
**JAMES B. CARDWELL, DEPUTY ASSISTANT SECRETARY, BUDGET**

### Biographical Sketch

Name: Harold Howe II.
Position: Commissioner of Education.
Birthplace and Date: Hartford, Connecticut, August 17, 1918.
Education: Yale University, A.B. 1940; Columbia University, M.A. in history, 1947; Post graduate study in education at University of Cincinnati and Harvard.
Experience: Present: Commissioner of Education.
1964–65: Director of the Learning Institute of North Carolina.
1960–64: Superintendent of Schools, Scarsdale, New York.
1957–60: Principal, Newton High School, Newton, Massachusetts.
1953–57: Principal, Walnut Hills High School, Cincinnati, Ohio.
1950–53: Principal, Andover High School and Junior High School, Andover, Massachusetts.
1947–50: History teacher, Phillips Academy, Andover, Massachusetts.
1941–45: U.S. Navy.
1940–41: History teacher, Darrow School, New Lebanon, New York.
Association Memberships: Board of Trustee of Yale. Several professional education societies.
Publications: Contributions to Educational Journals.

### INTRODUCTION OF ASSOCIATES

Senator Hill. Commissioner Howe.

Mr. Howe. Senator, I would like to make my opening statement. Before I do, I would like to say that there will be several members of the staff of the Office of Education making statements to you this morning. I believe you have met most of them before. You have cer-

tainly met Mr. Estes on my right and a number of others who will appear before you, including Mr. Venn and Mr. Muirhead and Mr. Lillywhite, but there are four new people here I would like to be sure you have had a chance to meet.

Mr. Sisco, on my immediate left, is the Assistant Commissioner for Administration. Then we have two new bureaus in the Office of Education with two new bureau chiefs—Dr. James Gallagher, Associate Commissioner for the Bureau of Education for the Handicapped; and M. Don Davies, who has been with us about 2 weeks now, is head of the new Bureau for Educational Personnel Development.

You will recall that the Congress passed the Education Professions Development Act last June and we started a new bureau to administer that legislation. So, you will be hearing these people for the first time.

Mr. Robert Leestma, also, will appear before you. He is in charge of our various programs having to do with International Education.

### BUDGET REQUEST AND CARRYOVER FUNDS

Mr. Chairman and members of the committee: It is a pleasure to appear before you today to present our fiscal year 1969 proposed budget for programs administered by the Office of Education—some 90 programs which affect virtually every level and area of American education.

Our request includes $3.7 billion in new appropriations which, when added to $400 million in carryover funds from 1968, will result in a total obligation level of $4.1 billion, an increase of $200 million over the 1968 program level.

These funds requested for fiscal 1969 will provide support from the Office of Education to education in the United States of America in the same proportion as in fiscal 1968—in both years the Office will carry about 8 percent of the total Federal, State, and local expenditure.

I would like to make some overall comments and bring you up to date on the achievements of these programs since we appeared before you last year, as well as the directions we envision for them in the future. Afterwards, my colleagues will present to you each appropriation account in more detail.

### SERVICES TO STUDENTS, TEACHERS, SCHOOLS, AND COLLEGES

Program achievements of the past year can best be measured in terms of services to the Nation's students, teachers, schools, and colleges.

A few examples of what 1968 funds are supporting can illustrate this. About 9½ million children from poverty areas, under title I of the Elementary and Secondary Education Act, are receiving those extra services which can make the difference between success and failure in school.

We have growing evidence that these funds are having the intended effects. Some 1.3 million students are receiving financial aid in the form of loans, grants, and work opportunities to enable them to pursue a higher education.

Over 60,000 persons are being provided advanced training so that better qualified teachers, administrators, and other professionals will benefit students in the classroom.

About 7½ million students are enrolled in federally supported vocational education programs to obtain the skills necessary for the world of work; and some 319,000 adults are participating in basic literacy programs to become more fulfilled and productive citizens.

### New Programs

We must continue these efforts as well as fill in gaps with new programs. Congress itself recognized these needs in its last session by enacting the Elementary and Secondary Education Amendments of 1967 and the Education Professions Development Act.

Now, during its second session, the major focus on new legislation will be on higher education and vocational education.

### 1969 programs

In developing our 1969 budget in a year of financial restraints, we have placed highest priority for budget increases over 1968 on programs aimed at increasing educational opportunities for the disadvantaged and the handicapped, expanding the supply of better qualified teachers, and improving the quality of education through research to develop new methods of teaching and learning in our classrooms.

We believe it reasonable that activities which can be temporarily delayed, such as some construction and equipment programs, be given lesser priority.

Our requested program level of $4.1 billion may be distributed in the following categories:

### Budget bureau reduction

Senator Hill. How much is that $4.1 billion of what you requested?

Mr. Howe. We are requesting $4.1 billion in obligational level, but $3.7 billion in new appropriations.

Senator Hill. How much did you request?

Mr. Cardwell. The original request was $4,856 million.

Senator Hill. You were cut $1.1 billion?

Mr. Howe. Yes, sir.

Senator Hill. Where was most of that loss?

Mr. Howe. The major cuts were in equipment, construction, and materials under the Elementary and Secondary Education Act. The National Defense Education Act, and the Higher Education Facilities Act.

Some additional cuts are distributed throughout the budget. We will be happy to give you a detail if it would be helpful.

Senator Hill. All right.

(The material follows:)

HISTORY OF 1969 ESTIMATE

| Appropriation | 1968 appropriation [1] | 1969 | | | Department reduction from agency request | Budget Bureau reduction from Department submission | Explanation of difference | Positions | Amount |
|---|---|---|---|---|---|---|---|---|---|
| | | Estimate to Department | Department estimate to Budget Bureau | President's budget | | | | | |
| | (a) | (b) | (c) | (d) | (e) | (f) | | | |
| | | | | | | | DEPARTMENT REDUCTION | | |
| Elementary and secondary educational activities. | $1,640,963,066 | $2,048,550,000 | $1,999,790,000 | $1,561,703,000 | $48,760,000 | $438,087,000 | Supplementary educational centers and services: Number of projects reduced from 1,680 to 1,530. | ---------- | $39,000,000 |
| | | | | | | | Strengthening State departments of education: Number of new positions to increase leadership capabilities in State agencies reduced by 200. | ---------- | 3,750,000 |
| | | | | | | | Equipment and minor remodeling: Number of State approved projects reduced by 10 percent. | ---------- | 8,500,000 |
| | | | | | | | Program planning and evaluation: Level of evaluation capabilities of State educational agencies, including computer and contractual services, increased; number of State planning and evaluation staff members increased by 30. | ---------- | +2,500,000 |
| | | | | | | | Program support: Level of evaluations and studies reduced. | ---------- | 10,000 |
| | | | | | | | Total, Department reduction | ---------- | 48,760,000 |
| | | | | | | | BUREAU OF BUDGET REDUCTION | | |
| | | | | | | | Educationally deprived children: Number of disadvantaged students receiving benefits reduced from 10,000,000 to 9,500,000; earmarking of summer program funds eliminated. | ---------- | 250,000,000 |
| | | | | | | | Supplementary educational centers and services: Number of continuation projects reduced from 1,530 to 1,075; and initiation of new projects eliminated. | ---------- | 90,837,000 |
| | | | | | | | Guidance, counseling and testing: Level of funding reduced by 10 percent. | ---------- | 2,500,000 |

| | | | | | | | | |
|---|---|---|---|---|---|---|---|---|
| | | | | | | | Equipment and minor remodeling: Number of State approved projects reduced by 77 percent. | 64,750,000 |
| | | | | | | | Library resources: Level of support to States for procurement of library resources, textbooks, and instructional materials reduced from $1.91 to $0.84 per student. | 59,000,000 |
| | | | | | | | Program planning and evaluation: Level of evaluation capabilities of State educational agencies, including computer and contractual services, reduced; number of State planning and evaluation staff members reduced by 70. | 6,000,000 |
| | | | | | | | Dropout prevention program: Amount will implement new program for innovative projects in poverty area schools to reduce and prevent school dropouts, and will support between 15 and 20 projects. | +30,000,000 |
| | | | | | | | Bilingual education program: Amount will implement new program of bilingual education, and will support 20 teacher training programs, between 25 and 40 local school programs, and some production of teaching materials. | +5,000,000 |
| | | | | | | | Total, Bureau of Budget Reduction | 438,087,000 |
| | | | | | | | DEPARTMENT REDUCTION | |
| School assistance in federally affected areas. | 439,137,000 | 473,517,000 | 473,137,000 | 410,335,000 | 380,000 | 62,802,000 | Construction—Technical services: 1968 lapse rate on existing positions maintained. | 380,000 |
| | | | | | | | BUREAU OF BUDGET REDUCTION | |
| | | | | | | | Maintenance and operations: Funding level of entitlements reduced from 80 percent to 70 percent. | 54,610,000 |
| | | | | | | | Construction: Funding of some eligible projects deferred until following year. | 8,192,000 |
| | | | | | | | Total, Bureau of Budget Reduction | 62,802,000 |

See footnote at end of table, p. 779.

HISTORY OF 1969 ESTIMATE—Continued

| Appropriation | 1968 appropriation [1] | 1969 | | | Department reduction from agency request | Budget Bureau reduction from Department submission | Explanation of difference | Positions | Amount |
|---|---|---|---|---|---|---|---|---|---|
| | | Estimate to Department | Department estimate to Budget Bureau | President's budget | | | | | |
| | (a) | (b) | (c) | (d) | (e) | (f) | | | |
| | | | | | | | DEPARTMENT REDUCTION | | |
| Education professions development activities. | $163,850,000 | $284,710,000 | $253,713,000 | $215,913,000 | $30,997,000 | $37,800,000 | State grants for recruitment of educational personnel: Number of teachers and teacher aides recruited and trained reduced from 15,000 to 12,000. | ---------- | $5,000,000 |
| | | | | | | | Fellowships and graduate programs for elementary, secondary and other educational personnel: Number of new fellowships reduced from 5,256 to 3,932, and number of program development grants reduced from 115 to 75. | ---------- | 16,315,000 |
| | | | | | | | Institutes and training programs for elementary, secondary, and other educational personnel: Number of persons trained from 40,300 to 38,700. | ---------- | 2,750,000 |
| | | | | | | | College teacher fellowships: Reduction reflects revised estimate of continuation costs—from 10,825 to 9.325 2d, 3d, and 4th-year awards. | ---------- | 6,600,000 |
| | | | | | | | Program support: Level of evaluations and studies reduced. | ---------- | 332,000 |
| | | | | | | | Total, Department reduction | ---------- | 30,997,000 |
| | | | | | | | BUREAU OF BUDGET REDUCTION | | |
| | | | | | | | State grants for recruitment of educational personnel: Number of teachers and teacher aides recruited and trained reduced from 12,000 to 9,000. | ---------- | 5,000,000 |
| | | | | | | | Encouragement of educational personnel: Level of activities to recruit and encourage persons for educational careers reduced. | ---------- | 1,000,000 |
| | | | | | | | Fellowships and graduate programs for elementary, secondary, and other educational personnel: Number of new fellowships reduced from 3,932 to 3,185. | ---------- | 6,000,000 |

| | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|
| | | | | | | | Institutes and training programs for elementary, secondary, and other educational personnel: Number of persons trained reduced from 38,700 to 31,400. | --------- | 12,400,000 |
| | | | | | | | College teacher fellowships: Number of new fellowships reduced from 7,500 to 6,000; 400 4th-year awards eliminated. | --------- | 13,400,000 |
| | | | | | | | Total, Bureau of Budget Reduction | ---------- | 37,800,000 |
| | | | | | | | DEPARTMENT ADDITIONS | | |
| Teacher Corps | 13,500,000 | 33,150,000 | 41,235,000 | 31,235,000 | +8,085,000 | 10,000,000 | Program increased because of a change in number of corpsmen to be recruited and the time of their recruitment. Under the agency estimate, 2,000 corpsmen were to be recruited at the end of fiscal year 1969. Under the Department estimate, 5,000 corpsmen were to be recruited near the beginning of fiscal year 1969 and supported for ⅔ of a year. | --------- | +8,100,000 |
| | | | | | | | Program support: Level of evaluations and studies reduced. | --------- | −15,000 |
| | | | | | | | Total, Department additions | ---------- | +8,085,000 |
| | | | | | | | BUREAU OF BUDGET REDUCTION | | |
| | | | | | | | Recruiting changed. No corpsmen are to be recruited in fiscal year 1968, thereby reducing continuation costs. The number to be recruited in fiscal year 1969 is 3,000, with 1,500 at the beginning (with full year support) and 1,500 at the end. | --------- | 10,000,000 |
| | | | | | | | DEPARTMENT ADDITION | | |
| Higher educational activities. | 1,034,094,000 | 1,081,061,000 | 1,082,625,000 | 708,127,000 | +1,564,000 | 374,498,000 | Strengthening developing institutions: Number of cooperative arrangements reduced from 390 to 385. | --------- | 800,000 |
| | | | | | | | Construction—Technical services: 86 new positions eliminated. | 86 | 956,000 |
| | | | | | | | Insured student loans—Interest payments: Increase reflects revised estimate of payments due. | --------- | +5,000,000 |
| | | | | | | | Program support: Level of evaluations and studies reduced. | --------- | 1,680,000 |
| | | | | | | | Total, Department addition | ---------- | +1,564,000 |

See footnote at end of table, p. 779.

| Appropriation | 1968 appropriation [1] | 1969 | | | Department reduction from agency request | Budget Bureau reduction from Department submission | Explanation of difference | Positions | Amount |
|---|---|---|---|---|---|---|---|---|---|
| | | Estimate to Department | Department estimate to Budget Bureau | President's budget | | | | | |
| | (a) | (b) | (c) | (d) | (e) | (f) | | | |
| | | | | | | | BUREAU OF BUDGET REDUCTION | | |
| | | | | | | | Strengthening developing institutions: Number of cooperative arrangements reduced from 385 to 350. Number of national teaching fellowships reduced from 1,588 to 1,275. | ---------- | $5,000,000 |
| | | | | | | | Construction—Public community colleges and technical institutes: Number of projects reduced from 237 to 83. | | 62,000,000 |
| | | | | | | | Other undergraduate facilities: Number of projects reduced from 700 to 76. | ---------- | 271,000,000 |
| | | | | | | | Graduate facilities: Number of projects reduced from 63 to 10. | ---------- | 42,000,000 |
| | | | | | | | Technical services: Increase for computer services for construction project data eliminated. | ---------- | 487,000 |
| | | | | | | | Educational opportunity grants: Number of new grants reduced from 320,700 to 267,000. | ---------- | 57,400,000 |
| | | | | | | | Encouragement of educational talent: Number of projects increased from 95 to 135. | ---------- | +2,500,000 |
| | | | | | | | Direct student loans: Allowance based on decision to fund with appropriated dollars rather than participation sales. | ---------- | +134,400,000 |
| | | | | | | | Insured student loans—Interest payments: Reduction reflects revised estimate of payments due based on November status report and loans outstanding. | ---------- | 49,211,000 |
| | | | | | | | Work-study programs: Number of students employed reduced as follows: Winter-spring term, from 223,300 to 204,500; summer term, from 111,300 to 101,900; fall term, from 244,900 to 224,200. | ---------- | 24,300,000 |
| | | | | | | | Total, Bureau of Budget Reduction | | 374,498,000 |

| | | | | | | | | |
|---|---|---|---|---|---|---|---|---|
| | | | | | | | BUREAU OF BUDGET REDUCTION | |
| Higher education facilities loan fund. | $102,625,000 | $204,975,000 | $204,975,000 | $104,975,000 | ---------- | $100,000,000 | Number of construction loans to higher education institutions reduced from 220 to 165. | 100,000,000 |
| | | | | | | | DEPARTMENT REDUCTION | |
| Expansion and improvement of vocational education. | 252,900,000 | 272,991,000 | 253,186,000 | 249,995,000 | 19,805,000 | 3,191,000 | Vocational training under George-Barden Act and Vocational Education Act of 1963: Estimate was based on higher authorization pending legislation. Reduction maintains current authorizations. | 14,350,000 |
| | | | | | | | Residential vocational schools: Planning for 10 schools eliminated. | 5,000,000 |
| | | | | | | | Program support: Level of evaluations and studies reduced. | 455,000 |
| | | | | | | | Total, Department reduction | 19,805,000 |
| | | | | | | | BUREAU OF BUDGET REDUCTION | |
| | | | | | | | Vocational training under George-Barden Act and Vocational Education Act of 1963: Support reduced from current authorization to 1968 level. | 3,191,000 |
| | | | | | | | DEPARTMENT REDUCTION | |
| Libraries and community services. | 156,500,000 | 186,060,000 | 185,760,000 | 149,199,000 | 300,000 | 36,561,000 | Program support: Level of evaluations and studies reduced. | 300,000 |
| | | | | | | | BUREAU OF BUDGET REDUCTION | |
| | | | | | | | Library services: Interlibrary cooperation and State institutional library services programs reduced to 1968 level. | 5,291,000 |
| | | | | | | | Library construction: Number of library construction projects reduced from 400 to 204. | 18,000,000 |
| | | | | | | | Library of Congress: Level of cataloging and acquisition of printed materials reduced. | 2,270,000 |
| | | | | | | | University community service programs: Number of projects reduced from 935 to 623. | 11,000,000 |
| | | | | | | | Total, Bureau of Budget reduction | 36,561,000 |

See footnote at end of table, p. 779.

HISTORY OF 1969 ESTIMATE—Continued

| Appropriation | 1968 appropriation [1] | 1969 | | | Department reduction from agency request | Budget Bureau reduction from Department submission | Explanation of difference | Positions | Amount |
|---|---|---|---|---|---|---|---|---|---|
| | | Estimate to Department | Department estimate to Budget Bureau | President's budget | | | | | |
| | (a) | (b) | (c) | (d) | (e) | (f) | | | |
| | | | | | | | DEPARTMENT REDUCTION | | |
| Educational improvement for the handicapped. | $53,400,000 | $125,600,000 | $110,575,000 | $85,225,000 | $15,025,000 | $25,350,000 | Preschool and school programs: Number of children served reduced from 98,300 to 83,300. | ---------- | $12,900,000 |
| | | | | | | | Captioned films for the deaf and media services: Number of research and development contracts reduced from 24 to 13; number of teachers trained reduced from 247 to 190; and number of children served reduced from 103,350 to 71,540. | ---------- | 2,000,000 |
| | | | | | | | Program support: Level of evaluations and studies reduced. | ---------- | 125,000 |
| | | | | | | | Total, Department reduction | | 15,025,000 |
| | | | | | | | BUREAU OF BUDGET REDUCTION | | |
| | | | | | | | Preschool and school programs: Number of children served reduced from 83,300 to 53,300. | ---------- | 18,000,000 |
| | | | | | | | Teacher education: Number of teachers receiving in-service training reduced from 12,487 to 9,110; number of new personnel trained reduced from 5,692 to 4,590; number of program development grants reduced from 106 to 84. | ---------- | 7,000,000 |
| | | | | | | | Captioned films for the deaf and media services: Number of research and development contracts reduced from 13 to 12; number of teachers trained reduced from 190 to 160; number of researchers supported reduced from 546 to 542. | ---------- | 350,000 |
| | | | | | | | Total, Bureau of Budget reduction | | 25,350,000 |
| | | | | | | | DEPARTMENT REDUCTION | | |
| Research and training | 88,967,000 | 165,650,000 | 142,300,000 | 142,300,000 | 23,350,000 | | Laboratories and research and development centers: Regional laboratory program reduced to continuation level of present projects. | ---------- | 11,700,000 |

| | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|
| | | | | | | | General education demonstration and development: Reduced to support of 3 proposed major projects. | ---------- | 7,150,000 |
| | | | | | | | Vocational education research: Adjusted for consistency with reduction in vocational education grants to States (research and institutes to remain at 10 percent). | ---------- | 4,000,000 |
| | | | | | | | Educational media: Reduced level of support | ---------- | 1,000,000 |
| | | | | | | | Training: Graduate program increases deferred pending more emphasis on program development. | ---------- | 3,000,000 |
| | | | | | | | Evaluations: Increased level of support | ---------- | +3,500,000 |
| | | | | | | | Total, Department reduction | ---------- | 23,350,000 |
| | | | | | | | BUREAU OF BUDGET REDUCTION | | |
| Foreign language training and area programs. | 15,700,000 | 23,500,000 | 23,500,000 | 19,250,000 | ---------- | 4,250,000 | Language and area studies: Language and area centers reduced from 126 to 110; number of foreign language fellowships at American institutions reduced from 3,056 to 2,749. | ---------- | 3,950,000 |
| | | | | | | | Foreign language training and area studies: Number of individuals supported for overseas study reduced from 747 to 693. | ---------- | 300,000 |
| | | | | | | | Total, Bureau of Budget reduction | ---------- | 4,250,000 |
| | | | | | | | DEPARTMENT REDUCTION | | |
| Educational research and training (special foreign currency program). | ---------- | 7,400,000 | 4,000,000 | 4,000,000 | 3,400,000 | ---------- | Training, research, and study grants and research in foreign education: Level of support reduced. | ---------- | 3,400,000 |
| | | | | | | | DEPARTMENT REDUCTION | | |
| Salaries and expenses | 37,519,976 | 55,093,000 | 46,100,000 | 46,100,000 | 8,983,000 | ---------- | Executive direction and administration | 133 | 1,975,000 |
| | | | | | | | National Center for Educational Statistics | 39 | 742,000 |
| | | | | | | | Bureau of Elementary and Secondary Education. | 122 | 1,882,000 |
| | | | | | | | Bureau of Adult, Vocational, and Library Programs. | 46 | 1,021,000 |
| | | | | | | | Bureau of Higher Education | 159 | 2,302,000 |
| | | | | | | | Bureau of Research | 46 | 721,000 |
| | | | | | | | Bureau of Education of Handicapped | 30 | 340,000 |
| | | | | | | | Total, Department reduction | 575 | 8,983,000 |
| Total, Office of Education | 3,999,156,042 | 4,962,247,000 | 4,820,896,000 | 3,728,357,000 | 141,351,000 | 1,092,539,000 | Total reduction, Office of Education | 661 | 1,233,890,000 |

[1] 1968 appropriation adjusted for comparability with 1969 appropriation structure; principal adjustments relate to creation of "Education professions development activities" appropriation.

Mr. CARDWELL. $438 million of it came out of elementary and secondary education. About $40 million came out of vocational education and library activities, and $475 million out of higher education.

The main element of that latter part relates to higher education facilities construction reduction.

Senator HILL. All right.

### ELEMENTARY AND SECONDARY EDUCATION

Mr. HOWE. At the elementary and secondary school level, $2 billion, or 50 percent, is included to continue existing programs under the Elementary and Second Education Act, the National Defense Education Act, and the programs for school assistance in federally affected areas.

Three new programs enacted in the last session of Congress will be launched—projects to help schools prevent dropouts in poverty areas, bilingual programs to assist children with limited English-speaking ability to overcome this barrier to education, and support to enable States and the Federal Government to plan and evaluate these programs more effectively.

### INCLUSION OF FUNDS FOR 1970

We are also proposing that our 1969 appropriation include funds for 1970 for assistance to educationally deprived children in order that schools may be notified well in advance of the academic year of their grants on which to base financial, personnel, and other plans.

This is in accordance with the Elementary and Secondary Education Amendments of 1967 and our 1968 supplemental request which includes funds for 1969.

I might say that the supplemental request is heard by Senator Pastore. We are not presenting this in detail today.

### HIGHER EDUCATION

An amount of $1.1 billion, or 26 percent of the Office of Education budget, for higher education, includes increases in student aid and in strengthening developing institutions so that they can contribute more significantly to the Nation's resources.

### LEGISLATION PROPOSAL

We are proposing as new legislation an Educational Opportunity Act to consolidate in 1970 the three student aid programs of opportunity grants, direct loans, and work-study to make them more consistent and flexible in terms of the needs of individual students and institutions.

### TEACHER QUALITY IMPROVEMENT

To improve the quality of educational personnel, our budget includes $247 million, or 6 percent of the total, for training those who serve our schools and colleges.

In accordance with the Education Professions Development Act, signed by the President on June 29, 1967, we will initiate two new programs—grants to States to recruit and train teachers in critical

shortage areas, and special projects to identify capable persons and to encourage them to enter education.

In addition, these funds will expand the Teacher Corps and add to the institute programs for training teachers.

VOCATIONAL EDUCATION

To continue the existing vocational education programs, $250 million, or 6 percent of the total Office of Education budget, is requested. We are also proposing as new legislation the Partnership for Learning and Earning Act which would merge the three existing acts in 1970 to modernize and strengthen vocational education programs; and would authorize $15 million in 1969 for innovative occupational projects.

LIBRARY AND COMMUNITY SERVICES

An amount of $158 million, or 4 percent, is included to continue library and community service programs, and to expand basic education for adult illiterates.

RESEARCH, DEMONSTRATION AND DISSEMINATION

For research, demonstration, and dissemination to improve all levels of education, our budget includes $176 million, or 4 percent of the total, and an increase of more than 95 percent over 1968.

Emphasis will be placed on developing programs to strengthen instruction and administration, including a special demonstration project in the District of Columbia, and on the problems of low-income, urban, and migrant children.

EDUCATION FOR HANDICAPPED

To support education for the handicapped, we are requesting $85 million, or 2 percent of the total Office program. This represents an increase of almost 65 percent over the 1968 level. Preschool and school programs, teacher education, and research will be expanded.

Three new programs enacted last year will be implemented—regional resource centers to provide special services; innovative centers for deaf-blind children; and projects to recruit and encourage persons to enter the field of education for the handicapped, and to disseminate information on the available services and resources to teachers and parents of handicapped children.

ADMINISTRATIVE EXPENSES

Of the remaining $67 million, $46.1 million has been allocated to the administrative expenses of the Office of Education which operates its various programs with an overhead cost of about 1 percent.

New Positions

At this point, I would like to make some special comments on our salaries and expenses appropriation for which we are requesting 373 new positions to assist us in administering these varied and far-reaching programs more effectively and efficiently.

We feel that this represents a modest increase in light of our new and expanded responsibilities as well as a mounting workload in existing areas such as insured student loans.

### Bureau of Educational Personnel Development

We have just established a new Bureau of Educational Personnel Development to coordinate and administer all preschool, elementary, secondary, adult, and vocational teacher training programs included in the new act.

### House Committee Study: Utilization of Findings

We are also eager to make the fullest use of the findings of the study on the Office of Education made by Congresswoman Green's committee.

I have established a small task force to oversee the detailed review and analysis of each of the 150 or so recommendations and we plan to issue a preliminary report on the status of these proposals during this month.

We have already implemented some of the recommendations such as reorganizing the National Center for Educational Statistics to provide more efficient services, and combining student aid programs into a single application form.

### Validity of Program Priorities

In summarizing, Mr. Chairman, we believe that our budget represents wise and responsible decisions on priorities in view of the many competing demands on our fiscal resources.

As the President emphasized in his education message, it will enable us to continue, expand, and implement programs which meet our most urgent needs and which directly affect the Nation's youth.

Thank you, Mr. Chairman. We will be glad to answer any questions you may have.

### Budget Bureau Reduction

Senator Hill. How much were you reduced by the budget from your original request?

Mr. Cardwell. The overall education?

Senator Hill. Overall.

Mr. Cardwell. $1.1 billion, approximately.

Senator Hill. What is the overall amount allowed by the budget?

Mr. Cardwell. The budget allowed $3,791,000,000 in appropriation requests compared to an original request of $4,856,000,000. These amounts include permanent appropriations and civil rights educational activities which are not heard by this committee.

Mr. Howe. Isn't that obligations rather than appropriations?

Mr. Cardwell. That is appropriations.

### 1968–69 Expenditure Comparison

Senator Hill. Is there anything you gentlemen would like to add?

Mr. Howe. The only thing I would reiterate and perhaps emphasize, Mr. Chairman, is the fact that our appropriation request for new appropriations in fiscal year 1969 is somewhat below our appropriation for fiscal year 1968.

I believe the figure is about $127 million less that we are requesting in new funds in fiscal 1969. We have set our request this way, realizing the stringencies in the fiscal year 1969 budget.

Our obligation authorization that we are requesting in fiscal 1969 is, of course, above our obligation level authorized for fiscal 1968 because we have some carryover funds that will make that possible.

### Program Priorities

What we have tried to do in making this request of you is to set our priorities in such a way that we can have funds for those programs which will have the maximum impact on the important areas of the American city, the disadvantaged child, and exploring new and better ways to educate; rather than putting our emphasis on construction and equipment funds in a tight budget year.

I simply wanted to reiterate this position which is reflected throughout all our decisions in our budget.

### 1968 expenditure reductions

Mr. Cardwell. I think also it might be pointed out, Mr. Chairman, that the effect of House Joint Resolution 888 was to reduce the Office of Education obligations in 1968 by about $347 million.

The largest cut, $216 million, was taken against construction including construction of higher education facilities and educational research facilities.

There were also reductions of $65 million in formula grants and a reduction of slightly less than a million dollars in salaries and expenses.

Senator Hill. House Joint Resolution 888 brought about that much reduction?

Mr. Cardwell. Yes, sir.

Senator Hill. That was quite a reduction; was it not?

Mr. Cardwell. Yes, sir.

Senator Hill. Is there anything you would like to add, Mr. Howe?

Mr. Howe. No; thank you, sir.

## Elementary and Secondary Educational Activities

STATEMENT OF NOLAN ESTES, ASSOCIATE COMMISSIONER FOR ELEMENTARY AND SECONDARY EDUCATION
ACCOMPANIED BY:
HAROLD HOWE II, COMMISSIONER OF EDUCATION
JAMES J. GALLAGHER, ASSOCIATE COMMISSIONER FOR EDUCATION FOR THE HANDICAPPED
B. ALDEN LILLYWHITE, DEPUTY ASSOCIATE COMMISSIONER FOR ELEMENTARY AND SECONDARY EDUCATION
JOHN F. HUGHES, DIRECTOR, DIVISION OF COMPENSATORY EDUCATION
RALPH BECKER, ACTING DIRECTOR, DIVISION OF PLANS AND SUPPLEMENTARY CENTERS
HARRY PHILLIPS, DIRECTOR, STATE AGENCY COOPERATION
LUCIEN HAAS, DIRECTOR, PUBLIC INFORMATION STAFF, ELEMENTARY AND SECONDARY EDUCATION
IRWIN KIRK, EXECUTIVE OFFICER, ELEMENTARY AND SECONDARY EDUCATION
BERNARD SISCO, ASSISTANT COMMISSIONER FOR ADMINISTRATION
LEON SCHWARTZ, DEPUTY ASSISTANT COMMISSIONER FOR ADMINISTRATION
JOE G. KEEN, BUDGET OFFICER
THOMAS McNAMARA, BUDGET ANALYST
JAMES B. CARDWELL, DEPUTY ASSISTANT SECRETARY, BUDGET

### Appropriation Estimate

OFFICE OF EDUCATION

ELEMENTARY AND SECONDARY EDUCATIONAL ACTIVITIES

"For grants, loans, and payments under title II of the Act of September 30, 1950, as amended [by title I of the Elementary and Secondary Education Act of 1965 and title I of the Elementary and Secondary Education Amendments of 1966], under titles II, III, [and] V, *VII and VIII* of [said] *the Elementary and Secondary Education Act of* 1965 [Act] as amended [by said 1966 Amendments], *under title IV of the Elementary and Secondary Education amendments of 1967*, and under titles III, [V, and XI] *and V(A)*, of the National Defense Education Act of 1958, as amended [(20 U.S.C. ch. 17; Public Laws 88–665, 89–329, 89–698, and 89–752), $1,677,907,000], *$361,703,000*, of which [$1,191,000,000 shall be for meeting the special educational needs of educationally deprived children under title II of the Act of September 30, 1950, as amended, but the aggregate amounts otherwise available for grants therefor within States shall not be less than the amounts allocated from the fiscal year 1967 appropriation to local educational agencies in such States for grants; $104,457,000] *$46,000,000* shall be for school library resources, textbooks, and other instructional materials under title II of said Elementary and Secondary Education Act of 1965; [$208,750,000] *$189,163,000* shall be for supplementary educational centers and services under title III of said Act; [$29,750,000] *$35,000,000* shall be for strengthening State departments of education under title V of said Act; *$5,000,000 shall be for im-*

*proving the education of bilingual children under Title VII of said Act; $30,000,000 shall be for preventing school dropouts under Title VIII of said Act; $14,000,000 shall be for planning and evaluation under Title IV of the Elementary and Secondary Education amendments of 1967;* [$82,200,000] *$17,950,000* shall be for grants to States and loans to nonprofit private schools for equipment and minor remodeling under title III of the National Defense Education Act of 1958, as amended, and for grants to States for administrative services under said title III; and [$24,500,000] *$22,000,000* shall be for grants to States for testing, guidance, and counseling under title V of said Act; *Provided,* That allotments under sections 302(a) and 305 for equipment and minor remodeling shall be made on the basis of [$79,200,000] *$14,950,000* for grants to States and on the basis of [$6,409,491] *$2,038,636* for loans to private notprofit schools, and allotments under section 302(b) for administrative services shall be made on the basis of $2,000,000: *Provided further, That not to exceed $590,000 shall be available for necessary expenses of advisory committees, and for services of specialists in reviewing applications for assistance.*

*"For meeting the special educational needs of educationally deprived children under Title II of the Act of September 30, 1950, as amended, $1,200,000,000, for the fiscal year 1969: Provided, That the aggregate amounts otherwise available for grants therefor within States shall not be less than the amounts allocated from the fiscal year 1968 appropriation to local educational agencies in such States for grants. For meeting the special educational needs of educationally deprived children under Title II of the Act of September 30, 1950, as amended, $1,200,000,000, for the fiscal year 1970: Provided, That the aggregate amounts otherwise available for grants therefor within States shall not be less than the amounts allocated from the fiscal year 1969 appropriation to local educational agencies in such States for grants."*

EXPLANATION OF LANGUAGE CHANGES

The phrase beginning with "by Title I" and ending with "Amendments of 1966" and the phrase "by said 1966 amendments" are deleted to clarify and update the legal citations for this appropriation.

The items "VII and VIII" are included as is the phrase "under title IV of the Elementary and Secondary Education Amendments of 1967" and the phrase beginning with "$5,000,000 shall be for improving the education of bilingual children" and ending with "the Elementary and Secondary Education Amendments of 1967" to include the pertinent provisions of the Elementary and Secondary Education Amendments of 1967 for which appropriations are sought.

It is requested that the items "V and XI" be dropped and that "V–A" be substituted as these National Defense Education Act references indicate the comparable transfer of certain activities to the "Educational Professions Development Activities" appropriation.

The section beginning with "$1,191,000,000 shall be for" and ending with "local educational agencies in such States for grants", is deleted since this section pertained to Title I of the Elementary and Secondary Education Act and the 1969 appropriation request does not include funds for Title I. The new obligational authority for Title I will be requested in a fiscal year 1968 supplemental to be made available for obligation in fiscal year 1969. This procedure was authorized by Title IV of the Elementary and Secondary Education Amendments of 1967 so that the President could submit to the Congress and the Congress could enact in one fiscal year, funding recommendations for education legislation for the next fiscal year. This would provide advance notice to Federal, State and local officials of the amounts becoming available to them at the beginning of the next fiscal year.

The final paragraph in this appropriation beginning with "For meeting the special educational needs" and ending with "in such States for grants" was added for this same purpose, to provide advance notice of the amounts to be requested in fiscal year 1969 for obligation in fiscal year 1970.

The proposed language inserts the phrase beginning with "Provided further that not to exceed $590.000 . . ." and ending with ". . . applications for assistance" to provide authorization for program support within the appropriation.

## AMOUNTS AVAILABLE FOR OBLIGATION

| | 1968 | 1969 |
|---|---|---|
| Appropriation | $1,677,907,000 | $361,703,000 |
| Comparative transfer to "Education professions development activities" | −37,250,000 | |
| Comparative transfer from "Arts and humanities educational activities" | +500,000 | |
| Proposed for separate transmittal: Title I—Educationally deprived children | | 1,200,000,000 |
| Cutback from the 1968 President's budget required by H.J. Res. 888 | −30,057,000 | |
| Total available for obligation | 1,611,100,000 | 1,561,703,000 |
| Disposition of cutback: | | |
| To be transferred to "Salaries and expenses" for increased pay and postal costs | 193,934 | |
| To be returned to the Treasury | 29,863,066 | |
| Total cutback | 30,057,000 | |

## OBLIGATIONS BY ACTIVITY

| | 1968 estimate | | 1969 estimate | | Increase or decrease | |
|---|---|---|---|---|---|---|
| | Positions | Amount | Positions | Amount | Positions | Amount |
| Educationally deprived children | | $1,191,000,000 | | $1,200,000,000 | | +$9,000,000 |
| Supplementary educational centers and services | | 187,876,000 | | 189,163,000 | | +1,287,000 |
| Guidance, counseling and testing | | 24,500,000 | | 22,000,000 | | −2,500,000 |
| Strengthening State departments of education | | 29,750,000 | | 35,000,000 | | +5,250,000 |
| Equipment and minor remodeling | | 78,740,000 | | 17,950,000 | | −60,790,000 |
| Library resources | | 99,234,000 | | 46,000,000 | | −53,234,000 |
| Dissemination of information | | | 15 | 2,000,000 | +15 | +2,000,000 |
| Program planning and evaluation | | | | 14,000,000 | | +14,000,000 |
| Dropout prevention program | | | | 30,000,000 | | +30,000,000 |
| Bilingual education program | | | | 5,000,000 | | +5,000,000 |
| Program support | | | | 590,000 | | +590,000 |
| Total obligations | | 1,611,100,000 | 15 | 1,561,703,000 | +15 | −49,397,000 |

## OBLIGATIONS BY OBJECT

| | 1968 estimate | 1969 estimate | Increase or decrease |
|---|---|---|---|
| Total number of permanent positions | | 15 | +15 |
| Full-time equivalent of all other positions | | 13 | +13 |
| Average number of all employees | | 24 | +24 |
| Personnel compensation: | | | |
| Permanent positions | | $102,500 | +$102,500 |
| Positions other than permanent | | 262,800 | +262,800 |
| Other personnel compensation | | | |
| Total personnel compensation | | 365,300 | +365,300 |
| Personnel benefits | | 19,500 | +19,500 |
| Travel and transportation of persons | | 243,900 | +243,900 |
| Transportation of things | | | |
| Rent, communications, and utilities | | 15,100 | +15,100 |
| Printing and reproduction | | 1,800 | +1,800 |
| Other services | | 6,435,400 | +6,435,400 |
| Supplies and materials | | 1,500 | +1,500 |
| Equipment | | 7,500 | +7,500 |
| Investments and loans | $1,500,000 | 1,000,000 | −500,000 |
| Grants, subsidies, and contributions | 1,609,600,000 | 1,553,613,000 | −55,987,000 |
| Total obligations by object | 1,611,100,000 | 1,561,703,000 | −49,397,000 |

SUMMARY OF CHANGES

| | |
|---|---|
| 1968 enacted appropriation | $1,677,907,000 |
| Comparative transfer to "Education Professions Development Activities" | −37,250,000 |
| Comparative transfer from "Arts and Humanities Educational Activities" | 500,000 |
| Cutback required by H.J. Res. 888 | −30,057,000 |
| 1968 estimated obligations | 1,611,100,000 |
| 1969 estimated obligations | 1,561,703,000 |
| Total change | −49,397,000 |

| | Base | | Change from Base | |
|---|---|---|---|---|
| | Positions | Amount | Positions | Amount |
| INCREASES | | | | |
| A. Program | | | | |
| 1. Increase in assistance for educationally deprived children | | $1,191,000,000 | | $9,000,000 |
| 2. Supplementary educational centers and services | | 187,876,000 | | 1,287,000 |
| 3. Strengthening State departments of education | | 29,750,000 | | 5,250,000 |
| 4. Dissemination of information | | | 15 | 2,000,000 |
| 5. Program planning and evaluation | | | | 14,000,000 |
| 6. Dropout prevention programs | | | | 30,000,000 |
| 7. Bilingual education programs | | | | 5,000,000 |
| 8. Program support | | | | 590,000 |
| Total increases | | | 15 | 67,127,000 |
| DECREASES | | | | |
| A. Program | | | | |
| 1. Guidance, counseling, and testing | | $24,500,000 | | $2,500,000 |
| 2. Equipment and minor remodeling | | 78,740,000 | | 60,790,000 |
| 3. Library resources | | 99,234,000 | | 53,234,000 |
| Total decreases | | | | 116,524,000 |
| Total net changes requested | | | +15 | −49,397,000 |

EXPLANATION OF CHANGES

An increase of $9,000,000 under Title I of the Elementary and Secondary Education Act is requested to provide a total program of $1,200,000,000. An estimated 9,500,000 children will benefit from this program, approximately the same number as in 1968.

The $1,287,000 increase requested for supplementary educational centers and services will provide a total of $189,163,000 to fund 1,075 projects initiated in prior years.

An increase of $5,250,000 is requested for Title V of the Elementary and Secondary Education Act, primarily as a result of new legislation enacted in the 90th Congress. This legislation revised the distribution formula for grants to States to provide for a more equitable distribution of funds to the less populous States. The amount requested would provide sufficient funds so that the less populous States would be raised above their 1968 level of funding and the more populous States would not fall below their 1968 level.

An amount of $2,000,000 and 15 positions are requested in fiscal year 1969 to initiate a program for dissemination of information on educational activities.

An amount of $14,000,000 is requested to fund a new activity provided for in the Elementary and Secondary Education Amendments of 1967. From this total, $5,000,000 will be used for planning and $9,000,000 for evaluation.

An increase of $30,000,000 is requested to initiate a new program of demonstration projects involving the use of innovative methods, systems, materials or programs which show promise of reducing school dropouts.

$5,000,000 is requested to initiate a program of bilingual education as authorized by the 1967 amendments. These grants would provide financial assistance to local educational agencies to develop and carry out new and imaginative programs at the elementary and secondary school level to meet the special educational needs of children of limited English speaking ability.

An amount of $590,000 is requested for program support of the activities carried in this appropriation.

Decreases of $2,500,000 for guidance, counseling, and testing, of $60,790,000 for equipment and minor remodeling, and of $53,234,000 for library resources are proposed in view of the greater need for funds in more critical areas.

*Authorizing legislation*

*Legislation*:

| | *1969 authorization* |
|---|---|
| Elementary and Secondary Education Act: | |
| Title I—Educationally deprived children: | |
| Sec. 203 | $2,000,637,050 |
| Sec. 221 | 50,000,000 |
| Title II—School library resources, textbooks and other instructional materials: | |
| Sec. 201 | 162,500,000 |
| Sec. 202 | 4,875,000 |
| Title III—Supplementary educational centered services: | |
| Sec. 301 | 512,500,000 |
| Sec. 302 | 15,375,000 |
| Title V—Strengthening State departments of education: | |
| Sec. 501 | 80,000,000 |
| Title VII—Bilingual education programs | |
| Sec. 703 | 30,000,000 |
| Title VIII: | |
| Sec. 806—Dissemination of Information | 3,700,000 |
| Sec. 807—Dropout prevention projects | 30,000,000 |
| National Defense Education Act: | |
| Title III—Financial assistance for strengthening instruction in science, mathematics, modern foreign languages and other critical subjects: Sec. 301 | (1) |
| Title V—Guidance, counseling and testing: Sec. 501 | (1) |

[1] Proposed legislation would extend authorization which expires June 30, 1968.

EXPLANATION OF TRANSFERS

| | 1968 estimate | 1969 estimate | Purpose |
|---|---|---|---|
| Transfer to: "Salaries and expenses" Office of Education. | $193,934 | ---------- | Transferred from reserve to provide for pay cost deficiency. |
| Comparative transfer from: "Arts and humanities educational activities". | 500,000 | $500,000 | To provide a coordinated presentation of the acquisition of equipment and minor remodeling program. |
| Comparative transfer to: "Education professions development activities". | 37,250,000 | 50,100,000 | To provide a coordinated presentation of education personnel training programs. |

| | 1968 estimate | 1969 estimate | Increase or decrease |
|---|---|---|---|
| 1. Educationally deprived children: | | | |
| (a) Grants to local educational agencies | $1,100,287,599 | $1,101,977,990 | +$1,690,391 |
| (b) Grants to State educational agencies: | | | |
| (1) Handicapped children | 24,746,993 | 25,984,523 | +1,237,530 |
| (2) Neglected and delinquent children | 10,282,175 | 11,981,379 | +1,699,204 |
| (3) Migratory children | 41,692,425 | 45,989,052 | +4,296,627 |
| (c) Grants for State administrative expenses | 13,990,808 | 14,067,056 | +76,248 |
| Total appropriation and obligations | 1,191,000,000 | 1,200,000,000 | +9,000,000 |

TABLE 1.—FUNDS EXPENDED FOR FISCAL YEAR 1966, AND FUNDS ALLOCATED FOR FISCAL YEAR 1967–69, TITLE I OF ELEMENTARY AND SECONDARY EDUCATION ACT (AS AMENDED)

| | Fiscal year 1966, funds expended | | Fiscal year 1967, funds allocated | | Fiscal year 1968, funds allocated | | Fiscal year 1969, funds allocated | |
|---|---|---|---|---|---|---|---|---|
| | Amount | Percent | Amount | Percent | Amount | Percent | Amount | Percent |
| Total | [1] $969,934,724 | 100.0 | [2] $1,042,231,067 | 100.0 | [3] $1,177,009,192 | 100.0 | [4] 1,185,932,944 | 100.0 |
| Operation | 872,599,341 | 90.0 | 983,871,067 | 94.4 | 1,121,689,192 | 95.3 | 1,142,082,944 | 96.3 |
| Salaries | 468,718,993 | 48.3 | 591,990,000 | 56.8 | 703,850,000 | 59.8 | 738,830,000 | 62.3 |
| Contracted service | 43,261,064 | 4.5 | 52,110,000 | 5.0 | 62,380,000 | 5.3 | 71,160,000 | 6.0 |
| Equipment | 204,686,292 | 21.1 | 168,840,000 | 16.2 | 165,960,000 | 14.1 | 152,980,000 | 12.9 |
| Other | 155,932,992 | 16.1 | 170,931,067 | 16.4 | 189,499,192 | 16.1 | 179,112,944 | 15.1 |
| Construction | 97,335,383 | 10.0 | 58,360,000 | 5.6 | 55,320,000 | 4.7 | 43,850,000 | 3.7 |

[1] Excludes $11,165,689 expended in programs at State supported schools for handicapped children under Public Law 89–313, and $6,495,789 expended for State administration.
[2] Excludes $11,178,933 for State administration.
[3] Excludes $13,990,808 for State administration.
[4] Excludes $14,067,056 for State administration.

TABLE 2.—CHILDREN PARTICIPATING IN FISCAL YEAR 1966 AND ESTIMATED NUMBER OF CHILDREN PARTICIPATING IN FISCAL YEARS 1967–69

TITLE I OF THE ELEMENTARY AND SECONDARY EDUCATION ACT OF 1965 (PUBLIC LAW 89–10)

| | Fiscal year 1966, children participating | | Fiscal year 1967, children participating | | Fiscal year 1968, children participating | | Fiscal year 1969, children participating | |
|---|---|---|---|---|---|---|---|---|
| | Number | Percent | Number | Percent | Number | Percent | Number | Percent |
| Population classifications [1] | 8,299,900 | 100.0 | 9,000,000 | 100.0 | 9,500,000 | 100.0 | 9,500,000 | 100.0 |
| A | 3,502,558 | 42.2 | 3,915,000 | 43.5 | 4,227,500 | 44.5 | 4,325,000 | 45.5 |
| B | 414,995 | 5.0 | 459,000 | 5.1 | 494,000 | 5.2 | 505,000 | 5.3 |
| C | 946,189 | 11.4 | 1,035,000 | 11.5 | 1,111,500 | 11.7 | 1,140,000 | 12.0 |
| D | 2,539,769 | 30.6 | 2,646,000 | 29.4 | 2,707,500 | 28.5 | 2,610,000 | 27.5 |
| E | 896,389 | 10.8 | 945,000 | 10.5 | 959,500 | 10.1 | 920,000 | 9.7 |

[1] Standard Metropolitan Statistical Areas (SMSA):

"A" Includes the largest "core city" in the SMSA. If the area is composed of "twin cities," such as Minneapolis-St. Paul, or "tricity" areas, it should represent all of the large cities as the SMSA.

"B" Includes all secondary cities within the SMSA that have populations of 50,000 or more. Also included are "older secondary cities" within the SMSA which have populations less than 50,000. An "older secondary city" is characterized by a high incidence of low-income families, antiquated and high density housing, and low mobility of inhabitants.

"C" Includes all other urban and rural areas within the SMSA which have a population of fewer than 50,000. These are either incorporated or unincorporated areas.

"D" Includes urban areas outside the SMSA which have populations between 2,500 and 49,999.

"E" Includes rural areas outside the SMSA which have populations below 2,500.

TABLE 3.—FUNDS EXPENDED FOR FISCAL YEAR 1966, AND FUNDS ALLOCATED FOR FISCAL YEAR 1967–69

TITLE I OF THE ELEMENTARY AND SECONDARY EDUCATION ACT OF 1965 (PUBLIC LAW 89–10)

| | Fiscal year 1966, funds expended [2] | | Fiscal year 1967, funds allocated [3] | | Fiscal year 1968, funds allocated [4] | | Fiscal year 1969, funds allocated [5] | |
|---|---|---|---|---|---|---|---|---|
| | Amount | Percent | Amount | Percent | Amount | Percent | Amount | Percent |
| Population classifications [1] | $969,934,724 | 100.0 | $1,042,231,067 | 100.0 | $1,177,009,192 | 100.0 | $1,185,932,944 | 100.0 |
| A | 354,026,174 | 36.5 | 390,835,000 | 37.5 | 447,265,000 | 38.0 | 462,500,000 | 39.0 |
| B | 56,256,214 | 5.8 | 61,490,000 | 5.9 | 70,620,000 | 6.0 | 72,340,000 | 6.1 |
| C | 119,301,971 | 12.3 | 130,280,000 | 12.5 | 150,655,000 | 12.8 | 154,150,000 | 13.0 |
| D | 310,379,112 | 32.0 | 321,005,000 | 30.8 | 353,100,000 | 30.0 | 341,530,000 | 28.8 |
| E | 129,971,253 | 13.4 | 138,621,067 | 13.3 | 155,369,192 | 13.2 | 155,412,944 | 13.1 |

[1] For definitions of population classifications see preceding table.
[2] Excludes $11,165,689 expended in programs as State supported schools for handicapped children under Public Law 89–313, and $6,495,789 expended for State administration.
[3] Excludes $11,178,933 for State administration.
[4] Excludes $13,990,808 for State administration.
[5] Excludes $14,067,056 for State administration.

TABLE 4.—CHILDREN PARTICIPATING BY GRADE SPAN

TITLE I OF THE ELEMENTARY AND SECONDARY EDUCATION ACT OF 1965 (PUBLIC LAW 89–10)

| Grade span | Children participating | | | | | | | |
|---|---|---|---|---|---|---|---|---|
| | Fiscal year 1966 | | Fiscal year 1967 [1] | | Fiscal year 1968 [1] | | Fiscal year 1969 [1] | |
| | Number | Percent | Number | Percent | Number | Percent | Number | Percent |
| Total | 8,299,900 | 100.0 | 9,000,000 | 100.0 | 9,500,000 | 100.0 | 9,500,000 | 100.0 |
| Prekindergarten | 103,400 | 1.2 | 126,000 | 1.4 | 152,000 | 1.6 | 171,000 | 1.8 |
| Kindergarten | 377,800 | 4.6 | 423,000 | 4.7 | 456,000 | 4.8 | 465,000 | 4.9 |
| Grades 1–3 | 2,437,300 | 29.4 | 2,646,000 | 29.4 | 2,793,000 | 29.4 | 2,793,000 | 29.4 |
| Grades 4–6 | 2,427,300 | 29.2 | 2,619,000 | 29.1 | 2,755,000 | 29.0 | 2,746,000 | 28.9 |
| Grades 7–9 | 1,788,200 | 21.5 | 1,926,000 | 21.4 | 2,023,500 | 21.3 | 2,014,000 | 21.2 |
| Grades 10–12 | 1,165,900 | 14.1 | 1,260,000 | 14.0 | 1,320,500 | 13.9 | 1,311,000 | 13.8 |

[1] Estimated.

ELEMENTARY AND SECONDARY EDUCATIONAL ACTIVITIES

TITLE I—ASSISTANCE FOR EDUCATIONALLY DEPRIVED CHILDREN, 1967 OBLIGATIONS

| State and outlying area | Grants to local educational agencies | Administration | Total |
|---|---|---|---|
| Total | $1,041,438,092 | $11,154,908 | $1,052,593,000 |
| Alabama | 30,665,313 | 307,060 | 30,972,373 |
| Alaska | 1,808,190 | 75,000 | 1,883,190 |
| Arizona | 8,882,769 | 88,828 | 8,971,597 |
| Arkansas | 20,654,825 | 206,548 | 20,861,373 |
| California | 73,624,052 | 736,241 | 74,360,293 |
| Colorado | 8,481,559 | 84,816 | 8,566,375 |
| Connecticut | 8,469,923 | 84,699 | 8,554,622 |
| Delaware | 2,070,051 | 75,000 | 2,145,051 |
| District of Columbia | 5,642,037 | 75,000 | 5,717,037 |
| Florida | 28,170,636 | 281,706 | 28,452,342 |
| Georgia | 34,725,066 | 347,251 | 35,072,317 |
| Hawaii | 2,226,425 | 75,000 | 2,301,425 |
| Idaho | 2,650,898 | 75,000 | 2,725,898 |
| Illinois | 46,713,796 | 467,138 | 47,180,934 |
| Indiana | 15,224,771 | 152,248 | 15,377,019 |
| Iowa | 15,414,565 | 154,146 | 15,568,711 |
| Kansas | 9,992,513 | 99,925 | 10,092,438 |
| Kentucky | 27,307,793 | 273,204 | 27,580,997 |
| Louisiana | 29,009,607 | 290,106 | 29,299,713 |
| Maine | 3,497,402 | 75,000 | 3,572,402 |
| Maryland | 14,522,650 | 145,226 | 14,667,876 |
| Massachusetts | 14,747,623 | 147,691 | 14,895,314 |
| Michigan | 32,086,667 | 320,867 | 32,407,534 |
| Minnesota | 19,456,722 | 194,567 | 19,651,289 |
| Mississippi | 23,329,443 | 233,294 | 23,562,737 |
| Missouri | 23,682,259 | 236,823 | 23,919,082 |
| Montana | 3,216,798 | 75,000 | 3,291,798 |
| Nebraska | 5,446,688 | 75,000 | 5,521,688 |
| Nevada | 903,394 | 75,000 | 978,394 |
| New Hampshire | 1,316,481 | 75,000 | 1,391,481 |
| New Jersey | 23,973,647 | 239,736 | 24,213,383 |
| New Mexico | 9,927,903 | 99,279 | 10,027,182 |
| New York | 113,674,692 | 1,136,747 | 114,811,439 |
| North Carolina | 45,712,346 | 457,268 | 46,169,614 |
| North Dakota | 4,071,397 | 75,000 | 4,146,397 |
| Ohio | 34,779,157 | 347,792 | 35,126,949 |
| Oklahoma | 17,114,213 | 171,176 | 17,285,389 |
| Oregon | 7,452,052 | 75,000 | 7,527,052 |
| Pennsylvania | 48,152,478 | 481,525 | 48,634,003 |
| Rhode Island | 3,580,835 | 75,000 | 3,655,835 |
| South Carolina | 21,301,660 | 213,017 | 21,514,677 |
| South Dakota | 5,405,378 | 75,000 | 5,480,378 |
| Tennessee | 29,491,451 | 294,915 | 29,786,366 |
| Texas | 68,137,046 | 682,045 | 68,819,091 |
| Utah | 2,967,156 | 75,000 | 3,042,156 |
| Vermont | 1,589,962 | 75,000 | 1,664,962 |
| Virginia | 23,985,037 | 239,869 | 24,224,906 |
| Washington | 10,603,489 | 106,035 | 10,709,524 |
| West Virginia | 14,775,612 | 147,756 | 14,923,368 |
| Wisconsin | 14,783,495 | 147,835 | 14,931,330 |
| Wyoming | 1,339,428 | 75,000 | 1,414,428 |
| Guam | 542,390 | 25,000 | 567,390 |
| Puerto Rico | 18,628,375 | 186,284 | 18,814,659 |
| Virgin Islands | 270,042 | 25,000 | 295,042 |
| Trust territories | 701,259 | 25,000 | 726,259 |
| Bureau of Indian Affairs | 4,413,398 | 0 | 4,413,398 |
| Undistributed | 123,278 | 1,245 | 124,523 |

ELEMENTARY AND SECONDARY EDUCATION ACT OF 1965, PUBLIC LAW 89-10, AS AMENDED TITLE I—ASSISTANCE FOR EDUCATIONALLY DEPRIVED CHILDREN—ALLOTMENTS FOR FISCAL YEAR 1968

| | Local educational agencies | Handicapped children (State agencies) | Juvenile delinquents in institutions (State agencies) | Dependent and neglected children in institutions (State agencies) | Migratory children (State agency) | Total program | Administration | Total |
|---|---|---|---|---|---|---|---|---|
| United States, outlying parts, and Department of the Interior | $1,100,287,599 | $24,746,993 | $9,168,720 | $1,113,455 | $41,692,425 | $1,177,009,192 | $13,990,808 | $1,191,000,000 |
| 50 States and the District of Columbia | 1,068,480,946 | 24,746,993 | 9,168,720 | 1,113,455 | 41,692,425 | 1,145,202,539 | 13,680,672 | 1,158,883,211 |
| Alabama | 36,988,984 | 244,616 | 114,105 | | 425,652 | 37,773,357 | 377,734 | 38,151,091 |
| Alaska | 1,805,503 | | 10,979 | | | 1,816,482 | 150,000 | 1,966,482 |
| Arizona | 8,422,776 | 222,941 | 165,606 | | 1,165,372 | 9,976,695 | 150,000 | 10,126,695 |
| Arkansas | 22,673,547 | 346,752 | 92,047 | | 379,435 | 23,491,781 | 234,918 | 23,726,699 |
| California | 78,008,208 | 883,294 | 894,795 | | 6,150,119 | 85,936,416 | 859,364 | 86,795,780 |
| Colorado | 7,798,580 | 593,274 | 116,638 | 29,483 | 1,134,220 | 9,672,195 | 150,000 | 9,822,195 |
| Connecticut | 7,907,261 | 728,372 | 111,403 | 25,711 | 290,066 | 9,062,813 | 150,000 | 9,212,813 |
| Delaware | 2,084,729 | 235,275 | 67,716 | | 147,587 | 2,535,307 | 150,000 | 2,685,307 |
| Florida | 26,445,029 | 689,163 | 344,390 | | 5,454,573 | 32,933,155 | 329,332 | 33,262,487 |
| Georgia | 36,829,728 | 276,789 | 136,445 | | 438,419 | 37,681,381 | 376,814 | 38,058,195 |
| Hawaii | 2,226,608 | 181,925 | 22,229 | | | 2,430,762 | 150,000 | 2,580,762 |
| Idaho | 2,475,984 | 69,452 | 37,594 | | 512,723 | 3,095,753 | 150,000 | 3,245,753 |
| Illionois | 46,230,999 | 462,308 | 351,682 | 79,503 | 375,350 | 47,499,842 | 474,998 | 47,974,840 |
| Indiana | 14,580,136 | 805,473 | 139,034 | 110,329 | 338,581 | 15,973,553 | 159,736 | 16,133,289 |
| Iowa | 15,153,804 | 323,005 | 75,789 | 79,341 | 42,642 | 15,674,581 | 156,746 | 15,831,327 |
| Kansas | 9,608,706 | 338,323 | 83,283 | | 465,229 | 10,495,541 | 150,000 | 10,645,541 |
| Kentucky | 32,483,284 | 174,397 | 27,507 | | 186,398 | 32,871,586 | 328,716 | 33,200,302 |
| Louisiana | 31,530,268 | 456,293 | 278,977 | | 408,033 | 32,673,571 | 326,736 | 33,000,307 |
| Maine | 3,403,277 | 134,820 | 62,151 | | 5,617 | 3,605,865 | 150,000 | 3,755,865 |
| Maryland | 14,590,115 | 318,287 | 421,390 | | 153,204 | 15,482,996 | 154,830 | 15,637,826 |
| Massachusetts | 16,422,153 | 1,115,839 | 221,037 | | 155,247 | 17,914,276 | 179,143 | 18,093,419 |
| Michigan | 30,670,217 | 1,211,650 | 303,382 | | 2,084,085 | 34,269,334 | 342,693 | 34,612,027 |
| Minnesota | 18,867,365 | 778,541 | 217,307 | | 157,289 | 20,020,502 | 200,205 | 20,220,707 |
| Mississippi | 38,788,595 | 118,478 | 73,133 | | 579,622 | 39,559,828 | 395,598 | 39,955,426 |
| Missouri | 23,086,158 | 723,378 | 189,342 | | 418,247 | 24,417,125 | 244,171 | 24,661,296 |
| Montana | 2,993,356 | 158,490 | 46,048 | 26,772 | 441,483 | 3,666,149 | 150,000 | 3,816,149 |
| Nebraska | 5,666,795 | 182,744 | 49,107 | 17,652 | 112,861 | 6,029,159 | 150,000 | 6,179,159 |
| Nevada | 879,759 | 17,583 | 49,178 | | 16,852 | 963,372 | 150,000 | 1,113,372 |
| New Hampshire | 1,296,376 | 98,306 | 37,586 | | 6,639 | 1,438,907 | 150,000 | 1,588,907 |
| New Jersey | 22,865,209 | 1,325,535 | 267,424 | | 1,013,700 | 25,471,868 | 254,719 | 25,726,587 |

ELEMENTARY AND SECONDARY EDUCATION ACT OF 1965, PUBLIC LAW 89–10, AS AMENDED TITLE I—ASSISTANCE FOR EDUCATIONALLY DEPRIVED CHILDREN—ALLOTMENTS FOR FISCAL YEAR 1968—Continued

| | Local educational agencies | Handicapped children (State agencies) | Juvenile delinquents in institutions (State agencies) | Dependent and neglected children in institutions (State agencies) | Migratory children (State agency) | Total program | Administration | Total |
|---|---|---|---|---|---|---|---|---|
| New Mexico | $9,629,504 | $201,412 | $99,716 | ---------- | $564,301 | $10,494,933 | $150,000 | $10,644,933 |
| New York | 115,776,356 | 3,191,922 | 1,026,749 | ---------- | 1,102,303 | 121,097,330 | 1,210,973 | 122,308,303 |
| North Carolina | 51,096,076 | 768,829 | 324,376 | ---------- | 934,544 | 53,123,825 | 531,238 | 53,655,063 |
| North Dakota | 4,042,272 | 89,114 | 21,434 | ---------- | 314,579 | 4,467,399 | 150,000 | 4,617,399 |
| Ohio | 34,197,997 | 411,353 | 406,715 | $110,614 | 716,995 | 35,843,674 | 358,437 | 36,202,111 |
| Oklahoma | 17,214,771 | 219,592 | 80,814 | 61,793 | 529,575 | 18,106,545 | 181,065 | 18,287,610 |
| Oregon | 6,982,937 | 325,132 | 166,380 | ---------- | 952,163 | 8,426,612 | 150,000 | 8,576,612 |
| Pennsylvania | 46,699,583 | 1,965,588 | 207,229 | 146,485 | 327,346 | 49,346,231 | 493,462 | 49,839,693 |
| Rhode Island | 3,481,096 | 158,525 | 40,176 | 14,164 | ---------- | 3,693,961 | 150,000 | 3,843,961 |
| South Carolina | 31,540,454 | 305,387 | 128,978 | 39,098 | 396,798 | 32,410,715 | 324,107 | 32,734,822 |
| South Dakota | 5,649,685 | 112,605 | 23,666 | ---------- | 29,619 | 5,815,575 | 150,000 | 5,965,575 |
| Tennessee | 33,763,326 | 269,894 | 196,388 | 112,992 | 75,070 | 34,417,670 | 344,177 | 34,761,847 |
| Texas | 65,260,201 | 848,750 | 472,044 | 107,830 | 10,433,192 | 77,122,017 | 771,220 | 77,893,237 |
| Utah | 2,724,300 | 292,875 | 49,325 | ---------- | 115,414 | 3,181,914 | 150,000 | 3,331,914 |
| Vermont | 1,484,141 | 238,232 | 39,758 | ---------- | 3,064 | 1,765,195 | 150,000 | 1,915,195 |
| Virginia | 28,130,476 | 434,333 | 148,154 | ---------- | 433,057 | 29,146,020 | 291,460 | 29,437,480 |
| Washington | 9,840,169 | 779,232 | 224,576 | ---------- | 1,121,964 | 11,965,941 | 150,000 | 12,115,941 |
| West Virginia | 17,193,348 | 158,566 | 62,887 | 9,298 | 40,344 | 17,464,443 | 174,644 | 17,639,087 |
| Wisconsin | 14,357,585 | 444,001 | 233,045 | ---------- | 308,961 | 15,343,592 | 153,436 | 15,497,028 |
| Wyoming | 1,235,793 | 81,403 | 30,706 | 19,382 | 233,891 | 1,601,175 | 150,000 | 1,751,175 |
| District of Columbia | 5,397,367 | 234,945 | 178,300 | 123,008 | ---------- | 5,933,620 | 150,000 | 6,083,620 |
| American Samoa | 75,000 | ---------- | ---------- | ---------- | ---------- | 75,000 | 25,000 | 100,000 |
| Guam | 614,867 | ---------- | ---------- | ---------- | ---------- | 614,867 | 25,000 | 639,867 |
| Puerto Rico | 21,013,645 | ---------- | ---------- | ---------- | ---------- | 21,013,645 | 210,136 | 21,223,781 |
| Trust territories | 794,398 | ---------- | ---------- | ---------- | ---------- | 794,398 | 25,000 | 819,398 |
| Virgin Islands | 308,743 | ---------- | ---------- | ---------- | ---------- | 308,743 | 25,000 | 333,743 |
| Department of the Interior | 9,000,000 | ---------- | ---------- | ---------- | ---------- | 9,000,000 | ---------- | 9,000,000 |

Note: $2,000 per annum income level and $150,000 minimum administration amount.

ELEMENTARY AND SECONDARY EDUCATIONAL ACTIVITIES—FISCAL YEAR 1969 ESTIMATED ALLOTMENTS

TITLE I.—ASSISTANCE FOR EDUCATIONALLY DEPRIVED CHILDREN

| | Grants to educational agencies [1] | Grants for State administration expenses [2] | Total |
|---|---|---|---|
| United States and outlying areas | $1,185,932,944 | $14,067,056 | $1,200,000,000 |
| 50 States and District of Columbia | 1,154,126,291 | 13,756,920 | 1,167,883,211 |
| Alabama | 37,978,303 | 379,783 | 38,358,086 |
| Alaska | 1,817,031 | 150,000 | 1,967,031 |
| Arizona | 10,057,375 | 150,000 | 10,207,375 |
| Arkansas | 23,637,106 | 236,371 | 23,873,477 |
| California | 87,045,145 | 870,451 | 87,915,596 |
| Colorado | 9,781,167 | 150,000 | 9,931,167 |
| Connecticut | 9,176,709 | 150,000 | 9,326,709 |
| Delaware | 2,595,972 | 150,000 | 2,745,972 |
| District of Columbia | 5,960,505 | 150,000 | 6,110,505 |
| Florida | 33,321,783 | 333,218 | 33,655,001 |
| Georgia | 37,891,490 | 378,915 | 38,270,405 |
| Hawaii | 2,443,448 | 150,000 | 2,593,448 |
| Idaho | 3,137,143 | 150,000 | 3,287,143 |
| Illinois | 47,605,885 | 476,059 | 48,081,944 |
| Indiana | 16,044,861 | 160,449 | 16,205,310 |
| Iowa | 15,713,349 | 157,133 | 15,870,482 |
| Kansas | 10,547,738 | 150,000 | 10,697,738 |
| Kentucky | 32,995,576 | 329,956 | 33,325,532 |
| Louisiana | 32,871,871 | 328,719 | 33,200,590 |
| Maine | 3,633,851 | 150,000 | 3,783,851 |
| Maryland | 15,577,967 | 155,780 | 15,733,747 |
| Massachusetts | 18,059,707 | 180,597 | 18,240,304 |
| Michigan | 34,561,847 | 345,618 | 34,907,465 |
| Minnesota | 20,097,464 | 200,975 | 20,298,439 |
| Mississippi | 39,772,985 | 397,730 | 40,170,715 |
| Missouri | 24,500,707 | 245,007 | 24,745,714 |
| Montana | 3,722,274 | 150,000 | 3,872,274 |
| Nebraska | 6,071,473 | 150,000 | 6,221,473 |
| Nevada | 968,900 | 150,000 | 1,118,900 |
| New Hampshire | 1,449,238 | 150,000 | 1,599,238 |
| New Jersey | 25,879,277 | 258,793 | 26,138,070 |
| New Mexico | 10,541,614 | 150,000 | 10,691,614 |
| New York | 122,410,984 | 1,224,110 | 123,635,094 |
| North Carolina | 53,514,336 | 535,143 | 54,049,479 |
| North Dakota | 4,499,025 | 150,000 | 4,649,025 |
| Ohio | 35,976,639 | 359,766 | 36,336,405 |
| Oklahoma | 18,238,742 | 182,387 | 18,421,129 |
| Oregon | 8,647,963 | 150,000 | 8,797,963 |
| Pennsylvania | 49,496,666 | 494,967 | 49,991,633 |
| Rhode Island | 3,704,748 | 150,000 | 3,854,748 |
| South Carolina | 32,645,524 | 326,455 | 32,971,979 |
| South Dakota | 5,840,383 | 150,000 | 5,990,383 |
| Tennessee | 34,725,538 | 347,255 | 35,072,793 |
| Texas | 77,830,271 | 778,303 | 78,608,574 |
| Utah | 3,210,652 | 150,000 | 3,360,652 |
| Vermont | 1,783,620 | 150,000 | 1,933,620 |
| Virginia | 29,314,486 | 293,145 | 29,607,631 |
| Washington | 12,203,289 | 150,000 | 12,353,289 |
| West Virginia | 17,564,171 | 175,642 | 17,739,813 |
| Wisconsin | 15,419,308 | 154,193 | 15,573,501 |
| Wyoming | 1,640,185 | 150,000 | 1,790,185 |
| Outlying areas | 31,806,653 | 310,136 | 32,116,789 |

[1] Estimated authorizations based on fiscal year 1968 population and 50 percent estimated State or National current expenditures per pupil in average daily attendance, 1966–67 whichever is higher. The current expenditure per ADA for 1966–67 is estimated at 5 percent increase over the 1965–66 current expenditure. Low income factor $2,000 per annum. AFDC (January 1967); handicapped children (1965–66); estimated migratory children of migratory workers (FTE 1965–66) juvenile delinquents, (May 1967); dependent and neglected children, (May 1967). State agency programs are allotted at full entitlement. Allotments to county local educational agencies were ratably reduced with the provision that the aggregate amount available for grants within a State to local educational agencies shall not be less than the aggregate amount allocated to local educational agencies within the State for fiscal year 1967.

[2] 1 percent of col. 1 or $150,000 whichever is greater.

TITLE III.—SUPPLEMENTARY EDUCATIONAL CENTERS AND SERVICES, FISCAL YEAR 1967 ACTUAL OBLIGATIONS AND FISCAL YEARS 1968 AND 1969 ALLOTMENTS

| State and outlying areas | 1967 actual | 1968 estimated allotment | 1969 estimated allotment |
|---|---|---|---|
| Total | $162,396,786 | $187,876,000 | [1] $189,163,000 |
| Alabama | 3,024,711 | 3,424,541 | 3,447,255 |
| Alaska | 392,903 | 452,588 | 454,367 |
| Arizona | 1,308,769 | 1,661,909 | 1,672,206 |
| Arkansas | 1,550,758 | 1,936,210 | 1,948,439 |
| California | 12,160,935 | 16,449,141 | 16,563,600 |
| Colorado | 1,703,686 | 1,977,876 | 1,990,398 |
| Connecticut | 2,468,655 | 2,676,143 | 2,693,586 |
| Delaware | 699,296 | 658,430 | 661,659 |
| Florida | 4,403,764 | 5,245,934 | 5,281,477 |
| Georgia | 3,543,497 | 4,223,564 | 4,251,906 |
| Hawaii | 831,962 | 858,244 | 862,881 |
| Idaho | 615,703 | 848,919 | 853,490 |
| Illinois | 8,198,680 | 9,565,795 | 9,631,766 |
| Indiana | 4,087,290 | 4,624,411 | 4,655,575 |
| Iowa | 2,368,611 | 2,669,953 | 2,687,351 |
| Kansas | 1,723,423 | 2,213,590 | 2,227,775 |
| Kentucky | 2,973,163 | 3,071,760 | 3,091,988 |
| Louisiana | 3,139,246 | 3,551,093 | 3,574,699 |
| Maine | 1,326,111 | 1,078,491 | 1,084,680 |
| Maryland | 2,695,996 | 3,397,502 | 3,420,025 |
| Massachusetts | 4,605,774 | 4,835,193 | 4,867,844 |
| Michigan | 6,217,337 | 7,885,320 | 7,939,455 |
| Minnesota | 2,387,241 | 3,470,610 | 3,493,647 |
| Mississippi | 2,510,046 | 2,388,011 | 2,403,423 |
| Missouri | 3,456,248 | 4,126,703 | 4,154,362 |
| Montana | 759,274 | 851,654 | 856,244 |
| Nebraska | 1,137,709 | 1,501,013 | 1,510,176 |
| Nevada | 473,609 | 584,322 | 587,030 |
| New Hampshire | 715,649 | 794,968 | 799,158 |
| New Jersey | 4,669,094 | 6,078,962 | 6,120,373 |
| New Mexico | 1,258,107 | 1,184,497 | 1,191,431 |
| New York | 12,397,571 | 15,596,196 | 15,704,646 |
| North Carolina | 4,578,714 | 4,705,504 | 4,737,240 |
| North Dakota | 814,690 | 806,364 | 810,636 |
| Ohio | 8,203,699 | 9,489,272 | 9,554,705 |
| Oklahoma | 1,952,437 | 2,341,021 | 2,356,101 |
| Oregon | 1,494,343 | 1,931,407 | 1,943,603 |
| Pennsylvania | 8,493,024 | 10,293,043 | 10,364,137 |
| Rhode Island | 683,895 | 966,799 | 972,200 |
| South Carolina | 2,504,527 | 2,603,012 | 2,619,939 |
| South Dakota | 1,099,848 | 833,672 | 838,135 |
| Tennessee | 3,819,419 | 3,647,737 | 3,672,023 |
| Texas | 8,055,130 | 9,893,210 | 9,961,489 |
| Utah | 788,642 | 1,165,174 | 1,171,976 |
| Vermont | 520,357 | 562,265 | 564,812 |
| Virginia | 3,892,209 | 4,175,918 | 4,203,925 |
| Washington | 2,287,463 | 2,868,147 | 2,886,941 |
| West Virginia | 1,668,422 | 1,840,104 | 1,851,657 |
| Wisconsin | 3,682,692 | 3,960,810 | 3,987,301 |
| Wyoming | 417,988 | 504,969 | 507,118 |
| District of Columbia | 1,027,298 | 857,785 | 862,418 |
| Outlying Areas | 3,960,981 | 4,546,244 | 4,613,732 |
| Undistributed | 2,646,190 | | |

[1] Estimated distribution of $184,549,268 to the 50 States and D.C. with a basic amount of $200,000 to each State and D.C., and the balance distributed 50% on the basis of the 5–17 resident population, 7/1/65 and 50% on the basis of the total resident population, 7/1/65. 2½% ($4,613,732) of the 50 States and D.C. amount is reserved for the outlying areas.

ELEMENTARY AND SECONDARY EDUCATION

TITLE V-A.—GUIDANCE, COUNSELING, AND TESTING, GRANTS TO STATES, FISCAL YEAR, 1967
ACTUAL OBLIGATIONS, FISCAL YEARS 1968 AND 1969 ALLOTMENTS

| States and outlying areas | 1967 actual | 1968 [1] estimated | 1969 [2] estimated |
|---|---|---|---|
| Total | $24,459,810 | $24,500,000 | $22,000,000 |
| Alabama | 466,321 | 463,990 | 409,837 |
| Alaska | 50,000 | 50,000 | 50,000 |
| Arizona | 211,036 | 211,036 | 191,739 |
| Arkansas | 247,503 | 241,872 | 215,122 |
| California | 2,213,461 | 2,234,188 | 2,028,779 |
| Colorado | 251,881 | 252,472 | 224,900 |
| Connecticut | 335,032 | 337,272 | 305,252 |
| Delaware | 64,010 | 65,045 | 59,095 |
| District of Columbia | 81,690 | 83,354 | 76,951 |
| Florida | 672,981 | 683,699 | 617,732 |
| Georgia | 571,353 | 573,845 | 511,871 |
| Hawaii | 92,896 | 94,918 | 85,879 |
| Idaho | 95,307 | 94,436 | 84,178 |
| Illinois | 1,279,344 | 1,283,562 | 1,162,764 |
| Indiana | 622,322 | 622,990 | 560,337 |
| Iowa | 349,831 | 344,499 | 306,102 |
| Kansas | 280,084 | 280,900 | 252,109 |
| Kentucky | 411,207 | 404,727 | 356,694 |
| Louisiana | 486,744 | 490,008 | 441,298 |
| Maine | 124,482 | 121,900 | 107,561 |
| Maryland | 444,440 | 450,499 | 406,861 |
| Massachusetts | 624,841 | 623,472 | 560,763 |
| Michigan | 1,093,668 | 1,104,807 | 1,000,785 |
| Minnesota | 466,200 | 467,363 | 417,490 |
| Mississippi | 327,251 | 321,854 | 286,546 |
| Missouri | 536,808 | 534,336 | 484,237 |
| Montana | 94,820 | 93,954 | 83,328 |
| Nebraska | 183,739 | 180,682 | 159,003 |
| Nevada | 51,057 | 53,000 | 50,000 |
| New Hampshire | 80,322 | 81,909 | 72,699 |
| New Jersey | 786,645 | 793,072 | 717,640 |
| New Mexico | 148,795 | 147,918 | 130,519 |
| New York | 2,024,777 | 2,033,751 | 1,823,010 |
| North Carolina | 645,750 | 640,335 | 566,715 |
| North Dakota | 88,499 | 87,691 | 76,526 |
| Ohio | 1,316,161 | 1,311,989 | 1,180,195 |
| Oklahoma | 299,533 | 291,500 | 260,612 |
| Oregon | 237,771 | 240,909 | 216,397 |
| Pennsylvania | 1,380,486 | 1,368,843 | 1,215,056 |
| Rhode Island | 103,573 | 102,627 | 90,980 |
| South Carolina | 356,913 | 351,727 | 311,629 |
| South Dakota | 94,334 | 91,063 | 79,927 |
| Tennessee | 485,771 | 480,854 | 424,292 |
| Texas | 1,372,705 | 1,380,889 | 1,241,840 |
| Utah | 142,952 | 145,027 | 130,519 |
| Vermont | 50,571 | 50,591 | 50,000 |
| Virginia | 558,700 | 556,981 | 496,566 |
| Washington | 377,336 | 372,927 | 337,988 |
| West Virginia | 238,877 | 230,791 | 200,242 |
| Wisconsin | 532,919 | 531,926 | 477,435 |
| Wyoming | 50,000 | 50,000 | 50,000 |
| American Samoa | | 20,000 | 20,000 |
| Canal Zone | | 20,000 | |
| Guam | 20,000 | 20,000 | 20,000 |
| Puerto Rico | 312,000 | 312,000 | 292,000 |
| Virgin Islands | 20,000 | 20,000 | 20,000 |
| Undistributed | 4,111 | | |

[1] Distribution of $24.500,000 with 1.6 percent ($392,000) reserved for the outlying areas. Distribution of $24,108,000 to the 50 States and District of Columbia on the basis of estimated age 5-to-17 population (July 1, 1965) with a minimum of $50,000; $392,000 distributed to the outlying areas on the basis of age 5-to-17 population (July 1, 1965) with a minimum of $20,000.

[2] Estimated distribution of $22,000,000 with 1.6 percent ($352,000) reserved for the outlying areas and the balance distributed to the 50 States and District of Columbia on the basis of estimated 5-to-17 population (July 1, 1966), with a minimum of $50,000. The amount for the outlying areas is distributed on the basis of 5-to-17 population (July 1, 1966) with a minimum of $20,000.

TITLE V.—GRANTS TO STATES FOR STRENGTHENING STATE DEPARTMENTS OF EDUCATION, FISCAL YEAR 1967 ACTUAL OBLIGATIONS AND FISCAL YEARS 1968 AND 1969 ALLOTMENT

| State and outlying areas | 1967 actual | 1968 estimated allotment | 1969 estimated allotment |
|---|---|---|---|
| Total | $18,561,865 | $25,287,500 | [1] $33,250,000 |
| Alabama | 361,015 | 497,350 | 651,861 |
| Alaska | 118,295 | 171,871 | 283,508 |
| Arizona | 217,266 | 300,954 | 429,594 |
| Arkansas | 241,611 | 328,124 | 460,343 |
| California | 1,437,553 | 1,895,749 | 2,234,466 |
| Colorado | 289,858 | 347,190 | 481,921 |
| Connecticut | 242,902 | 386,662 | 526,593 |
| Delaware | 134,006 | 192,381 | 306,719 |
| District of Columbia | 119,122 | 206,022 | 322,158 |
| Florida | 483,058 | 652,801 | 827,789 |
| Georgia | 431,120 | 577,997 | 743,132 |
| Hawaii | 150,904 | 213,704 | 330,852 |
| Idaho | 154,511 | 217,211 | 334,821 |
| Illinois | 755,185 | 1,013,556 | 1,236,065 |
| Indiana | 440,282 | 610,586 | 780,013 |
| Iowa | 296,258 | 402,486 | 544,501 |
| Kansas | 259,100 | 354,128 | 489,773 |
| Kentucky | 308,713 | 417,806 | 561,839 |
| Louisiana | 351,879 | 476,462 | 628,221 |
| Maine | 163,400 | 236,260 | 356,378 |
| Maryland | 339,343 | 464,535 | 614,723 |
| Massachusetts | 402,364 | 581,783 | 747,416 |
| Michigan | 719,819 | 955,682 | 1,170,567 |
| Minnesota | 353,642 | 482,274 | 634,799 |
| Mississippi | 283,476 | 380,091 | 519,156 |
| Missouri | 402,645 | 533,910 | 693,237 |
| Montana | 166,455 | 214,585 | 331,848 |
| Nebraska | 185,914 | 275,106 | 400,342 |
| Nevada | 133,251 | 190,404 | 304,483 |
| New Hampshire | 140,440 | 200,831 | 316,283 |
| New Jersey | 503,589 | 679,227 | 857,696 |
| New Mexico | 184,013 | 255,743 | 378,429 |
| New York | 1,101,390 | 1,450,692 | 1,730,782 |
| North Carolina | 640,170 | 622,127 | 793,074 |
| North Dakota | 146,721 | 206,396 | 322,581 |
| Ohio | 600,898 | 1,078,054 | 1,309,059 |
| Oklahoma | 283,311 | 387,284 | 527,296 |
| Oregon | 240,762 | 337,476 | 470,927 |
| Pennsylvania | 787,239 | 1,034,524 | 1,259,794 |
| Rhode Island | 148,487 | 211,259 | 328,085 |
| South Carolina | 300,222 | 404,942 | 547,281 |
| South Dakota | 151,982 | 214,536 | 331,793 |
| Tennessee | 373,661 | 497,987 | 652,582 |
| Texas | 890,024 | 1,175,595 | 1,419,448 |
| Utah | 189,883 | 264,277 | 388,086 |
| Vermont | 126,442 | 182,331 | 295,346 |
| Virginia | 377,484 | 549,649 | 711,049 |
| Washington | 327,026 | 449,344 | 597,531 |
| West Virginia | 234,491 | 316,091 | 446,725 |
| Wisconsin | 369,614 | 504,462 | 659,909 |
| Wyoming | 127,086 | 181,253 | 294,126 |
| Guam, Puerto Rico, Virgin Islands, American Samoa, Trust Territory | 373,983 | 505,750 | 665,000 |

[1] Estimated distribution of $35,000,000 with 5 percent ($1,750,000) reserved for special projects; 2 percent $665,000) of the balance reserved for the outlying areas, and the remainder distributed to the 50 States and the District of Columbia with 40 percent distributed in equal payments and 60 percent on the basis of total public school enrollment, fall 1966. The amount for the outlying areas is distributed with a basic amount of $70,000 and the balance distributed on the basis of total public school enrollment, fall 1966.

TITLE III.—NATIONAL DEFENSE EDUCATIONAL ACT GRANTS TO STATES FOR EQUIPMENT AND MINOR REMODELING FISCAL YEAR 1967 ACTUAL OBLIGATIONS AND FISCAL YEARS 1968 AND 1969 ALLOTMENT

| State and outlying areas | 1967 actual | 1968 estimated allotment | 1969 estimated allotment [1] |
|---|---|---|---|
| Total | $79,200,000 | $75,240,000 | $14,950,000 |
| Alabama | 2,014,582 | 1,907,332 | 378,224 |
| Alaska | 98,239 | 104,631 | 20,748 |
| Arizona | 798,891 | 770,310 | 152,752 |
| Arkansas | 1,069,262 | 994,268 | 197,163 |
| California | 5,281,072 | 5,242,948 | 1,039,676 |
| Colorado | 814,942 | 808,074 | 160,241 |
| Connecticut | 723,588 | 714,739 | 141,733 |
| Delaware | 141,621 | 162,549 | 32,233 |
| District of Columbia | 176,432 | 171,298 | 33,968 |
| Florida | 2,340,475 | 2,253,621 | 446,892 |
| Georgia | 2,439,089 | 2,240,029 | 444,197 |
| Hawaii | 323,179 | 296,893 | 58,874 |
| Idaho | 393,520 | 358,504 | 71,091 |
| Illinois | 3,070,632 | 3,039,031 | 602,639 |
| Indiana | 2,081,955 | 1,935,201 | 383,750 |
| Iowa | 1,219,629 | 1,124,076 | 222,904 |
| Kansas | 963,725 | 893,692 | 177,219 |
| Kentucky | 1,751,078 | 1,601,331 | 317,544 |
| Louisiana | 2,102,814 | 1,997,668 | 396,137 |
| Maine | 475,510 | 444,425 | 88,129 |
| Maryland | 1,306,913 | 1,297,174 | 257,229 |
| Massachusetts | 1,520,775 | 1,544,978 | 306,369 |
| Michigan | 3,645,951 | 3,370,569 | 668,383 |
| Minnesota | 1,647,838 | 1,561,279 | 309,601 |
| Mississippi | 1,413,779 | 1,323,052 | 262,361 |
| Missouri | 1,617,898 | 1,630,492 | 323,326 |
| Montana | 356,982 | 337,733 | 66,972 |
| Nebraska | 619,939 | 588,213 | 116,643 |
| Nevada | 110,269 | 114,636 | 22,732 |
| New Hampshire | 275,963 | 260,849 | 51,726 |
| New Jersey | 1,807,813 | 1,781,877 | 353,346 |
| New Mexico | 634,140 | 594,823 | 117,953 |
| New York | 4,373,027 | 4,179,461 | 828,786 |
| North Carolina | 2,779,286 | 2,563,936 | 508,428 |
| North Dakota | 360,193 | 339,331 | 67,289 |
| Ohio | 4,224,670 | 4,056,842 | 804,471 |
| Oklahoma | 1,137,986 | 1,032,380 | 204,721 |
| Oregon | 783,647 | 740,911 | 146,923 |
| Pennsylvania | 4,219,562 | 4,013,207 | 795,818 |
| Rhode Island | 307,652 | 285,191 | 56,553 |
| South Carolina | 1,541,924 | 1,445,849 | 286,712 |
| South Dakota | 378,746 | 359,232 | 71,236 |
| Tennessee | 2,059,265 | 1,901,346 | 377,037 |
| Texas | 5,274,748 | 5,043,834 | 1,000,191 |
| Utah | 579,906 | 557,715 | 110,595 |
| Vermont | 190,750 | 184,693 | 36,625 |
| Virginia | 2,137,843 | 1,962,654 | 389,194 |
| Washington | 1,191,013 | 1,094,505 | 217,040 |
| West Virginia | 1,007,223 | 922,818 | 182,995 |
| Wisconsin | 1,817,524 | 1,719,894 | 341,055 |
| Wyoming | 156,540 | 150,066 | 29,758 |
| American Samoa | 50,000 | | 25,000 |
| Canal Zone | 50,000 | | 25,000 |
| Guam | 50,000 | 1,219,840 | 25,000 |
| Puerto Rico | 1,240,000 | | 171,818 |
| Virgin Islands | 50,000 | | 25,000 |

[1] Estimated distribution of $16,988,636 with 12 percent ($2,038,636) reserved for loans, 1.6 percent ($271 818) reserved for the outlying areas and the balance distributed to the 50 States and District of Columbia on the basis of the State products of (1) NDEA allotment ratios, fiscal year 1968–69, and (2) estimated 5–17 population, July 1, 1965; $271,818 distributed to the outlying areas on the basis of the 5–17 population, July 1. 1965, with a minimum of $25,000.

ELEMENTARY AND SECONDARY EDUCATION

TITLE II.—GRANTS TO STATES FOR SCHOOL LIBRARY MATERIALS, FISCAL YEAR 1967 ACTUAL OBLIGATIONS AND FISCAL YEARS 1968 AND 1969 ALLOTMENTS

| State and outlying Areas | 1967 actual | 1968 estimated allotment | 1969 estimated allotment |
|---|---|---|---|
| Total | $101,875,000 | [1] $99,234,000 | [2] $46,000,000 |
| Alabama | 1,759,538 | 1,767,887 | 819,506 |
| Alaska | 126,724 | 124,897 | 57,896 |
| Arizona | 833,531 | 816,510 | 378,494 |
| Arkansas | 944,690 | 906,017 | 419,985 |
| California | 9,562,774 | 9,337,909 | 4,328,595 |
| Colorado | 1,088,546 | 1,064,689 | 493,538 |
| Connecticut | 1,424,663 | 1,400,476 | 649,192 |
| Delaware | 263,823 | 260,120 | 120,579 |
| Florida | 2,685,012 | 2,648,847 | 1,227,875 |
| Georgia | 2,205,186 | 2,152,555 | 997,818 |
| Hawaii | 397,695 | 386,217 | 179,031 |
| Idaho | 374,102 | 360,311 | 167,023 |
| Illinois | 5,462,794 | 5,337,276 | 2,474,098 |
| Indiana | 2,589,946 | 2,534,729 | 1,174,976 |
| Iowa | 1,495,947 | 1,448,999 | 671,685 |
| Kansas | 1,148,472 | 1,115,859 | 517,258 |
| Kentucky | 1,557,122 | 1,505,814 | 698,021 |
| Louisiana | 1,957,961 | 1,902,770 | 882,030 |
| Maine | 532,305 | 506,785 | 234,921 |
| Maryland | 1,860,478 | 1,830,047 | 848,320 |
| Massachusetts | 2,666,346 | 2,658,619 | 1,232,405 |
| Michigan | 4,775,593 | 4,634,860 | 2,148,493 |
| Minnesota | 2,021,427 | 1,979,521 | 917,609 |
| Mississippi | 1,231,368 | 1,173,309 | 543,888 |
| Missouri | 2,346,016 | 2,236,998 | 1,036,962 |
| Montana | 386,441 | 371,750 | 172,325 |
| Nebraska | 778,405 | 742,427 | 344,153 |
| Nevada | 224,572 | 218,847 | 101,447 |
| New Hampshire | 341,491 | 334,087 | 154,866 |
| New Jersey | 3,294,199 | 3,214,941 | 1,490,288 |
| New Mexico | 606,099 | 585,437 | 271,380 |
| New York | 8,420,204 | 8,122,336 | 3,765,115 |
| North Carolina | 2,447,284 | 2,353,748 | 1,091,082 |
| North Dakota | 349,449 | 331,096 | 153,480 |
| Ohio | 5,514,273 | 5,357,489 | 2,483,468 |
| Oklahoma | 1,233,761 | 1,211,458 | 561,572 |
| Oregon | 990,023 | 998,243 | 462,737 |
| Pennsylvania | 5,835,561 | 5,590,970 | 2,591,698 |
| Rhode Island | 435,108 | 423,153 | 196,153 |
| South Carolina | 1,331,933 | 1,286,889 | 596,538 |
| South Dakota | 390,650 | 377,371 | 174,930 |
| Tennessee | 1,845,333 | 1,774,313 | 822,484 |
| Texas | 5,460,665 | 5,322,514 | 2,467,255 |
| Utah | 596,144 | 582,833 | 270,173 |
| Vermont | 211,766 | 208,063 | 96,448 |
| Virginia | 2,132,269 | 2,076,258 | 962,451 |
| Washington | 1,599,722 | 1,589,629 | 736,874 |
| West Virginia | 910,963 | 858,758 | 398,078 |
| Wisconsin | 2,331,479 | 2,277,841 | 1,055,895 |
| Wyoming | 184,428 | 174,290 | 80,792 |
| District of Columbia | 347,914 | 336,897 | 156,169 |
| American Samoa | | 27,213 | 30,000 |
| Guam | 55,881 | 65,564 | 30,000 |
| Puerto Rico | 1,777,382 | 2,063,321 | 930,616 |
| Virgin Islands | 32,867 | 39,568 | 30,000 |
| Trust Territories | 69,881 | 82,868 | 37,376 |
| Bureau of Indian Affairs | 113,189 | 141,807 | 63,959 |
| Undistributed | 313,605 | | |

[1] Distribution of $99,234,000: $96,813,659 to the 50 States and District of Columbia on the basis of total public and revised estimated nonpublic K–12 enrollment, fall 1966; 2½ percent ($2,420,341) of the total amount for the 50 States and District of Columbia reserved for the outlying areas and Bureau of Indian Affairs and distributed on the basis of total K–12 public and nonpublic enrollment, fall 1966.

[2] Estimated distribution of $44,878,049 to the 50 States and District of Columbia on the basis of the total public and nonpublic K–12 enrollment, fall 1966. Estimated distribution of 2½ percent ($1,121,951) of $44,878,049 on the basis of total public and nonpublic K–12 enrollment, fall 1966, with a minimum amount of $30,000.

NEW POSITIONS REQUESTED FISCAL YEAR 1969

| | Grade | Annual salary |
|---|---|---|
| DISSEMINATION OF INFORMATION | | |
| Director, National Information Coordinating Center | GS-15 | $18,404 |
| (2) Public information specialist | GS-13 | 27,014 |
| (2) Public information specialist | GS-12 | 22,922 |
| (2) Public information specialist | GS-11 | 19,316 |
| (2) Staff assistant | GS-9 | 16,108 |
| Staff assistant | GS-7 | 6,734 |
| Secretary-stenographer | GS-6 | 6,137 |
| Secretary-stenographer | GS-5 | 5,565 |
| (2) Clerk-typist | GS-4 | 9,990 |
| Clerk-typist | GS-3 | 4,466 |
| Total new positions (15) | | 136,656 |

BUDGET REQUEST

Senator HILL. We will hear from Mr. Estes, Associate Commissioner for Elementary and Secondary Education.

Mr. ESTES. Mr. Chairman, I am pleased to appear before you to present an appropriation request of $1,561,703,000 to support this Nation's investment in elementary and secondary education.

NEW PROGRAMS

This budget request is approximately the same level as for fiscal year 1968. There are, however, significant changes within the total request. Funding of a new program aimed at preventing students from dropping out of school is proposed; bilingual education programs will be supported by the request to better the achievement of children who are deprived of educational opportunity because their native language is not English. Other increases will support strengthening of State departments of education, dissemination activities about proven successful programs and methods, and assistance for planning and evaluation of federally assisted education programs.

APPROPRIATION ADVANCES

Our fiscal year 1968 budget request includes a procedure to overcome one of the most serious problems experienced by local school officials in making efficient use of Federal funds—the timing of the Federal appropriation process which often makes funds available well after the school year begins in the fall.

Senator HILL. That presents a problem, does it not?

Mr. ESTES. A great problem to not only the State level but also the local level.

To plan effectively and hire personnel for the fall school programs, school officials need to know in the spring the amount of funds they can count on for operations in the fall.

The Elementary and Secondary Education Amendments of 1967 provide a solution to this problem through the budget process.

This budget provides that the 1969 grants for education of the disadvantaged under title I be appropriated in the spring of 1968, as a a part of the 1968 supplemental appropriation bill.

The budget also provides that fiscal year 1970 appropriations be included in the regular 1969 appropriation bill, making the 1970 amount known about a year before the school year begins.

The procedure does not increase the new obligation authority of the total Federal budget for any fiscal year. It does permit the Congress to enact funding levels for the following fiscal year, so that school systems can be notified as to the grant they can expect to receive the following year.

EXPIRED PROGRAMS

This request also includes funds in the amount of $39,950,000 for programs whose authorizations expired in fiscal year 1968.

PLANNING AND EVALUATION

To increase the effectiveness of Federal-State planning, evaluation, and administration of programs supported by Federal funds, we are requesting $14 million under authorization of title IV of the 1967 amendments.

Some $5 million of the request will provide grants of $100,000 to each State to enable the States to increase their capacity for planning succeeding year educational programs under the Elementary and Secondary Education Act.

We plan to use $4,500,000 of the request for several special project grants to States for evaluation of these programs.

Each special project grant would involve a cluster of States, concentrating on developing evaluation instruments to measure programs of a similar nature in the various States, on the preparation of special techniques for such programs as those serving handicapped and migrant children, and on actual field testing of the evaluation instruments.

Senator HILL. This proposal is something new, is it not?

Mr. ESTES. That is right. This is additional funding to attempt to evaluate some of the special programs that have been developed recently.

An additional benefit will be the training of urgently needed education evaluators.

The greater portion of the remaining $4,500,000 included in the request for Federal activities will be to strengthen program data collection procedures at State and Federal levels to improve decision-making processes as well as to provide information reports to the Congress on a much more current basis.

ASSISTANCE FOR EDUCATIONALLY DEPRIVED CHILDREN

Title I of the Elementary and Secondary Education Act depends on the imagination and discretion of local school leaders to develop educational solutions to the problems of the Nation's children of poverty.

Locally designed projects are submitted to the State educational agency for review and approval in accordance with congressional intent.

Currently an estimated 9½ million disadvantaged children in all 50 States and outlying areas are receiving special attention through a variety of title I activities.

In their annual 1966–67 reports to the U.S. Office of Education, a majority of States have highlighted improved reading competencies on the part of their title I pupils.

Twenty-nine of the State agencies reported decreases in dropout rates among these youngsters, and 23 noted substantial increases in the number continuing higher education. They also report gains in attendance, attitudes and decreased vandalism in their poverty schools.

In addition, there is preliminary, though unrefined, statistical data on programs for migrant children, neglected and delinquent youngsters in institutions, Indian and handicapped students, that would indicate progress in these areas.

Independent evaluation efforts support these general findings. A study of average reading achievement in 39 cities reveals that reading programs for selected title I pupils showed a much higher achievement rate than had been previously expected from low-income area schools.

The rate matched the expected achievement of the national norm—10 months' growth for 10 months' instruction—this instead of a 7-month achievement gain during the 10-month school year.

The $1,200 million requested in this budget for fiscal year 1970 will allow local school districts and State agencies to continue their progress in helping children from disadvantaged areas to stay in school and to achieve at the level of their classmates.

SUPPLEMENTARY EDUCATIONAL CENTERS AND SERVICES

The title III program of supplementary centers and services supports special projects to meet critical needs by adapting new or improved educational ideas, practices, and methods to viable programs in community schools.

Since enactment in 1965, more than 6,600 proposals have been submitted by local school districts throughout the Nation.

More than 2,400 of these proposals, including renewals, have been funded. We are requesting $189,163,000, an increase of $1,287,000, for continuation of projects in 1969.

In accordance with the 1967 ESEA amendments, during fiscal year 1969, the program will begin to be transferred from Federal administration to administration by the States.

The amendments provide that up to 75 percent of a State's fiscal year 1969 allotment will be available for making grants to local school systems on the basis of State plans; the remaining 25 percent will continue to be administered by the Commissioner of Education.

To assist States and their advisory councils in developing State plans, funds are being made available from fiscal year 1968 appropriations. We hope that all States may have an approved State plan prepared by July 1, 1968.

A national Advisory Council has been appointed by the President in accordance with the 1967 amendments.

Senator HILL. Who is the chairman of this Council?

Mr. ESTES. James Hazlett, superintendent of schools in Kansas City, Mo., will be the chairman.

The role of the Council will be of major importance in affording a channel of communications for periodic review and evaluation of issues and programs arising from title III.

An annual report to the President and to the Congress will be prepared by the Council with its findings and recommendations for improvement of the program, its administration, and its operation.

### STRENGTHENING STATE DEPARTMENTS OF EDUCATION

The $35 million requested for fiscal year 1969, an increase of $5,250,000 will contribute toward a further strengthening of State departments of education to provide the leadership role needed to attain excellence in education.

The State departments of education have taken full advantage of the opportunities of title V. Funds have been used primarily for leadership services to local educational agencies for the improvement of instruction, for data gathering, and for study, planning, and evaluation.

Major efforts will now focus upon the need for formulating statewide plans for educational development.

Senator HILL. When you speak of educational development, what do you have in mind?

Mr. ESTES. We are talking about improvement of the educational process both at the elementary and secondary level.

The advisory council on State departments of education at its last meeting vigorously endorsed expanded efforts in this area.

The largest portion of the $5,250,000 increase will insure that no State will receive less in fiscal year 1969 than it did in 1968 because of the change in formula specified by the 1967 amendments.

The formula was changed to provide a more equitable distribution of funds. The revised formula provides each State with an equal share of 40 percent of the appropriation with the remainder distributed on the basis of school-age population.

### LIBRARY RESOURCES

The budget request of $46 million for title II ESEA will provide for the purchase of some 9 million school library books, textbooks, and other instructional materials.

The reduction in the request from the fiscal year 1968 level of $99,234,000 reflects the greater overall emphasis in the Office of Education on services to children and the need for personnel development related to providing these services.

Also, in the context of a tight budget, activities such as construction and equipment can be temporarily deferred in favor of direct services to people.

Senator HILL. That is what you have done in this budget?

Mr. ESTES. That is correct, sir.

### DISSEMINATION

There are five major elements in producing educational change in the American school system today. We must assess needs, assign priorities, develop program strategies, evaluate programs and disseminate information about successful proven programs and methods.

Although dissemination of information is only one element in this process it is a critical link in the chain. Without it we cannot secure the adoption of new practices which result from the multibillion dollar effort in programs supported by Federal legislation.

### National Information Center

The budget request of $2 million submitted under title VIII of the 1967 amendments to the Elementary and Secondary Education Act will establish a national information center to collect and disseminate information on new and vital educational programs.

This program will provide the following: technical assistance to the States for creating statewide dissemination systems; assistance to rural areas in preparing proposals and providing administrative help to help secure Federal aid; conferences, workshops, demonstrations and planning for an education exposition; brochures, pamphlets, research reports, bibliographies, and other printed materials about effective programs and practices.

### Utilization of Contract Authority

It is planned that contract authority will be utilized extensively in achieving the objectives of this program. Whenever possible, contracts will be made with colleges and universities or other nonprofit organizations to carry out these activities.

### DROPOUT PREVENTION

The full authorization of $30 million is requested for a new program aimed specifically at reducing the number of students who do not graduate from high school.

It is estimated that 721 pupils graduate from high school for every 1,000 who enter the fifth grade.

This represents a school dropout rate of nearly 28 percent.

We propose to invest the $30 million requested in a limited number of large projects in districts with large concentrations of children from low-income families and where the dropout rate exceeds the national average by at least 5 to 10 percent.

These projects would concentrate on programs beginning at the fourth-grade level, where the attainment gap of disadvantaged children begins to widen appreciably and the future dropout can be detected.

Accumulated evidence indicates that the problems which frequently culminate in leaving school before graduation worsen progressively during the late elementary and early secondary school years.

### Program Projects

Dropout prevention projects may greatly intensify identification of potential dropouts, remedial instruction, curriculum modification, and counseling and guidance services.

These projects would be designed to improve and sustain student interest in education, increase incentives for successfully remaining in school, and help students meet personal and financial problems which may cause them to terminate their schooling before graduation.

These objectives may be achieved through a combination of specialist services within the school, through work-study arrangements with business and industry, by providing part-time job opportunities and work experiences, by experimental programs to meet the individual needs of individual students, and by varying combinations of these and other factors.

Most of these approaches have been attempted in relative isolation, but no project has concentrated funds on the wide range of imaginative program possibilities which might be used to keep children in school.

### BILINGUAL EDUCATION PROGRAM

We are requesting $5 million under title VII of the Elementary and Secondary Education Amendments of 1967 to provide for experimental and demonstration programs of bilingual education for disadvantaged children whose dominant language is other than English and who come from families with low incomes or families receiving payments under AFDC.

Approximately 5 million children aged 6 to 18 with a non-English mother tongue are in schools where English is the sole medium of instruction, yet do not teach it as the child's second language.

Although children of many different ethnic groups are affected by these conditions, the Mexican Americans, Puerto Ricans, and the American Indians are affected the most.

Research indicates that "the best language in which to begin a child's education is his mother tongue," but the popular view in our country has been that English is everybody's native tongue.

Therefore, emphasis in the first years of the program must be on providing strong leadership to orient educators and the public to the advantages of such bilingual education, and to assure demonstration programs of highest quality.

The goals in the implementation of title VII are: (1) The development of school programs integrating the child's principal language with lessons and developing, at the same time, competence in English; (2) collection and sequencing of teaching materials, and in a few cases producing them; and (3) intensive teacher training focused upon the unique needs of bilingual teachers.

### DIRECT PROGRAM SUPPORT

In fiscal year 1969, we are for the first time asking separately for funds for direct support of programs.

The request of $590,000 provides for expenses of advisory committees, review of proposals by experts outside the Office of Education, and consultant services to develop new programs.

These activities are directly and integrally in support of the process by which program funds are made available to grant recipients.

Through this approach, Congress will be able to identify more specifically the direct costs, other than normal operating costs, which are involved in the administration of programs funded by the 1969 appropriations.

Thank you, Mr. Chairman. My associates and I will be happy to answer any questions you may have.

### BILINGUAL EDUCATION PROGRAM

Senator HILL. Don't they teach English in many foreign countries today?

Mr. ESTES. They do, sir.

Senator HILL. In other words, they don't just stick to their native language, so to speak?

Mr. ESTES. But this is taught as a second language. One of the problems of our children whose native tongue is other than English is that they come to the school where the sole medium of instruction is English and nobody attempts to teach them this language and as a result they are certainly at a disadvantage.

Senator HILL. Whereas in many foreign countries they teach in their native language and also in English, is that right?

Mr. ESTES. That is right.

Senator HILL. Senator Cotton.

PERCENTAGE OF FUNDS DEVOTED TO PLANNING AND EVALUATION

Senator COTTON. Could you say roughly what proportion of the funds that you have discussed are devoted to study, evaluation, and planning in contradistinction to going actually into presently established programs and activities?

Mr. ESTES. That would be difficult to say. We have in this request about $14 million specifically for planning and evaluation under the amendments of 1967, ESEA. States use about 15 percent of the funds under title V for planning and evaluation type activities. About 5 percent of the funds that are provided in this program for State administration of programs, and this is a rough estimate, about 5 percent of those funds are used for evaluation.

Senator COTTON. I note on page 7, that you referred to ——

Mr. ESTES. Pardon me, sir. I would say about 2 percent.

ADMINISTRATIVE PERSONNEL TO SECURE FEDERAL AID

Senator COTTON. I note on page 7 you referred to administrative help to secure Federal aid. In my State the Governor has appointed an individual and that has almost created a department, which I think was the intention of Federal officials, involved in studying, ascertaining and consulting with the various State agencies, educational, colleges and all the rest, about what Federal aid is available and for what purposes. Why do you need this in addition to those activities already in existence?

Mr. ESTES. As you know, under title V of the Elementary and Secondary Act many States provide a service similar to this. However, we find that many local, rural, isolated school districts do not have the staff that is necessary to develop an understanding of the many programs through which and under which they can receive Federal funds for the improvement of instruction in their district. This would be an attempt on our part to develop technical assistance to help local school districts to get maximum benefit from our programs. We have 27 different programs in our Bureau alone that our local school districts need to keep up with. We have 80 programs in the Office of Education.

Many of the larger school districts have a full-time staff that takes care of the various Federal programs for which we are responsible. However, the small school district does not. This is an attempt to give them assistance in understanding our programs consistent with the amendments of 1967.

OFFICE OF EDUCATION PROGRAMS APPROPRIATION COMPONENTS

Senator COTTON. You say 80 programs plus—What were the others?

Mr. ESTES. Eighty-four or 85 programs in the Office of Education that we administer.

Senator COTTON. By "we", you mean——

Mr. ESTES. The Office of Education.

Mr. HOWE. This would include higher education as well as elementary and secondary.

Senator COTTON. You are connected with elementary and secondary?

Mr. ESTES. That is right. For the most part, the State grant programs in elementary and secondary education.

Senator COTTON. You have the largest number?

Mr. ESTES. That is right. This budget request represents about 50 percent of the total request of the Office of Education.

Senator COTTON. But it does range over 85 programs?

Mr. ESTES. No. Ours range over 27 programs. The $2 billion that we are asking for in this request, and the school assistance and Federal affected areas request.

Senator COTTON. But the 85 programs are the whole range of programs under the Office of Education?

Mr. ESTES. That is right.

Senator COTTON. Which includes your division of elementary and secondary, the higher education, and what else?

Mr. ESTES. Adult, vocational, and library programs, education professions development, Bureau of Education for the Handicapped, and Bureau of Research.

NONMATCHING OF TITLE V FUNDS AND MATCHING OF TITLE III FUNDS

Senator COTTON. Now, the title V funds, elementary and secondary education, those are not matched?

Mr. ESTES. That is correct.

Senator COTTON. The title III funds of the National Defense Education Act are 50–50 matched funds?

Mr. ESTES. That is right.

Senator COTTON. I notice, Mr. Estes, you are not the proper person to ask this but this is an old tune of mine that I have played a long time.

REDUCTION OF DEFENSE EDUCATION FUNDS: SERVICE PRIORITY OVER EQUIPMENT

I note that for fiscal year 1969 the recommendation has dropped under title III, defense education funds, from $82,700,000 to $17,950,000.

Mr. ESTES. That is right, sir.

Senator COTTON. That is about an 80-percent cut.

Mr. ESTES. That is right, 80 or more percent.

Senator COTTON. Why didn't you cut them out altogether?

Mr. ESTES. We think the program has merits. I think you have to look at that reduction in light of the fact that during the past 2 years we have spent in excess of $350 million from all of our programs in

elementary and secondary education on equipment, materials, and supplies. So that when you look at one program by itself to see whether or not it has increased or decreased this does not give you a clear picture. In title I, for instance, last year we spent 21 percent of the funds for equipment and materials. This year the amount has been reduced but there is a significant amount in other programs spent for equipment and materials. Secondly in light of our tight budget we are concentrating and focusing on services to people rather than the purchase of equipment and the construction of facilities.

Senator COTTON. Some of that equipment, the mechanics of the new educational techniques come into that, like projectors and various other mechanical methods of making instruction clear and interesting to the student.

Mr. ESTES. That is right, sir.

Senator COTTON. The thing that impresses me, and I don't know what the situation is in other States, that here is a program where the local school districts or the State have to match every dollar. Every dollar in my State is matched, and they are eager to do it, which leads me to the inescapable conclusion that the superintendents and school officials favor this position, and heaven knows we are a State without a sales tax or an income tax and the school burden is very, very heavy. And I do find that my school officials are extremely interested in this program and so interested that their treasurers budget the money in order to pay every matching dollar that can be made available.

Your point is that these various expedients, machines, aids, mechanical or otherwise, for instruction visually and by other methods, becomes a matter of accumulating the equipment and then the necessities, is that right?

Mr. ESTES. Yes. By and large, these are nonrecurring costs. During the first 2 years of the Elementary and Secondary Act we found large amounts used for the purchase of equipment. However, now that they are pretty well equipped to carry on these programs we are finding a greater increase now in instructional services rather than support activities and the purchase of equipment.

### OVERMATCHING OF FUNDS BY STATES

I think this trend will continue. Secondly, I would like to point out that not only are these funds for equipment matched but they are overmatched. We have two of these matching programs in our Bureau, title III for equipment and title V for guidance. To give you an example, one State overmatches our amount for guidance and counseling 27 to 1. The national average is overmatching by 10 to 1. So I think in light of the significant increase in the expenditure for education nationwide, it has increased over 100 percent in recent years. Actually, the matching requirement is not as significant as it was in 1958 because local school districts see the need for equipment. They are going to purchase it and they will spend more than the amount necessary to match. We think there is much more flexibility in the

titles of ESEA which makes it possible for them to purchase the equipment necessary.

Senator COTTON. The poorer States are not in as good a position to assume this burden as the richer States, are they?

Mr. ESTES. Perhaps they are not. However, it might be that the requirement for matching would distort priorities at the local level, which perhaps would not be true with the less flexible authority that we have in the Elementary and Secondary Education Act.

Senator COTTON. Your point in plain English is that if they can get money by matching it they are likely to use a disproportionate part of their own funds in securing these matching funds and neglect something else?

Mr. ESTES. That is right.

STATE NONMATCHING OF SOME AVAILABLE FUNDS: ADMINISTRATION

Senator COTTON. Are there any States that do not avail themselves, do not match these title III funds?

Mr. ESTES. Yes. We do have a few States. Especially as it relates to funds for administration. During the last 2 or 3 years the State of California has not matched all of its funds for administration of the program. As a matter of fact, if I am not mistaken they did not use some $400,000 for State administration under this program because the legislature would not provide matching funds for the program.

Senator COTTON. By State administration, you mean exactly what?

Mr. ESTES. Funds that are provided under this legislation to assist States in administering this program at the State level. It is a State plan program. The State department of education develops the plan, submits it to the Commissioner for approval, and then administers the program.

Senator COTTON. You put a restriction on the amount that can be used for State administration in contradistinction to the amount that can be used for actual equipment?

Mr. ESTES. That is right. There is an amount authorized. It is roughly 5 percent or more, I believe.

Senator COTTON. Five percent for administration?

Mr. ESTES. That is right.

Senator COTTON. Ninety-five percent for real tangible equipment?

Mr. ESTES. Yes in effect. This last year it was $7.5 million for administration and supervision in addition to $79.2 million for equipment; $5.5 million of it was used for supervision at the State level, and about $2 million for administration at the State level. The remaining $79.2 million was used for purchase of equipment at the local level.

Senator COTTON. I am not quite clear. It does not run over 5 percent for administration?

Mr. ESTES. That would run in excess of 5 percent, $7.5 million in addition to $79 million which was our appropriation last year, would be about 10 percent for supervision and administration. There was a separate authorization for supervision and administration of $10 million.

Senator COTTON. In many States?

Mr. ESTES. Yes. It is over 5 percent of the State's allocation. The money is allocated on the basis of population age 5 through 17 in public schools within the State.

PACKAGING FUNDS AT STATE LEVEL FOR MORE EFFECTIVE UTILIZATION

Senator COTTON. Why would it not improve the program to cut out the assistance to administration and just assist States in obtaining the necessary working materials and equipment?

Mr. ESTES. You mean at the local school district level?

Senator COTTON. Yes.

Mr. ESTES. Actually what we have done is combine part of these funds with funds under title V as well as funds for administration of other programs in order to package the funds at the State level for management to make it possible for the States to use these funds more effectively in really meeting the needs of local school districts.

ADMINISTRATION FUNDING REQUISITE

The answer to your question, however, is that there must be some funds at the State level for administering these programs. The administrative overburden created by these Federal assistance programs is considerable and there must be in my opinion funds available for administering these programs if we want to get an adequate return on our investment of Federal dollars.

Senator COTTON. My own experience in only one small State is that the State Board of Education is more than glad, and so are the local districts, to provide management if they get the equipment.

Mr. ESTES. Your State may be the exception. Let me give you an example in South Dakota. Four years ago, before the Elementary and Secondary Eduction Act was adopted and was passed by the Congress, the State department of education employed 12 people. Today they have some 60 people and more will be added this next year.

Senator COTTON. Those are not added for this particular purpose. Those are as a result of the whole elementary and secondary education bill. Funds are provided to enable States to increase their administrative force; is that right?

Mr. ESTES. That is right.

NONINCLUSION OF PROGRAM ADMINISTRATION FUNDS IN BUDGET REQUEST

Senator COTTON. It is not tied up with the title III funds of the Defense Education Act. That is only one small facet of it.

Mr. ESTES. That is right. The funds under title V are to provide States with moneys to perform all of the functions required by the State education agency, including those relating to this program.

Senator COTTON. If those within this program are supposed to be only 5 percent as opposed to 95 percent for equipment, why can't 5 percent be taken out and depend on title V for the general augmenting of administrative force.

Mr. ESTES. There are no funds for administration of this program in this budget.

Senator COTTON. None?

Mr. ESTES. None.

Senator COTTON. Were there last year?

Mr. ESTES. Yes; there were.

Senator HILL. How much?

Mr. ESTES. $5 million.

Senator HILL. You cut that all out entirely?

Mr. ESTES. We have eliminated this in this budget request as it relates specifically to the administration of NDEA III, it has been consolidated as part of our title V overall request for assistance.

### EQUIPMENT FUNDS

Senator COTTON. I think that is excellent but you cut out most of the rest, too.

Mr. ESTES. Let me correct my last statement. The $5 million for supervision of title III, NDEA was consolidated with ESEA title V. There is still $2 million in this budget request for administration.

However, in light of total commitment to equipment and materials during the past 2 years, I think this does not——

Senator COTTON. I do not want to belabor the point, but, Mr. Chairman, you know my feelings on this particular subject. I shall make them known again this year.

### LISTING OF OVERMATCHED AND UNDERMATCHED STATES

Would you be able to furnish this committee a list of the States that have oversubscribed, if that is what you want to call it, furnishing greater than 50-percent support of this particular program, as well as the States that have not chosen to meet the 50–50 matching requirement and have not chosen to avail themselves of the funds?

Could we have that, Mr. Chairman?

Mr. ESTES. Yes, sir; we will provide this for the record.

Senator HILL. Can you supply this for the record?

Mr. ESTES. Yes, sir.

Senator HILL. Thank you.

Is there anything you wish to add?

Mr. ESTES. No, sir.

(The list follows:)

TITLE III, NDEA—STATE ALLOTMENTS, EXCESS MATCHING OVER FEDERAL FUNDS CLAIMED, AND UNUSED ALLOTMENTS, FISCAL YEAR 1966

| | State supervisory, related services, and administration of the State plan | | | Acquisition of equipment and minor remodeling | | |
|---|---|---|---|---|---|---|
| | Allotment | Over-matching [1] | Unused allotment | Allotment | Over-matching [2] | Unused allotment |
| Total | $6,831,163 | $838,458 | $731,073 | $78,637,010 | $12,905,678 | $2,089,737 |
| Alabama | 128,634 | | 12,975 | 1,630,242 | | 79,636 |
| Alaska | 25,000 | | 11,267 | 97,911 | 24,404 | |
| Arizona | 74,440 | 736 | | 822,672 | | 15 |
| Arkansas | 88,687 | | 20,881 | 1,089,336 | 1,265 | |
| California | 370,758 | | 37,890 | 5,368,580 | | 354,441 |
| Colorado | 89,756 | 54 | | 847,774 | 66,520 | |
| Connecticut | 117,003 | 208,235 | | 710,910 | | 13,941 |
| Delaware | 52,000 | 22,213 | | 142,242 | 961 | |
| Florida | 236,677 | 24,959 | | 2,402,949 | 355,397 | |
| Georgia | 259,087 | | 3,319 | 2,543,469 | | |
| Hawaii | 223,400 | 50,993 | | 338,301 | 584,854 | |
| Idaho | 55,600 | | 1,480 | 403,494 | | 10,446 |
| Illinois | 268,950 | | 24,279 | 3,155,791 | 308,454 | |
| Indiana | 66,296 | | 11,211 | 2,158,431 | 0 | 0 |
| Iowa | 105,907 | | 27,915 | 1,247,039 | 337,937 | |
| Kansas | 75,000 | | 3,293 | 1,007,143 | 6,006 | |
| Kentucky | 127,990 | | 46,055 | 1,772,208 | | 241,799 |
| Louisiana | 134,856 | 31 | | 1,290,844 | | 273,380 |
| Maine | 39,539 | | 2,379 | 480,364 | | 44,271 |
| Maryland | 100,647 | | 29,786 | 1,301,300 | 109,659 | |
| Massachusetts | 185,000 | 23 | | 1,589,292 | 215,310 | |
| Michigan | 60,000 | 7,036 | | 3,757,794 | 7,627,088 | |
| Minnesota | 165,620 | | 50,221 | 1,710,348 | 0 | 0 |
| Mississippi | 75,000 | | 24,434 | 800,000 | | 228,851 |
| Missouri | 80,593 | | 19,546 | 1,599,030 | 726 | |
| Montana | 50,000 | | 12,717 | 364,092 | 1,801 | |
| Nebraska | 45,714 | | 6,558 | 630,155 | | 48,330 |
| Nevada | 60,000 | | 2,875 | 106,673 | | 1,196 |
| New Hampshire | 20,000 | 4,037 | | 272,342 | 4,157 | |
| New Jersey | 87,687 | | 14,403 | 1,861,207 | 183,305 | |
| New Mexico | 58,357 | 1,238 | | 644,759 | 11,586 | |
| New York | 1,010,485 | 56,940 | | 4,532,964 | 754,068 | |
| North Carolina | 192,512 | | 46,214 | 2,920,099 | | 336,546 |
| North Dakota | 60,000 | | 28,163 | 376,649 | 24,962 | |
| Ohio | 200,020 | | 37,494 | 4,351,752 | 398,108 | |
| Oklahoma | 77,920 | 11,030 | | 1,165,720 | 28,035 | |
| Oregon | 62,787 | | 4,363 | 817,301 | 602,243 | |
| Pennsylvania | 343,300 | | 53,645 | 4,401,836 | 1,026,490 | |
| Rhode Island | 50,000 | 7,415 | | 325,846 | 0 | 0 |
| South Carolina | 129,825 | | 12,475 | 1,577,873 | 13 | |
| South Dakota | 50,000 | | 8,034 | 388,225 | | 87,993 |
| Tennessee | 72,300 | | 1,984 | 2,075,005 | 0 | 0 |
| Texas | 225,000 | | 57,276 | 5,467,865 | | 248,979 |
| Utah | 87,029 | 2,686 | | 587,336 | | 58,177 |
| Vermont | 25,000 | | 1,651 | 205,908 | | 18,046 |
| Virginia | 102,903 | 9,320 | | 1,867,597 | 13,331 | |
| Washington | 166,236 | | 2 | 1,255,361 | | 24,356 |
| West Virginia | 80,000 | | 15,982 | 1,070,354 | 156,874 | |
| Wisconsin | 164,306 | | 88,077 | 1,884,755 | 61,820 | |
| Wyoming | 45,000 | | 9,222 | 165,568 | 0 | 0 |
| District of Columbia | 50,000 | 27,587 | | 175,294 | 221 | |
| Guam | 19,342 | | 3,007 | 22,010 | 61 | |
| Puerto Rico | 64,000 | 399,999 | | 775,000 | 22 | |
| Virgin Islands | 25,000 | 3,926 | | 80,000 | | 19,334 |

[1] Represents excess State funds over Federal funds claimed.
[2] Represents excess State and local funds over Federal funds claimed.

## School Assistance in Federally Affected Areas

STATEMENT OF B. ALDEN LILLYWHITE, DEPUTY ASSOCIATE COMMISSIONER FOR ELEMENTARY AND SECONDARY EDUCATION
ACCOMPANIED BY:
HAROLD HOWE II, COMMISSIONER OF EDUCATION
NOLAN ESTES, ASSOCIATE COMMISSIONER FOR ELEMENTARY AND SECONDARY EDUCATION
IRWIN KIRK, EXECUTIVE OFFICER, ELEMENTARY AND SECONDARY EDUCATION
BERNARD SISCO, ASSISTANT COMMISSIONER FOR ADMINISTRATION
LEON SCHWARTZ, DEPUTY ASSISTANT COMMISSIONER FOR ADMINISTRATION
JOE G. KEEN, BUDGET OFFICER
THOMAS McNAMARA, BUDGET ANALYST
JAMES B. CARDWELL, DEPUTY ASSISTANT SECRETARY, BUDGET

### Appropriation Estimate

#### SCHOOL ASSISTANCE IN FEDERALLY AFFECTED AREAS

For grants and payments under the Act of September 30, 1950, as amended (20 U.S.C., ch. 13), and under the Act of September 23, 1950, as amended (20 U.S.C., ch. 19) [$439,137,000] *$410,335,000* of which [$416,200,000] *$395,390,000* shall be for payments to local educational agencies for the maintenance and operation of schools as authorized by the Act of September 30, 1950, as amended (20 U.S.C., ch. 13), and [$22,937,000] *$14,745,000* which shall remain available until expended, shall be for providing school facilities and for grants to local educational agencies in federally affected areas as authorized by said Act of September 23, 1950: *Provided*, That this appropriation shall also be available for carrying out the provisions of section 6 of the Act of September 30, 1950: [*Provided further*, That applications filed on or before June 30, 1967, shall receive priority over applications filed after such date:] *Provided further*, That [no part of this appropriation for payments to local educational agencies for the maintenance and operation of schools shall be available to carry out the provisions of legislation for this purpose enacted after June 30, 1967] *not to exceed $200,000 shall be available for necessary expenses for program evaluation activities.*

#### EXPLANATION OF LANGUAGE CHANGES

The proposed appropriation language provides for the deletion of the phrase, "Provided further, That applications filed on or before June 30, 1967, shall receive priority over applications filed after such date:". The deletion of this provision is to provide for greater flexibility in meeting high priority requests in view of the limited fund availability.

Also deleted is the phrase, "no part of this appropriation for payments to local educational agencies for the maintenance and operation of schools shall be available to carry out the provisions of legislation for this purpose enacted after June 30, 1967". The Senate included this proviso in the appropriation language for School Assistance in Federally Affected Areas in fiscal year 1968 to assure that the substantive and technical changes in the program resulting from the Elementary and Secondary Education Amendments of 1967 would not be funded under that appropriation and than any additional funds required for the new legislation would be requested and considered separately.

The proposed appropriation language inserts the phrase "not to exceed $200,000 shall be available for necessary expenses for program evaluation activities." This proposed language is included to provide authorization for program support within the appropriation.

## AMOUNTS AVAILABLE FOR OBLIGATION

| | 1968 | 1969 |
|---|---|---|
| Appropriation | $439,137,000 | $410,335,000 |
| Unobligated balance brought forward | 51,158,498 | 49,323,000 |
| Cutback required by H.J. Res. 888: | | |
| Reduction below obligation level in the 1968 President's Budget: | | |
| Unobligated balance lapsing | −20,832,000 | |
| Reduction because of unanticipated carryover balances: | | |
| Unobligated balance carried forward | −49,323,000 | |
| Subtotal cutback | −70,155,000 | |
| Other unobligated balances carried forward | | −17,584,000 |
| Total currently authorized for obligation | 420,140,498 | 442,074,000 |
| Plus: proposed release of reserves for increased pay and postal costs | 22,000 | |
| Total available for obligation | 420,162,498 | 442,074,000 |
| Disposition of cutback: | | |
| To be used for pay and postal costs in this account | 22,000 | |
| To be returned to the Treasury | 20,810,000 | |
| To be carried forward for obligation in 1969 | 49,323,000 | |
| Total cutback | 70,155,000 | |

## OBLIGATIONS BY ACTIVITY

| | 1968 estimate | | 1969 estimate | | Increase or decrease | |
|---|---|---|---|---|---|---|
| | Positions | Amount | Positions | Amount | Positions | Amount |
| Maintenance and operations | | $395,390,000 | | $395,390,000 | | |
| Construction | 58 | 24,772,498 | 58 | 46,484,000 | | +$21,711,502 |
| Program support | | | | 200,000 | | +200,000 |
| Total obligations | 58 | 420,162,498 | 58 | 442,074,000 | | +21,911,502 |

## OBLIGATIONS BY OBJECT

| | 1968 estimate | 1969 estimate | Increase or decrease |
|---|---|---|---|
| Total number of permanent positions | 58 | 58 | |
| Full-time equivalent of all other positions | 2 | 2 | |
| Average number of all employees | 46 | 46 | |
| Personnel compensation: | | | |
| Permanent positions | $511,000 | $523,000 | +$12,000 |
| Positions other than permanent | 9,000 | 9,000 | |
| Total personnel compensation | 520,000 | 532,000 | +12,000 |
| Personnel benefits | 36,000 | 38,000 | +2,000 |
| Travel and transportation of persons | 26,000 | 26,000 | |
| Transportation of things | 1,000 | 1,000 | |
| Rent, communications, and utilities | 21,000 | 25,000 | +4,000 |
| Printing and reproduction | 5,000 | 5,000 | |
| Other services | 5,000 | 205,000 | +200,000 |
| Services of other agencies | 27,000,000 | 30,000,000 | +3,000,000 |
| Supplies and materials | 4,000 | 4,000 | |
| Equipment | 2,000 | 2,000 | |
| Lands and structures | 11,852,000 | 14,124,000 | +2,272,000 |
| Grants, subsidies, and contributions | 380,690,498 | 397,112,000 | +16,421,502 |
| Total obligations by object | 420,162,498 | 442,074,000 | +21,911,502 |

*Summary of changes*

| | |
|---|---|
| 1968 enacted appropriation | $439,137,000 |
| Unobligated balance brought forward | 51,158,498 |
| Cutback required by H.J. Res. 888: | |
| Reduction below obligation level in the 1968 President's budget | —20,832,000 |
| Reduction because of unanticipated carryover balances | —49,323,000 |
| Proposed release of reserves for increased pay and postal costs | 22,000 |
| 1968 estimated obligations | 420,162,498 |
| 1969 requested appropriation | 410,335,000 |
| Unobligated balance brought forward | 49,323,000 |
| Unobligated balance carried forward | —17,584,000 |
| 1969 estimated obligations | 442,074,000 |
| Total change | +21,911,502 |

| | Base amount | Changes from base amount |
|---|---|---|
| Increases: | | |
| A. Built-in: 1. Salary increase authorized in fiscal year 1968 | $620,000 | $18,000 |
| B. Program: | | |
| 1. Program support | | 200,000 |
| 2. Expansion of construction | 24,152,498 | 21,693,502 |
| Total increases | | 21,911,502 |

EXPLANATION OF CHANGES

An amount of $18,000 is requested in the technical services area to cover the cost in fiscal year 1969 of the salary increases enacted retroactive to October 1, 1967.

An amount of $200,000 is requested to provide for a program evaluation study.

An amount of $21,693,502 is requested to provide funding for some high priority projects left unfunded in fiscal year 1968.

OFFICE OF EDUCATION

| | 1968 estimate | 1969 estimate | Increase or decrease |
|---|---|---|---|
| Maintenance and operations: | | | |
| Payments to local educational agencies | $368,390,000 | $365,390,000 | —$3,000,000 |
| Payments to other Federal agencies | 27,000,000 | 30,000,000 | +3,000,000 |
| Total obligations | 395,390,000 | 395,390,000 | |

JUSTIFICATION OF ESTIMATE

Titles I and III of Public Law 81–874 authorize financial assistance for the maintenance and operation of local school districts in areas where enrollments are affected by Federal activities. Under current legislation, payments are made to eligible school districts which provide free public education to children who live on Federal property with a parent employed on Federal property (Section 3(a)); to children who either live on Federal property or live with a parent employed on Federal property (Section 3(b)); to those school districts having a substantial increase in school enrollment resulting from Federal contract activities with private companies (Section 4); and to school districts when there has been a loss of tax base as a result of the acquisition of real property by the Federal Government. Where no State or local educational agency is able, because of State law or for other reasons, to provide suitable free public education to children who live on Federal property, the Commissioner is required to make arrangements for this education (Section 6).

A local school district is eligible for payment for all of its Sections 3(a) and 3(b) children if (1) they amount to at least 10 in number and to at least 3 percent of the district's total number of children in average daily attendance during the year, or (2) they amount to 400, whichever is lower. For Section 3(a) children, the district is paid at a rate per child which is equal to 100 percent of the highest of either the rate derived from expenditures from local sources in comparable school districts, one-half of the national average per-pupil cost, or one-half of the State average per-pupil cost. All entitlement rate data are taken from experience from the second fiscal year preceding the year of application. For Section 3(b) children, the district is paid at 50 percent of the rate paid for Section 3(a) children. Under Section 6, Federal funds pay the full cost per child. Entitlements under this law are non-discretionary. If the funds appropriated for a fiscal year are not sufficient to pay in full the total amounts which the Commissioner estimates all local educational agencies are entitled to receive, the amount required for Section 6 shall be set aside to fund these entitlements in full and the remaining amount shall be pro-rated among the remaining applicant districts eligible under other sections of the Act.

The requested amount of $395,390,000 is the same as made available in 1968 and is expected to pay eligible school districts about 70 percent of full entitlements in fiscal year 1969. Full funding in 1969 would require an estimated $550,000,000.

Public Law 90–247, approved January 2, 1968, amended certain provisions of the Act some of which will increase entitlements.

The Office has been deducting $5.7 million from payments made to applicants, since they have been receiving this amount with respect to Federal property under laws other than P.L. 874. The section of the Act which authorized these deductions has been rescinded. This increases the amount which the applicants may receive. The Amendment will provide incentive for additional school districts to apply. These districts, many of which were former applicants, have not filed in recent years because the amount deductible under Section 3(e) equaled or exceeded the amount of their P.L. 874 entitlement. There is no telling at this time the number of these school districts who will apply or the amount of entitlements. The total may reach $3 million above the $5.7 million formerly deducted.

During FY 1969 the Office will implement the provision allowing school districts to offer for the computation of Federally connected ADA the result of one count rather than the two counts or actual daily attendance method formerly used. This method is expected to raise entitlements as much as $7 million.

The effect of the "big cities" Amendment was felt in the processing of applications in FY 1968. In addition to the $13 million increase in entitlements to the big cities it was noticeable that the amendments included in P.L. 89–750 enabled a greater number of smaller school districts to pass the threshold of three percent of Federally connected pupils. This increase is due to the eligibility of postal employees working on eligible Federal properties and the provision that children are eligible when a parent is on active duty in the uniformed services of the United States. The awareness of these amendments will enable additional school districts to submit applications and become eligible in 1969.

Because of the unpredictable program requirements for disasters, it is not possible at this time to foretell the need. No amount is included in Table I for this purpose.

Table I shows the basis of eligibility, the number of Federally-connected children, the rates of payment per child in ADA, and selected program data for fiscal years 1967, 1968 and 1969.

Table II summarizes, by State, the distribution of funds obligated for FY 1967, and anticipated obligation of funds requested for 1968 and 1969. The 1968 distribution includes $27 million of Section 6 funds. The distribution in 1969 will include $30 million of Section 6 funds which are not subject to pro-ration.

ESTIMATED REQUIREMENTS FOR PAYMENTS TO SCHOOL DISTRICTS—TITLES I AND III, PUBLIC LAW 874, AS AMENDED FISCAL YEARS 1967, 1968, AND 1969

| Section | Basis of eligibility | 1967 actual | 1968 appropriation | 1969 entitlement | 1969 appropriation request |
|---|---|---|---|---|---|
| Sec. 2 | School districts having partial loss of tax base by removal of real property from tax rolls through Federal acquisition. | $2,691,612.00 | $1,170,000 | $3,200,000 | $2,000,000 |
| Sec. 3(a): | | | | | |
| ADA | Children of parents who work on and reside on Federal property | 331,682.00 | | 374,285 | |
| Rate | | 312.16 | | 350.00 | |
| Entitlement | | 103,537,321.00 | 106,267,000 | 131,000,000 | 95,000,000 |
| Sec. 3(b): | | | | | |
| ADA | Children of parents who either work on or reside on Federal property | 1,966,478.00 | | 2,344,000 | |
| Rate | | 144.73 | | 163.35 | |
| Entitlement | | 284,608,347.00 | 284,409,000 | 382,900,000 | 266,990,000 |
| Sec. 3(f) | School districts eligible to receive amount to which they would have been entitled before reduction of federally connected children by cessation or decrease of Federal activity. | 370,856.00 | 224,000 | 500,000 | 250,000 |
| Sec. 3(c)(4) | Provides special deficit rate of payment when 50 percent or more of children reside on Federal property. | 140,138.00 | 90,000 | 200,000 | 100,000 |
| Deductions—3(e) | Payments made with respect to Federal property pursuant to any law of the United States other than Public Law 874. | —5,589,735.00 | —4,400,000 | | |
| Net sec. 3 entitlement | | [1]382,827,200.00 | 386,590,000 | 514,600,000 | 362,340,000 |
| Sec. 4: | | | | | |
| 1st year | Sudden and substantial increase of children resulting from Fed. activities carried on directly or through a contractor. | 1,530,383.00 | 1,350,000 | 2,000,000 | 1,000,000 |
| 2d year | | 129,280.00 | 90,000 | 200,000 | 50,000 |
| Sec. 6 | Arrangements with Federal agencies for educating certain children residing on Federal property. | | | | |
| Sec. 302 | Transfer of funds to Federal agencies for service provided to local educational agencies. | 23,314,154.00 | 27,000,000 | 30,000,000 | 30,000,000 |
| Sec. 7 | Natural disasters | 695,750.00 | [2] | [2] | [2] |
| Total requirements | | [3]411,186,622.00 | 416,200,000 | 550,000,000 | 395,390,000 |
| Net deficit for payment of 100 percent of entitlements under appropriation of $395,390,000. | | [4] | [4] | 154,610,000 | [4] |
| Percentage of entitlements payable under appropriation of $395,390,000. | | [4] | [4] | 70 | [4] |
| Estimated number of eligible school districts and Federal agencies | | 4,200.00 | 4,263 | 4,600 | 4,500 |
| Total number of federally connected children in ADA [5] | | 2,296,957.00 | 2,563,840 | 2,688,000 | 2,688,000 |

[1] Including $239,727 subsec. 3(c)2(b) reduction.
[2] Requirements are unpredictable. They are payable out of regular appropriation, subject to replacement by supplemental appropriations as needed.
[3] Including $1,757 reduction for pennies dropped for payment purposes
[4] Not available.
[5] Including children under sec. 6.

STATE ALLOCATIONS—TITLES I AND III, PUBLIC LAW 874, AS AMENDED FISCAL YEARS 1967, 1968, AND 1969

| State or territory | 1967 obligations | 1968 estimate | 1969 estimate |
|---|---|---|---|
| Total | $411,186,622 | $395,390,000 | $395,390,000 |
| Alabama | 8,788,148 | 8,955,406 | 8,941,314 |
| Alaska | 11,969,210 | 9,762,046 | 9,682,485 |
| Arizona | 7,400,681 | 6,285,722 | 6,234,493 |
| Arkansas | 2,354,113 | 1,953,560 | 1,937,638 |
| California | 66,481,546 | 60,978,019 | 60,481,048 |
| Colorado | 11,898,735 | 10,290,723 | 10,206,854 |
| Connecticut | 2,802,256 | 2,616,498 | 2,595,174 |
| Delaware | 1,449,975 | 2,350,131 | 2,490,900 |
| District of Columbia | 5,299,235 | 4,618,402 | 4,580,794 |
| Florida | 14,812,877 | 12,953,787 | 12,858,780 |
| Georgia | 13,690,982 | 12,330,086 | 12,748,034 |
| Hawaii | 7,964,285 | 6,857,193 | 6,801,307 |
| Idaho | 2,278,009 | 2,418,106 | 2,398,398 |
| Illinois | 7,462,780 | 9,983,678 | 9,902,311 |
| Indiana | 3,090,428 | 3,039,259 | 3,014,489 |
| Iowa | 1,752,046 | 1,787,388 | 1,772,821 |
| Kansas | 8,233,375 | 6,196,140 | 6,145,641 |
| Kentucky | 6,479,103 | 6,040,371 | 6,437,825 |
| Louisiana | 2,722,811 | 3,001,338 | 2,994,823 |
| Maine | 2,787,760 | 2,661,479 | 2,639,788 |
| Maryland | 20,146,856 | 18,746,284 | 18,593,502 |
| Massachusetts | 11,429,625 | 10,412,223 | 10,430,024 |
| Michigan | 3,308,727 | 4,981,623 | 4,941,023 |
| Minnesota | 1,273,704 | 1,706,172 | 1,692,267 |
| Mississippi | 2,345,147 | 2,478,037 | 2,457,841 |
| Missouri | 7,091,984 | 5,221,005 | 5,178,454 |
| Montana | 3,291,531 | 3,228,800 | 3,202,485 |
| Nebraska | 3,689,349 | 3,802,700 | 3,771,708 |
| Nevada | 3,009,568 | 2,719,033 | 2,696,873 |
| New Hampshire | 1,829,188 | 1,859,828 | 1,844,670 |
| New Jersey | 9,111,513 | 7,904,435 | 7,874,226 |
| New Mexico | 8,619,475 | 7,912,906 | 7,848,416 |
| New York | 9,998,561 | 21,055,954 | 21,017,404 |
| North Carolina | 9,378,813 | 9,344,737 | 9,654,094 |
| North Dakota | 2,305,769 | 2,359,730 | 2,340,498 |
| Ohio | 8,372,380 | 9,660,120 | 9,581,390 |
| Oklahoma | 10,945,040 | 8,932,441 | 8,859,642 |
| Oregon | 2,136,055 | 1,945,923 | 1,935,966 |
| Pennsylvania | 7,363,493 | 7,313,773 | 7,358,784 |
| Rhode Island | 2,918,704 | 2,638,017 | 2,616,517 |
| South Carolina | 7,127,971 | 6,682,898 | 6,908,146 |
| South Dakota | 3,467,192 | 3,446,992 | 3,419,806 |
| Tennessee | 5,004,521 | 4,915,534 | 4,875,472 |
| Texas | 23,744,874 | 20,904,631 | 20,734,258 |
| Utah | 5,436,366 | 4,505,686 | 4,468,965 |
| Vermont | 77,115 | 122,508 | 121,510 |
| Virginia | 27,963,744 | 24,455,489 | 24,755,628 |
| Washington | 11,005,576 | 10,549,718 | 10,463,738 |
| West Virginia | 554,339 | 465,327 | 461,535 |
| Wisconsin | 1,201,372 | 1,669,789 | 1,656,180 |
| Wyoming | 1,442,529 | 1,304,017 | 1,293,389 |
| Guam | 1,383,066 | 1,307,307 | 1,296,652 |
| Puerto Rico | 4,216,170 | 5,429,002 | 5,814,452 |
| Virgin Islands | 97,716 | 104,419 | 103,568 |
| Wake Island | 180,234 | 223,610 | 256,000 |

ASSISTANCE TO SCHOOL DISTRICTS FOR CONSTRUCTION OFFICE OF EDUCATION

| | 1968 estimate | | 1969 estimate | | Increase or decrease | |
|---|---|---|---|---|---|---|
| | Positions | Amount | Positions | Amount | Positions | Amount |
| Personnel compensation and benefits | 58 | $556,000 | 58 | $570,000 | ..... | $+14,000 |
| Other expenses | ..... | 24,216,498 | ..... | 45,914,000 | ..... | +21,697,502 |
| Total obligation | 58 | 24,772,498 | 58 | 46,484,000 | ..... | +21,711,502 |
| Activities: | | | | | | |
| Assistance to local educational agencies | ..... | 12,300,498 | ..... | 32,512,000 | ..... | +20,211,502 |
| Assistance for school construction on Federal properties | ..... | 11,852,000 | ..... | 13,334,000 | ..... | +1,482,000 |
| Technical services | 58 | 620,000 | 58 | 638,000 | ..... | +18,000 |
| Total obligation | 58 | 24,772,498 | 58 | 46,484,000 | ..... | +21,711,502 |

JUSTIFICATION OF ESTIMATE

Public Law 81–815 authorized payments to assist local school districts in the construction of school facilities in areas where enrollments are swollen by Federal activities. Assistance is authorized to eligible school districts which provide free public education for the following categories of children: those who live on Federal property with a parent employed on Federal property (Section 5(a)(1)); those who either live on Federal property or live with a parent employed on Federal property (Section 5(a)(2)); and to those school districts having a substantial increase in school enrollment resulting from Federal contract activities with private companies (Section 5(a)(3)). The Commissioner is required to provide school facilities for children residing on Federal property where no State or local educational agency is able, because of State law or for other reasons, to provide suitable free public education for such children under Section 10. Funds also are provided under Section 14 to school districts which provide free public education for substantial numbers of children who reside on Indian lands. Authority to make payments for children under Sections 5(a)(2) and 5(a)(3) is temporary but was extended through June 30, 1970, by Public Law 90–247 dated January 2, 1968.

For the past several years the requirements of this Act have been averaging around $50 million a year when the temporary provisions were in effect and about $23 million for the permanent provisions only. Amendments to the Act (P.L. 89–750 and P.L. 90–247) increased the cost of the program to an estimated average of $80 million a year when all provisions are in effect including an estimated $27.5 million a year for the permanent provisions and about $3 million for Section 14. These amendments include, for example: (1) extending the application period to four years, (2) reducing the percentage of increase in federally connected membership necessary to qualify, (3) permitting unhoused membership (children for whom there is no classroom space based on their State standard for occupancy) to be extended to the second year beyond the increase period, (4) liberalizing the eligbility requirements and providing minimum school facilities for all children, where necessary, in the school districts comprised primarily of Indian lands.

Under the existing law, it is estimated that $87 million is required to fund all eligible school construction projects filed in fiscal year 1967. Our estimate at this time is that requirements for fiscal years 1968 and 1969 will not be as high as the $87 million required for fiscal year 1967. We have had very little experience with the new provisions of the Act. There are over 4,000 federally impacted school districts in the United States. About 300 school districts qualify each year under P.L. 815. We have no way in advance of knowing who these eligible districts will be or the amount of money for which they will qualify. It is estimated that the $52.3 million appropriated for fiscal year 1967 will fund all eligible applications filed for the February 20, 1967, cutoff date except those having low priorities. An applicant's priority is based, by Federal Regulation, on the combination of two factors: (1) percentage of federally connected

membership of the total district membership, and (2) the percentage of unhoused membership of the total district membership. The combination of the two factors may not exceed twice the "No. 1" factor. None of the fiscal year 1967 money will fund applications filed for the June 26, 1967, cutoff date, some of which have high priorities. An additional $35 million will be needed to fund low priority applications and those filed for the June 26, 1967, cutoff date. The law requires that eligible unfunded applications filed in prior fiscal years be funded before applications in succeeding years are funded. With the extension of temporary provisions of the Act and other minor amendments, it is estimated that $80 million will be needed each year to fund eligible applications expected to be filed in fiscal years 1968 and 1969.

Table I shows the basis of eligibility by section of the law as presently in effect, the increases and number of federally connected children who are expected to be counted for payment, the average amount of payment per child, and estimated fund requirements for applications filed in 1967, 1968, and 1969. The average rate of constructing minimum school facilities increases from year to year because of rising labor and material costs.

Table II summarizes the estimated distribution, by State, of the total amounts in 1967, 1968 and 1969 under the present law in effect during those years.

TABLE 1.—ESTIMATED DATA FOR SCHOOL CONSTRUCTION, BY SECTION, PUBLIC LAW 815, AS AMENDED, FISCAL YEARS 1967, 1968, AND 1969

| Section | Basis of eligibility | | 1967 appropriation | 1968 entitlement | 1968 appropriation | 1969 entitlement | 1969 appropriation request |
|---|---|---|---|---|---|---|---|
| 5(a)(1) | Children of parents who work on and reside on Federal property. | Children | 8,100 | 13,800 | 2,130 | 13,100 | 380 |
| | | Rate | $1,520 | $1,550 | $1,550 | $1,600 | $1,600 |
| | | Assistance | $12,312,000 | $21,374,000 | $3,293,000 | $21,036,000 | $600,000 |
| 5(a)(2) | Children of parents who either work on or reside on Federal property. | Children | 30,772 | 51,980 | 8,010 | 49,600 | 1,420 |
| | | Rate | $800 | $815 | $815 | $840 | $840 |
| | | Assistance | $24,418,000 | $42,362,000 | $6,525,000 | $41,692,000 | $1,189,000 |
| (a)(3) | Children of parents who represent an increase in Federal activity either directly or through a contractor. | Children | 500 | 880 | 140 | 830 | 20 |
| | | Rate | $720 | $735 | $735 | $760 | $760 |
| | | Assistance | $360,000 | $644,000 | $99,000 | $634,000 | $18,000 |
| Total sec. 5 | | | $37,090,000 | $64,380,000 | $9,917,000 | $63,362,000 | $1,807,000 |
| 8 | School districts upon which provision of non-Federal share of construction imposes a financial hardship. | | $500,000 | $500,000 | $200,000 | $500,000 | $100,000 |
| 9 | Temporary increases of federally connected children for whom temporary school facilities are provided. | | $500,000 | $500,000 | $200,000 | $500,000 | $200,000 |
| 10 | Federally constructed schools on Federal property | Children | 6,000 | 5,300 | 5,300 | 5,200 | 5,200 |
| | | Rate | $1,900 | $1,920 | $1,920 | $1,950 | $1,950 |
| | | Assistance | $11,227,000 | $10,000,000 | $10,000,000 | $10,000,000 | $10,000,000 |
| 14 | Substantial number of children residing on Indian land and lack of financial resources. | | $3,000,000 | $4,000,000 | $2,000,000 | $5,000,000 | $2,000,000 |
| 16 | Natural disasters [1] | | 0 | 0 | 0 | 0 | 0 |
| Total | | | $52,317,000 | $79,380,000 | $22,317,000 | $79,362,000 | $14,107,000 |
| Technical services | | | $620,000 | $620,000 | $620,000 | $638,000 | $638,000 |
| Grand total (amount estimated to pay entitlement in full) | | | $52,937,000 | $80,000,000 | $22,937,000 | $80,000,000 | $14,745,000 |
| Unfunded 1968 and/or 1969 requirements | | | | $35,000,000 | ---------- | $92,063,000 | ---------- |
| Revised requirements | | | | $115,000,000 | ---------- | $172,063,000 | ---------- |

Requirements are unpredictable. They are payable out of regular appropriation, subject to replacement by supplemental appropriations as needed.

TABLE 1 (SUPPLEMENT) ESTIMATED REQUIREMENTS FOR SCHOOL CONSTRUCTION, BY SECTION PUBLIC LAW 81–815, AS AMENDED, FISCAL YEAR 1968

| Section | Basis of eligibility | Fiscal year 1968 with Public Law 90–247 |
|---|---|---|
| 5(a)(1) | Children of parents who work on and reside on Federal property: | |
| | Number of children | 13,800 |
| | Rate | $1,550 |
| | Estimated assistance | $21,374,000 |
| 5(a)(2) | Children of parents who either work on or reside on Federal property: | |
| | Number of children | 51,980 |
| | Rate | $815 |
| | Estimated assistance | $42,362,000 |
| 5(a)(3) | Children of parents who represent an increase in Federal activity either directly or through a contractor: | |
| | Number of children | 880 |
| | Rate | $735 |
| | Estimated assistance | $644,000 |
| | Total sec. 5 | $64,380,000 |
| 8 | School districts upon which provision of non-Federal share of construction imposes a financial hardship. | $500,000 |
| 9 | Temporary increases of federally-connected children for whom temporary school facilities are provided. | $500,000 |
| 10 | Federally constructed schools on Federal property: | |
| | Number of children | 5,300 |
| | Rate | $1,920 |
| | Estimated assistance | $10,000,000 |
| 14 | Substantial number of children residing on Indian lands and lack of financial resources. | $4,000,000 |
| 16 | Natural disasters [1] | 0 |
| | Total | $79,380,000 |
| | Technical services | $620,000 |
| | Grand total (amount estimated to pay entitlement in full) | $80,000,000 |
| | Appropriation | —$22,937,000 |
| | Remaining unfunded | —$57,063,000 |

[1] Requirements are unpredictable. They are payable out of regular appropriation, subject to replacement by supplemental appropriations as needed.

TABLE II.—SUMMARY OF ENTITLEMENTS, BY STATE—PUBLIC LAW 815, AS AMENDED, FISCAL YEARS 1967, 1968, AND 1969

| State and outlying areas | 1967 actual | 1968 estimate | 1969 estimate |
|---|---|---|---|
| Totals | $33,404,454 | $24,772,498 | $14,745,000 |
| Alabama | 117,087 | 92,000 | 54,000 |
| Alaska | 1,040,678 | 821,000 | 480,000 |
| Arizona | 687,278 | 545,000 | 319,000 |
| Arkansas | 35,459 | 29,000 | 17,000 |
| California | 5,245,300 | 4,142,498 | 2,419,000 |
| Colorado | 71,709 | 55,000 | 32,000 |
| Connecticut | | | |
| Delaware | —7,006 | | |
| District of Columbia | | | |
| Florida | 863,716 | 681,000 | 398,000 |
| Georgia | 898,028 | 710,000 | 415,000 |
| Hawaii | 3,953,923 | 2,174,000 | 1,270,000 |
| Idaho | | | |
| Illinois | 279,180 | 220,000 | 128,000 |
| Indiana | 756,140 | 596,000 | 348,000 |
| Iowa | 143,510 | 114,000 | 66,000 |
| Kansas | 1,019,246 | 804,000 | 470,000 |
| Kentucky | 1,272,490 | 1,004,000 | 587,000 |
| Louisiana | 420,709 | 333,000 | 195,000 |
| Maine | 33,870 | 27,000 | 16,000 |
| Maryland | 858,603 | 679,000 | 396,000 |
| Massachusetts | 151,469 | 111,000 | 65,000 |
| Michigan | 5,300 | 4,000 | 3,000 |
| Minnesota | | | |
| Mississippi | 232,523 | 184,000 | 107,000 |
| Missouri | 149,538 | 121,000 | 71,000 |
| Montana | 25,836 | 19,000 | 11,000 |
| Nebraska | 628,399 | 490,000 | 286,000 |
| Nevada | 112,479 | 90,000 | 52,000 |
| New Hampshire | 196,417 | 155,000 | 90,000 |
| New Jersey | 1,010,373 | 797,000 | 465,000 |
| New Mexico | 1,497,823 | 1,181,000 | 690,000 |
| New York | —10,651 | 22,000 | 13,000 |
| North Carolina | 1,613,484 | 1,275,000 | 745,000 |
| North Dakota | 461,026 | 365,000 | 213,000 |
| Ohio | 235,960 | 186,000 | 109,000 |
| Oklahoma | 1,404,098 | 1,111,000 | 649,000 |
| Oregon | —135 | | |
| Pennsylvania | | | |
| Rhode Island | 81,130 | | |
| South Carolina | 349,657 | 179,000 | 104,000 |
| South Dakota | 108,837 | 87,000 | 51,000 |
| Tennessee | 359,459 | 285,000 | 166,000 |
| Texas | 2,798,775 | 2,179,000 | 1,272,000 |
| Utah | 384,676 | 304,000 | 178,000 |
| Vermont | | | |
| Virginia | 968,257 | 222,000 | 130,000 |
| Washington | 759,394 | 543,000 | 317,000 |
| West Virginia | | | |
| Wisconsin | | | |
| Wyoming | 55,252 | | |
| Guam | 494,400 | 392,000 | 229,000 |
| Puerto Rico | 1,042,670 | 824,000 | 481,000 |
| Virgin Islands | | | |
| Wake Island | —13,972 | | |
| Technical Services | 612,060 | 620,000 | 638,000 |

*Program support*

| | |
|---|---|
| 1968 estimate | |
| 1969 estimate | $200,000 |
| Increase or decrease | +200,000 |

JUSTIFICATION OF ESTIMATE

In fiscal year 1969 an evaluation of the school assistance in federally affected areas programs (Public Law 815 and 874) will be conducted to study the type of payments made by these programs; the level of funding required to meet federally-caused burdens; and the changes, if any, in the present formulas needed to bring the payments in line with federally-caused burdens to local school districts. This study is needed due to the emergence of other educational assistance and the changing character of the impact programs, especially since reduced eligibility requirements have brought big cities into the program.

It is expected that this study would take about 1 year and the findings could be incorporated in legislative and budget proposals effective with fiscal year 1970.

BIOGRAPHICAL SKETCH

Name: B. Alden Lillywhite.
Position: Deputy Associate Commissioner for Elementary and Secondary Education.
Birthplace and date: Brigham City, Utah, April 14, 1904.
Education: Utah State University, B.A. and M.A.; University of Chicago, Graduate work.
Experience:
Present: Deputy Associate Commissioner for Elementary and Secondary Education.
1965–67: Director, Division of School Assistance in Federally Affected Areas.
1950–65: Associate Director, Division of School Assistance in Federally Affected Areas.
1949–50: Detailed to the Committee on Education and Labor, House of Representatives.
1946–50: Assistant in the Office of the Director of the Division of Planning, Community Facilities Administration, Federal Works Agency.
1941–45: Director of a Division of the Office of War Public Services in the Federal Works Agency.
1933–41: Served with the Federal Emergency Relief Administration and the Works Project Administration.
Awards: Superior Service Award, 1963, For notable contributions to American education.

BUDGET REQUEST

Senator HILL. Mr. Lillywhite.

Mr. LILLYWHITE. I have a short statement which I can read, if you wish.

Senator HILL. You may proceed in your own way.

Mr. LILLYWHITE. We are requesting a total of $410,335,000 for this appropriation.

PAYMENTS TO SCHOOL DISTRICTS

Of the total appropriation, $395,390,000 is requested for payments to school districts. Titles I and III of Public Law 874, as amended, authorize financial assistance for the maintenance and operation of schools in areas where enrollments are increased by Federal activities. Public Law 90–247 extended the temporary provisions of the act through June 30, 1970, Public Law 90–247 also added some new provisions to both Public Law 815 and Public Law 874.

Payments usually are made to local school districts. When these districts cannot assume responsibility for educating children living on Federal property, payments are made to other Federal agencies to provide such education. The 1968 adjusted appropriation is sufficient to pay approximately 80 percent entitlements to those districts eligible to receive payments from the appropriation.

Senator COTTON. When you say 80 percent, do you mean 80 percent of what they got last year, or 80 percent of what they want?

Mr. LILLYWHITE. Eighty percent of what would be the payment to them as determined by the formula in the act, which is determined by the number of federally connected children multiplied by the rate of payment per child.

Senator COTTON. What did they get this present fiscal year?

Mr. LILLYWHITE. The present fiscal year would be about 82 percent.

Senator COTTON. Thank you.

Mr. LILLYWHITE. Of the $395,390,000 requested, for fiscal year 1969, $365,390,000 will be used for grants to local educational agencies and about $30 million will be necessary for section 6 payments to other Federal agencies for education at full Federal expense of an estimated 52,300 children for whom the States cannot accept responsibility. This 1969 request will pay about 70 percent of the entitlement of each eligible district including the large school districts eligible for the first time in 1967. When funds available are not sufficient to pay entitlements in full they must be prorated equally to all eligible applicants after first funding in full the requirements under section 6.

Most eligible districts will receive about as much in 1969 as they will in the current year and most districts are receiving considerable Federal payments from other Federal programs.

Senator HILL. That is something they did not get when they enacted Public Laws 815 and 874, is that right?

Mr. LILLYWHITE. That is right.

### ASSISTANCE FOR SCHOOL CONSTRUCTION

Payments are made under Public Law 815 to assist in construction of schools in areas where public school enrollments are increased by Federal activities. We are requesting in appropriation of $14,745,000 for this activity in 1969 and anticipate obligating some $46,484,000 including funds from prior years. A total of $22,937,000 was appropriated in fiscal year 1968. Grants are made to local districts under section 5 of the act, to assist in providing school facilities for substantial increases in the number of children who live on Federal property or who live with a parent who works on Federal property.

Section 10 authorizes the Commissioner to arrange for the construction of schools for children living on Federal property when no local educational agency is able to provide school facilities for such children. Section 14 authorizes payments for children who live on Federal property (mostly Indian reservations) for whom no school facilities are available. The temporary provisions of the law cover children whose parents either work or reside on Federal property. The temporary provisions will terminate on June 30, 1970. Estimated total requirements of the act as in effect for 1969 is $80 million.

The total of $14,745,000 requested for 1969 will meet some, approximately one-half, of the requirements under the permanent provisions. Of this amount, approximately $10 million will be needed for constructing schools on Federal property because these projects must be funded first before using any of the appropriation for grants to school districts and $638,000 will be needed for technical services.

This will leave $4,107,000 for allocation to local educational agencies under sections 5 and 14. This amount of $14,745,000 is expected to be sufficient to approve about 55 projects providing 600 classrooms to house approximately 17,000 pupils. The priority requirements in

the act assure that the funds available will be allocated to school districts having the most urgent needs.

### Program Support

An amount of $200,000 is being requested in 1969 for program support. These funds would be used for an evaluation of the school assistance in federally affected areas programs (Public Laws 815 and 874) to study the type of payments made by these programs, the level of funding required to meet federally caused burdens, and the changes, if any, in the present formulas needed to bring the payments in line with federally caused burdens to local school districts.

Thank you, Mr. Chairman. My associates and I will be happy to answer any questions you may have.

### Proration of Urgent Supplemental Program Funds

Senator Hill. You know in the urgent supplemental appropriations bill the Senate added some $90,965,000 for Public Law 874. The House refused to agree to that addition. How much is that going to affect the situation?

Mr. Lillywhite. It would leave 80 percent across the board for all but the federally operated schools. If I understand correctly the action that was taken in conference, the decision was to fund in full the program for the 331,000 children that live on Federal property, which would mean about $23 million. They added $20 million to it so it would be a very slight reduction.

Senator Hill. $20,810,000, as I recall.

Mr. Lillywhite. That is right. So it would be a very slight reduction below the 80 percent for the remaining children.

Senator Hill. It would be a very slight reduction for the remaining.

Mr. Lillywhite. Very slight. It would be a difference of $3 million.

Senator Hill. What about those whose parents work for the Government but do not live on Federal property?

Mr. Lillywhite. Those are the ones. They are funded about 80 percent now. There would be just a few million dollars taken away from that 80 percent.

Senator Hill. This would be funded at what level?

Mr. Lillywhite. About 79.5.

Senator Hill. Pretty near the 80 percent.

Mr. Lillywhite. Yes. It is the present fiscal year we are talking about.

Senator Hill. Yes. That is for the present fiscal year, not the next fiscal year.

Do you have any questions, Senator Cotton?

### Schools on Government-Owned Property

Senator Cotton. As far as the schools that are actually on Government property, on Federal installations, it is largely a matter of bookkeeping, they could be taken right out of this program and put into the program of the particular agency of Government concerned. They would build their schools and finance them under, of course, general supervision of the Department of Education to make sure

they lived up to requirements of the Office of Education? That could be done, could it not?

Mr. Lillywhite. That could be done. In reference to your first statement, Senator Cotton, there are about 135 or 140 projects that have been built on Federal property. There are only about 22 or 23 of those where the Federal Government pays the full cost, and the Federal Government operates them. The funds are granted to the Air Force, Army, or Navy, whichever agency has the responsibility. The remaining "on base" schools are operated by the local school districts just the same as though the school were off base. There is no difference at all in the large majority of cases. We have had a few of them transferred back to local operations in the past few years.

### Program History and Bookkeeping

Senator Cotton. The history of this whole development is interesting. Like my veteran chairman, I have been around here a good many years. I remember when this thing started. Actually, I was in the House of Representatives. I voted against the first appropriations and I was on the Appropriations Subcommittee dealing with federally impacted areas. The thing that irritated me at that time was that the chambers of commerce and the local people would come down here and hound the delegations in Congress to get them a Federal installation. They wanted to get a military base or something comparable because it meant employment in the community, and so on, and so forth. Then if we were lucky enough and got the installation for them, all the merchants in town were happily selling clothes and other products to the people who were employed or stationed on the base. Then, they turned around in a couple of years and came down and began to squirm and demand that we give them money because of the added cost of schools, sewers, fire protection, and every other kind of expense.

I, frankly, thought it was a hypocritical performance. But my vote did not prevail, and we ended with this program. Then the years went on—and this statement can be instantly repudiated by any of the experts within the sound of my voice—and the Federal Government took so much supervision of the use of Federal funds for educational purposes—I will not argue the merits of that—that funds for impacted areas began to stand out as one of the very few Federal contributions that were handed over to the local districts for their use where they thought they needed it most, whether it was for additional teachers or additional equipment, school facilities or whatever. Because it stood out like a sore thumb in all this forest of Federal regulations—and I am not talking about Federal Government getting into the running of our schools and training our youth and all that, I am talking about strings tied to Federal appropriations—it had become so necessary and such an institution that I turned around and fought against reduction of impacted area funds.

Now in answer to my question you have just indicated to me it is practically impossible to divorce or separate for bookkeeping purposes those schools that are actually on and a part of Federal installations and the schools that are not on them but where the attendance is augmented by people who live in the community, who have come in to be employed by Federal installations.

Mr. LILLYWHITE. I think that is right, as long as the children go to the schools, those on the base and those whose parents work on the base, that is correct.

Senator COTTON. You can't separate them.

Mr. LILLYWHITE. That is right. There are a lot of these installations that are not military at all. Great Indian reservations, National Parks, National Forests.

Senator COTTON. I am not talking about strictly military. I am talking about Federal installations.

Mr. LILLYWHITE. That is correct.

Senator COTTON. They want to cut this more than last year.

### COST INCREASES AND BUDGETARY REDUCTION

Mr. LILLYWHITE. The appropriation is the same. Due to the fact that costs increase every year because the costs of education increase and the number of children increases, they have increased every year the program has been in effect. If it is the same appropriation the proration would be more.

Senator COTTON. How about the statement that it was for the building of schools? It contemplates obligation for years ahead of how many millions of dollars?

Mr. LILLYWHITE. The requirements for the construction of school facilities under this act run about $80 million a year currently. The appropriation was $22 million last year and only $14 million is requested this year. Now this is in accordance with the statement made by the commissioner and Dr. Estes, that the reservation of funds was much greater for the construction program than it was for the current operating expense program. We were limited to the expenditure of $24 million this current year for construction of school facilities.

### PRIORITY: CONSTRUCTION VIS-A-VIS ADMINISTRATION

Senator COTTON. Which do you think should be emphasized the more and cut the least. Construction or administration? I refer to impacted funds.

Mr. LILLYWHITE. Well, I suppose to be completely factual, you would have to say that that varies by different kinds of school districts. If there were a tremendous increase so that the school had to go on triple sessions, I would suppose it would be more pertinent for that district to have additional facilities than operating funds. Generally speaking, I think the decision that was made was the correct decision, to cut the funds for construction more than for operations.

### CONSTRUCTION: PUBLIC LAWS 815 AND 874

Senator COTTON. If you put the whole bundle into the district—I say district because in my State they have school districts—you put all the funds in and gave them so much and gave them the responsibility of either building, rebuilding, augmenting, adding to—gave them so much to reimburse them, at least to contribute to reimbursement to take care of the swollen X number of pupils in Federal installations and did not attempt to separate the bricks and mortar from the instruction and all the rest of the expense, what then?

Mr. LILLYWHITE. The school district, as you said before, can take the money granted under Public Law 874 for current operating expenses. There is no legal requirement on the use of that fund in the Federal law. The only requirement is in State law, and I am quite sure that a number of school districts have used that money to help build schools. They have used that money to put up temporary facilities. Now, under Public Law 815 under construction we grant only for the construction of school facilities. I had never thought about the question of putting the two amounts together and just allocating it.

Senator COTTON. Of course it would require repeal of Public Law 815 to do it. Thank you.

UTILIZATION OF URGENT SUPPLEMENTAL PROGRAM FUNDS

Senator HILL. Mr. Lillywhite, with reference to that amendment on the urgent supplemental apropriation bill, it provides an additional appropriation of $20,810,000 for the children whose parents work and live on Government property but it does not go further and direct that you take funds from the other children to add to this $20,810,000.

Mr. LILLYWHITE. That is correct. What this $20 million will do, is to raise the payments for the 354,000 children whose parents work and live on Federal property almost up to 100 percent and will not reduce any of the funds for the "B" category.

Senator HILL. It does not take it from the others?

Mr. LILLYWHITE. That is correct. I was in error before. Thank you for calling it to my attention.

Senator HILL. Since you are going to administer the funds I thought it was well to call it to your attention.

Mr. LILLYWHITE. There were a half dozen different proposals as you know, Mr. Chairman, that we had to consider.

PROGRAM HISTORY

Senator HILL. I know that. The truth is that these funds had their origin with the Lanham Act.

Mr. LILLYWHITE. That is right.

Senator HILL. Then we had certain military installations where the local communities could not take care of the children and properly educate them.

Mr. LILLYWHITE. That is right.

Senator HILL. I know in my State of Alabama we had a powder plant in Childersburg in Talladega County. We brought in a lot of people to operate that powder plant. Childersburg did not have the financial resources to educate the children of those employees.

Mr. LILLYWHITE. You have a number of installations there now.

Senator HILL. That is correct. Now, Mr. Lillywhite, haven't we a long history of full funding under the provisions of Public Law 874—that is, except for one or two instances?

Mr. LILLYWHITE. I believe you are correct sir.

Senator HILL. Will you kindly insert for the record the history of entitlements and payments since the act was in passed in 1951.

Mr. LILLYWHITE. I shall be happy to sir.

Senator HILL. Thank you very much, sir.

Mr. LILLYWHITE. Thank you Mr. Chairman.
(The information follows:)

PUBLIC LAW 874, AS AMENDED—HISTORY OF ENTITLEMENTS AND PAYMENTS, 1951-68

| Fiscal year | Entitlement | Payments | Payments as a percent of entitlement |
|---|---|---|---|
| 1951 | $29,686,018 | $28,501,577 | (1) |
| 1952 | 47,815,681 | 47,815,681 | 100.0 |
| 1953 | 57,697,895 | 57,697,895 | 100.0 |
| 1954 | 71,861,047 | 71,861,047 | 100.0 |
| 1955 | 75,287,517 | 74,918,604 | (2) |
| 1956 | 85,895,851 | 85,895,851 | 100.0 |
| 1957 | 111,320,777 | 111,320,777 | 100.0 |
| 1958 | 122,379,829 | 122,379,829 | 100.0 |
| 1959 | 156,847,056 | 156,847,056 | 100.0 |
| 1960 | 184,820,640 | 184,820,640 | 100.0 |
| 1961 | 208,244,128 | 208,244,128 | 100.0 |
| 1962 | 251,330,356 | 251,330,356 | 100.0 |
| 1963 | 264,269,382 | 264,269,382 | 100.0 |
| 1964 | 292,690,225 | 292,690,225 | 100.0 |
| 1965 | 319,250,689 | 319,250,689 | 100.0 |
| 1966 | 369,831,165 | 369,831,165 | 100.0 |
| 1967 | 419,748,036 | 411,200,000 | (3) |
| 1968 | 486,355,000 | 395,390,000 | (4) |
| 1968 "A" children | ($115,230,000) | ($92,411,000) | 80.2 |
| 1968 other | ($371,125,000) | ($302,979,000) | (4) |

[1] Secs. 6 and 8(a) were funded in full; secs. 2, 3, and 4 prorated at 96 percent.
[2] Secs. 6 and 8(a) were funded in full; secs. 2, 3, and 4 prorated at 99.5 percent.
[3] Secs. 6 and 302(a) and disaster provisions were funded in full; secs. 2, 3, and 4 tentatively prorated at 97.8 percent.
[4] Secs. 6 and 302(a) and disaster provisions will be funded in full; secs. 2, 3, and 4 tentatively prorated at 80.2 percent.

## EDUCATION PROFESSIONS DEVELOPMENT ACTIVITIES

STATEMENT OF DON DAVIES, ASSOCIATE COMMISSIONER FOR EDUCATIONAL PERSONNEL DEVELOPMENT
ACCOMPANIED BY:
HAROLD HOWE II, COMMISSIONER OF EDUCATION
RICHARD A. GRAHAM, DIRECTOR, TEACHER CORPS
RUSSELL A. WOOD, DEPUTY ASSOCIATE COMMISSIONER (ACTING) FOR EDUCATIONAL PERSONNEL DEVELOPMENT
PRESTON VALIEN, DEPUTY ASSOCIATE COMMISSIONER FOR HIGHER EDUCATION
DONALD N. BIGELOW, DIRECTOR, DIVISION OF PROGRAM ADMINISTRATION
S. WILLIAM HERRELL, EXECUTIVE OFFICER, BUREAU OF HIGHER EDUCATION
WESLEY CAPAR, EXECUTIVE OFFICER, BUREAU OF EDUCATIONAL PERSONNEL DEVELOPMENT
BERNARD SISCO, ASSISTANT COMMISSIONER FOR ADMINISTRATION
LEON SCHWARTZ, DEPUTY ASSISTANT COMMISSIONER FOR ADMINISTRATION
JOE G. KEEN, BUDGET OFFICER
MRS. SALLY H. BOND, BUDGET ANALYST
JAMES B. CARDWELL. DEPUTY ASSISTANT SECRETARY, BUDGET

*APPROPRIATION ESTIMATE*

*EDUCATION PROFESSIONS DEVELOPMENT ACTIVITIES*

*For grants, contracts, and payments under section 504, subpart 2 of part B, and parts C, D, and E of the Education Professions Development Act (Public*

*Law 90–35), and title IV of the National Defense Education Act of 1958, as amended (20 U.S.C. 461–465), $215,913,000 of which $15,000,000 shall be for grants to States under subpart 2 of part B of the Education Professions Development Act: Provided, That not to exceed $913,000 shall be available for necessary expenses for advisory committees, for services of specialists in reviewing applications submitted for assistance and for program evaluation.*

EXPLANATION OF LANGUAGE CHANGES

The proposed language will combine into a single appropriation account (1) all programs under the Education Professions Development Act, approved on June 29, 1967, with the exception of the Teacher Corps which has been left in a separate account; and (2) the graduate fellowship program for college teachers under Title IV of the National Defense Education Act. The purpose of the Education Professions Development Act is to coordinate, broaden, and strengthen programs for the training and improvement of teachers and other educational personnel. The merging of these programs into one account will, in accordance with this objective, provide a more comprehensive, coordinated budget presentation of these teacher training activities. The following list itemizes the proposed transfers:

| *Program* | *Previous appropriation account* |
|---|---|
| Education Professions Development Act: | |
| Encouragement of Educational Careers (Section 504). | New Program |
| Grants to States for Recruitment and Training Programs (Part B–2). | New Program |
| Fellowships and Graduate Programs (Part C). | Higher Educational Activities |
| Institutes and Training Programs for Preschool, Elementary, Secondary, Adult, and Vocational Personnel (Part D). | Elementary and Secondary Educational Activities, Arts and Humanities Educational Activities, and Research and Training |
| Institutes and Training Programs for Higher Education Personnel Part E). | Higher Educational Activities |
| National Defense Education Act: | |
| Graduate Fellowships (Title IV). | Higher Educational Activities |

The language also includes a proviso which will appropriate funds for necessary program support expenses.

AMOUNTS AVAILABLE FOR OBLIGATION

| | 1968 | 1969 |
|---|---|---|
| Appropriation | | $215,913,000 |
| Comparative transfers from: | | |
| "Elementary and secondary educational activities" | $37,250,000 | |
| "Higher educational activities" | 124,100,000 | |
| "Research and training" | 2,000,000 | |
| "Arts and humanities educational activities" | 500,000 | |
| Total available for obligation | 163,850,000 | 215,913,000 |

OBLIGATIONS BY ACTIVITY

| | 1968 estimate | 1969 estimate | Increase or decrease |
|---|---|---|---|
| 1. State grants for recruitment of educational personnel | | $15,000,000 | +$15,000,000 |
| 2. Development of educational personnel | $163,850,000 | 200,000,000 | +36,150,000 |
| 3. Program support | | 913,000 | +913,000 |
| Total obligations | 163,850,000 | 215,913,000 | +52,063,000 |

OBLIGATIONS BY OBJECT

| | 1968 estimate | 1969 estimate | Increase or decrease |
|---|---|---|---|
| Full-time equivalent of other positions | | 6 | +6 |
| Average number of all employees | | 6 | +6 |
| Personnel compensation: Positions other than permanent | | $112,900 | +$112,900 |
| Personnel benefits | | 5,100 | +5,100 |
| Travel and transportation of persons | | 60,000 | +60,000 |
| Printing and reproduction | | 15,000 | +15,000 |
| Other services | $39,750,000 | 55,620,000 | +15,870,000 |
| Grants, subsidies, and contributions | 124,100,000 | 160,100,000 | +36,000,000 |
| Total obligations by object | 163,850,000 | 215,913,000 | +52,063,000 |

*Summary of changes*

| | |
|---|---|
| 1968 enacted appropriation | ---------- |
| Comparative transfers from: | |
| "Elementary and Secondary Educational Activities" | $37,250,000 |
| "Higher Education Activities" | 124,100,000 |
| "Research and Training" | 2,000,000 |
| "Arts and Humanities Educational Activities" | 500,000 |
| 1968 total estimated obligations | 163,850,000 |
| 1969 estimated obligations | 215,913,000 |
| Total change | +52,063,000 |

| | Base | Change from base |
|---|---|---|
| ncreases: | | |
| Program: | | |
| 1. State grants for recruitment of educational personnel | | $15,000,000 |
| 2. Development of educational personnel: | | |
| (a) Preschool, elementary, secondary, adult, and vocational personnel: | | |
| (1) Fellowships and graduate programs | $35,000,000 | 8,500,000 |
| (2) Institutes and training programs | 39,750,000 | 13,650,000 |
| (b) Higher education personnel: | | |
| (1) Institutes and training programs | 2,500,000 | 12,500,000 |
| (c) Encouragement of educational careers | | 1,500,000 |
| 3. Program support | | 913,000 |
| Total incfeases | | 52,063,000 |

EXPLANATION OF CHANGES

An amount of $15,000,000 will provide for implementation of the program of State grants for recruitment of educational personnel under Part B–2 of the Education Profession Development Act. The estimate will support training for about 9,000 elementary and secondary teachers and teacher aides.

An increase of $8,500,000 will provide a total level of $43,500,000 for fellowships to experienced and prospective preschool, elementary, secondary, adult, and vocational teachers, as well as program grants to strengthen graduate school of education, under Part C of the Act. The request will support about 4,760 fellowship awards, or 670 more than in 1968, and approximately 75 program development grants to strengthen graduate schools of education.

Part D of the Act subsumes the programs of (1) institutes for elementary and secondary teachers and counselors under Titles V–B and XI of the National Defense Education Act and Section 13 of the National Foundation on the Arts and Humanities Act, and (2) institutes for vocational teachers under Section 4(c) of the Vocational Education Act of 1963. It also provides expanded authority to include all generally-taught subject areas; preschool, adult, and vocational education personnel; and teacher aides and other non-professional educational personnel and school administrators. An increase of $13,650,000 will provide for implementation of these expanded areas; and will result in a total

of $53,400,000. Approximately 31,400 persons will receive training, representing an additional 8,866 over 1968.

An increase of $12,500,000 will provide a total level of $15,000,000 for institutes and training programs for about 7,645 higher education personnel, or an additional 5,345 over 1968. Part E of the Act subsumes the previous authority for media institutes under Title VI–B of the Higher Education Act, and expands the program to include teachers, administrators, and educational specialists in all areas of higher education.

To initiate the program of attracting qualified persons to the field of education under Section 504 of the Act, $1,500,000 is requested for such activities as occupational and motivational analyses, mass media programs, coordination of recruiting and publicity, and experimental and model programs.

To provide vitally needed program support to insure the effectiveness of these programs, an amount of $913,000 is requested for expenses for advisory committees, services of other specialists in reviewing applications submitted for assistance, and evaluation activities.

EXPLANATION OF TRANSFERS

| | 1968 estimate | 1969 estimate | Purpose |
|---|---|---|---|
| Comparative transfer from— | | | |
| "Elementary and secondary educational activities" (institutes and training programs for elementary, secondary, and other education personnel). | $37,250,000 | $50,100,000 | To provide a coordinated presentation of educational personnel training programs under the Education Professions Development Act and title IV of the National Defense Education Act. |
| "Higher educational activities": | | | |
| Elementary and secondary teacher fellowship programs. | 35,000,000 | 43,500,000 | |
| College teacher fellowships | 86,600,000 | 86,600,000 | |
| Institutes and training programs for higher education personnel. | 2,500,000 | 15,000,000 | |
| "Research and training" (institutes and training programs for vocational education personnel). | 2,000,000 | [1] 2,800,000 | |
| "Arts and humanities educational activities" (institutes and training programs for elementary secondary and other education personnel). | 500,000 | [1] 500,000 | |

[1] Represents minimum level to be maintained under expanded authority of part D of the Education Professions Development Act.

1. *State Grants for Recruitment of Educational Personnel (Appropriations and Obligations)*

| | |
|---|---|
| 1968 estimate | |
| 1969 estimate | $15,000,000 |
| Increase or decrease | +15,000,000 |

JUSTIFICATION

Part B–2 of the Education Professions Development Act authorizes grants to States to support the efforts of local communities experiencing critical teacher shortages to (1) attract those individuals who are "otherwise engaged" into teaching, and (2) provide them, through short-term intensive training programs and subsequent in-service training, with the qualifications necessary for a successful career in teaching. Funds are allotted on the basis of public and private elementary and secondary school enrollments, and are not required to be matched. Up to three percent of a State's allotment may be used for administration of its State plan.

The program, where appropriate, will be administered in concert with institutes and training programs under Part D of the Act, as well as in conjunction with the Elementary and Secondary Education Act programs for educationally deprived children under Title I and supplementary educational centers and services under Title III. As provided in the law, up to 33 percent of the funds will assist in obtaining the services of teacher aides and to provide them with the necessary training required to help increase the effectiveness of classroom teachers.

An amount of $15,000,000 is requested to implement the program in 1969. In conjunction with other parts of the Act, it is estimated that, as a minimum, between 6,000 and 10,000 teachers and teacher aides, in a variety of short-term programs, could be supported and given basic training. This is based on experience

under the institute programs which average $60,000 for 40 participants for six weeks. This program, therefore, can be a major factor in helping to meet the critical manpower shortage in educational personnel.

*State grants for recruitment of educational personnel (Education Professions Development Act, pt B–2) Fiscal year 1969 estimate*[1]

| | | | |
|---|---|---|---|
| Total | $15,000,000 | Missouri | $336,195 |
| | | Montana | 55,870 |
| Alabama | 265,693 | Nebraska | 111,578 |
| Alaska | 18,771 | Nevada | 32,890 |
| Arizona | 122,712 | New Hampshire | 50,210 |
| Arkansas | 136,164 | New Jersey | 483,169 |
| California | 1,403,383 | New Mexico | 87,985 |
| Colorado | 160,011 | New York | 1,220,695 |
| Connecticut | 210,476 | North Carolina | 353,742 |
| Delaware | 39,093 | North Dakota | 49,760 |
| District of Columbia | 50,632 | Ohio | 805,170 |
| Florida | 398,092 | Oklahoma | 182,068 |
| Georgia | 323,505 | Oregon | 150,025 |
| Hawaii | 58,044 | Pennsylvania | 840,260 |
| Idaho | 54,151 | Rhode Island | 63,595 |
| Illinois | 802,132 | South Carolina | 193,405 |
| Indiana | 380,941 | South Dakota | 56,715 |
| Iowa | 217,768 | Tennessee | 266,659 |
| Kansas | 167,701 | Texas | 799,914 |
| Kentucky | 226,307 | Utah | 87,593 |
| Louisiana | 285,965 | Vermont | 31,269 |
| Maine | 76,164 | Virginia | 312,038 |
| Maryland | 275,035 | Washington | 238,903 |
| Massachusetts | 399,560 | West Virginia | 129,062 |
| Michigan | 696,567 | Wisconsin | 342,334 |
| Minnesota | 297,500 | Wyoming | 26,194 |
| Mississippi | 176,335 | Outlying areas | 450,000 |

[1] Distributed on the basis of 3% ($450,000) reserved for the outlying areas, and the balance on the basis of total public and nonpublic elementary and secondary enrollment, Fall 1966.

| | 1968 estimate | 1969 estimate | Increase or decrease |
|---|---|---|---|
| 2. Development of educational personnel: | | | |
| (a) Preschool, elementary, secondary, adult, and vocational personnel: | | | |
| (1) Fellowships and graduate programs | $35,000,000 | $43,500,000 | +$8,500,000 |
| (2) Institutes and training programs | 39,750,000 | 53,400,000 | +13,650,000 |
| (b) Higher education personnel: | | | |
| (1) Doctoral fellowships | 86,600,000 | 86,600,000 | |
| (2) Institutes and training programs | 2,500,000 | 15,000,000 | +12,500,000 |
| (c) Encouragement of educational personnel | | 1,500,000 | +1,500,000 |
| Total adjusted appropriation and obligations | 163,850,000 | 200,000,000 | +36,150,000 |

JUSTIFICATION

*Preschool, elementary, secondary, adult, and vocational personnel*

*Fellowships and graduate programs*

Part C of the Education Professions Development Act authorizes graduate fellowships to prospective and experienced preschool, elementary, secondary, adult, and vocational school teachers to provide opportunities for advanced training, particularly to strengthen preparation in the substantive courses. Previously this authority was limited to the elementary and secondary levels under Title V–C of the Higher Education Act.

Also provided under Part C are grants to strengthen graduate programs for elementary and secondary teachers. Under original legislation, only those institu-

tions with approved fellowship programs were eligible for support. The Act has now made eligible other institutions if such grants will result in developing programs which will qualify for such assistance.

Both fellowship and program awards offer a built-in challenge to improve the quality of teacher education, thus serving the needs of local educational agencies for upgrading and obtaining better qualified teaching staffs. Emphasis is placed on high-quality programs, particularly in the substantive courses, in terms of general academic standards, faculty, facilities, equipment, libraries, and other academic resources.

In fiscal year 1969, while priority will continue to be given to pre-service graduate programs in order to attract superior college graduates and to continuing programs started in 1968–69, the highest priority will be those programs which indicate concern for institutional changes in teacher preparation as well as for particular programs for participants. To this end, en-bloc allocation of fellowships in a single area will be encouraged. In addition, the inter-relationship of preservice and inservice graduate study will be emphasized.

Highest priority will also continue to be given to programs dealing with elementary education (including preschool, kindergarten, and early childhood); those designed for supervisors, school administrators, teacher trainers, and related educational personnel including those in adult and vocational education; and programs for teachers of the disadvantaged.

The 1969 request includes about $32,500,000 for approximately 4,760 fellowships, an increase of some 670 over 1968. Demand for these funds is evident from the fact that in 1968 one out of every seven proposals was supported for inservice training and one out of every two for preservice graduate study.

The request also includes about $11,000,000 for developmental programs without accompanying fellowship awards. This would assist about seventy-five higher education institutions, perhaps on a cooperative or consortium basis, to develop or strengthen their ability to prepare and to retrain education personnel. For instance, a grant might be used to hire four or five high-quality faculty members in different disciplines in order to upgrade the overall competency of a college or university to prepare the variety of teachers and specialists that are needed. Examples would be child development consultants and classroom teachers who are also able to teach the handicapped. Additionally, the funds could be allocated in concert with related grants under other Federal programs, always in tandem with the institution's own funds, in order to draw more effectively upon the resources of the total educational environment of the institution than has been done in the past. A more equitable geographic distribution of quality programs in all disciplines will also be an important factor in allocating awards.

To insure the success of this program, especially in the awarding of developmental grants, every effort will be made to solicit proposals which will provide pilot programs that would not otherwise be funded and to combine such grants with support from other sources. The following tables provide a more detailed estimate of how the requested funds might be distributed.

EXPERIENCED TEACHER FELLOWSHIPS

| | Average cost | | 1967 actual | | 1968 estimate | | 1969 estimate | |
|---|---|---|---|---|---|---|---|---|
| | Fiscal year 1967 and 1968 | Fiscal year 1969 | Number | Amount | Number | Amount (total rounded) | Number | Amount |
| 1st-year fellows in fiscal year 1966: | | | | | | | | |
| Academic year | $7,700 | $7,700 | 71 | $546,700 | | | | |
| Summer | 1,040 | 1,540 | 656 | 682,240 | | | | |
| 1st-year fellows in fiscal year 1967: | | | | | | | | |
| Academic year | 7,700 | 7,700 | 1,432 | 11,007,000 | 60 | $462,000 | | |
| Summer | 1,040 | 1,540 | 177 | 184,080 | 905 | 941,200 | | |
| 1st-year fellows in fiscal year 1968: | | | | | | | | |
| Academic year | 7,700 | 7,700 | | | 1,725 | 13,282,500 | 75 | $577,500 |
| Summer | 1,040 | 1,540 | | | 300 | 312,000 | 730 | 1,124,200 |
| 1st-year fellows in fiscal year 1969: | | | | | | | | |
| Academic year | 7,700 | 7,700 | | | | | 1,985 | 15,284,500 |
| Summer | 1,040 | 1,540 | | | | | 230 | 353,800 |
| Total | | | 1,503 | 12,420,020 | 1,785 | 15,000,000 | 2,060 | 17,340,000 |

Note: No summer programs were funded under the fiscal year 1966 appropriation. Beginning in fiscal year 1967, funds from 1 fiscal year will support the summer session immediately following the fiscal year, as well as the subsequent academic year. The estimates assume that some new recipients will begin their study in the summer rather than the academic year.

| Formula for calculating academic year average costs: | 1967, 1968, and 1969 |
|---|---|
| Stipend | [a] $4,000 |
| Dependents' allowances | [a] 1,200 |
| (Rate) | (2 at 600) |
| Institutional costs | 2,500 |
| Total | 7,700 |

| Formula for calculating summer average costs: | 1967 and 1968 | 1969 |
|---|---|---|
| Stipend | $800 | $800 |
| Dependents' allowances | 240 | 240 |
| Institutional costs | | [b] 500 |
| Total | 1,040 | 1,540 |

[a] The basic stipend, together with the dependency allowance, on the average reflects the variegated salaries paid to experienced teachers by local school districts throughout the country.

[b] Since most experienced teachers are able to accept an award for one year only, many attend summer sessions previous to and/or following the [c] demic year. The $500 is compensation to the institutions for each summer fellow.

## PROSPECTIVE TEACHER FELLOWSHIPS

| | Average cost | | 1967 actual | | 1968 estimate | | 1969 estimate | |
|---|---|---|---|---|---|---|---|---|
| | 1967 and 1968 | 1969 | No. | Amount | No. | Amount | No. | Amount |
| 1st year: | | | | | | | | |
| Academic year | $4,900 | $5,100 | 806 | $3,949,400 | 1,500 | $7,350,000 | 1,200 | $6,120,000 |
| Summer | 500 | 520 | 1,189 | 594,600 | 1,284 | 642,000 | 730 | 378,300 |
| 2d year: | | | | | | | | |
| Academic year | 5,200 | 5,450 | 1,530 | 7,956,000 | 806 | 4,191,000 | 1,500 | 8,175,000 |
| Summer | 525 | 550 | | | 604 | 317,000 | 885 | 486,700 |
| Total | | | 2,336 | 12,500,000 | 2,306 | 12,500,000 | 2,700 | 15,160,000 |

| | 1st year level | | 2d year level | |
|---|---|---|---|---|
| | 1967 and 1968 | 1969 | 1967 and 1968 | 1969 |
| Formula for calculating academic year average costs: | | | | |
| Stipend | $2,000 | $2,000 | $2,200 | $2,200 |
| Dependents' allowances | 400 | 600 | 500 | 750 |
| (Rate) | (1) | (2) | (3) | (4) |
| Institutional costs | 2,500 | 2,500 | 2,500 | 2,500 |
| Total | 4,900 | 5,100 | 5,200 | 5,450 |
| Formula for calculting summer average costs: | | | | |
| Stipend | 400 | 400 | 400 | 400 |
| Dependents' allowances | 100 | 120 | 125 | 150 |
| Total | 500 | 520 | 525 | 550 |

Note.—Funds from one fiscal year suport the summer session immediately following the fiscal year, as well as the subsequent academic year.

[1] 1 at $400.

[2] 1 at $600.

[3] 1¼ at $400.

[4] 1¼ at $600.

STRENGTHENING GRADUATE SCHOOLS OF EDUCATION

| | 1967 actual | 1968 estimate | 1969 estimate |
|---|---|---|---|
| Number of grants | 169 | 225 | 75 |
| Average cost | $29,585 | $33,300 | [1] $146,700 |
| Amount | $5,000,000 | $7,500,000 | $11,000,000 |

[1] Previously title V–C of the Higher Education Act authorized program development grants only to those institutions which had an approved fellowship program under the same part. The Education Professions Development Act has expanded this authority to include other institutions if such grants will make the institutions eligible for fellowship programs. Therefore, the higher average cost in 1969 includes these latter projects which are more expensive than those which were already of high enough quality to be awarded fellowships.

*Institutes and training programs*

Part D of the Education Professions Development Act authorizes grants to, or contracts with, higher education institutions and State and local educational agencies for programs to improve the qualifications of educational personnel at the preschool, elementary, secondary, adult, and vocational levels, and in all subject matters and areas of education. Eligible for such training are teachers, teacher aides, school administrators, artists, scientists, and persons from other professions or vocations. Funds support institutions, operating costs and stipends to participating individuals.

This program subsumes and greatly expands the following previously authorized programs at the elementary and secondary levels: (1) Institutes for guidance and counseling personnel under Title V–B of the National Defense Education Act: (2) institutes for teachers, supervisors, and teacher trainers of history, geography, economics, civics, industrial arts, modern foreign languages, reading, English, and international affairs; teachers of disadvantaged youth; school librarians; and educational media specialists under Title XI of the National Defense Education Act; and (3) teachers, supervisors and teacher trainers of arts and humanities under Section 13 of the National Foundation on the Arts and Humanities Act. Also requested under this authority are training programs for vocational education personnel which were previously funded under Section 4(c) of the Vocational Education Act of 1963.

Short-term or regular session institutes and other programs and projects may be supported along with or in combination with the Act's other pre-service and in-service programs of grants to States under Part B–2 and fellowships and graduate programs under Part C. Particular emphasis will be given to new programs conducted in cooperation with local and State educational agencies together with institutions of higher education. Special consideration will also be given to joint proposals made in connection with other related programs concerned with advanced training, including college teacher fellowships under Title IV of the National Defense Education Act; and the Elementary and Secondary Education Act programs of educationally disadvantaged children under Title I, supplementary educational centers and services under Title III, and bilingual education programs under Title VII.

While national priorities will be suggested by the Commissioner, putting emphasis on programs or projects for the disadvantaged, teaching the trainers of teachers in elementary education and in school administration, Part D permits institutions of higher education, State educational agencies and, with qualification, local educational agencies, to identify their own priorities for training educational personnel. Hence, they may submit proposals to meet their own needs. The subject fields under the previous authorizations will continue in 1969 at least at the level of support provided in fiscal year 1968.

Seeking out programs of the highest quality while making every effort to increase the number and to improve the qualifications of educational personnel available to the Nation's schools, will be the major goal. Experience indicates that it is usually possible to support one out of every three proposals which are received. Since the number of proposals may well double in 1969 (from 1,500 to 3,000), the demand upon funds will be great. Each year since 1964, almost $100,000,000 has been requested by some 400 to 500 colleges and universities.

The 1969 request of $53,400,000 represents an increase of $13,650,000 over the 1968 level, and will support about 800 programs to train some 31,400 persons, or 8,866 more than will be trained in 1968. In order to preserve flexibility and to obtain the impact intended by Part D, no formula has been developed as to

the number of programs to be allocated to any particular subject, discipline, or area. To insure the ability to help meet the critical shortages of adequately trained educational personnel, and to improve the quality of teaching throughout the Nation, every effort will be made to solicit such proposals as will provide pilot programs of the sort that would not otherwise be proposed or supported. The following table summarizes the levels of support for each year.

PRESCHOOL, ELEMENTARY, SECONDARY, ADULT, AND VOCATIONAL PERSONNEL INSTITUTES AND TRAINING PROGRAMS

| | 1967 | 1968 | 1969 [1] |
|---|---|---|---|
| Critical subjects (National Defense Education Act, title XI): | | | |
| Number of programs | 517 | 500 | |
| Number of participants | 17,720 | 18,000 | |
| Average cost per program | [2] $55,000 | [2] $60,000 | |
| Average cost per participant | [2] $1,600 | [2] $1,665 | |
| Tota cost | $28,327,933 | $30,000,000 | |
| Counseling personnel (National Defense Education Act, title V–B): | | | |
| Number of programs | 54 | 50 | |
| Number of participants | 1,550 | 1,500 | |
| Average cost per program | [2] $125,000 | [2] $145,000 | |
| Average cost per participant | [2] $4,325 | [2] $4,800 | 800 |
| Total cost | $6,707,226 | $7,250,000 | 31,400 |
| Arts and humanities (National Foundation on Arts and Humanities Act, sec. 13): | | | $66,800 [2] $1,700 $53,400,000 |
| Number of programs | 12 | 12 | |
| Number of participants | 384 | 384 | |
| Average cost per program | [2] $38,000 | [2] $41,500 | |
| Average cost per participant | [2] $1,200 | [2] 1,300 | |
| Total cost | $452,787 | $500,000 | |
| Vocational education (Vocational Education Act of 1963, sec. 4(c)): | | | |
| Number of programs | 31 | 54 | |
| Number of participants | 1,350 | 2,650 | |
| Average cost per program | $27,355 | $37,000 | |
| Average cost per participant | $628 | $755 | |
| Total cost | $848,000 | $2,000,000 | |
| Totals: | | | |
| Number of programs | 614 | 616 | 800 |
| Number of participants | 21,004 | 22,534 | 31,400 |
| Average cost per program | $59,179 | $64,500 | $66,800 |
| Average cost per participant | $1,730 | $1,800 | $1,700 |
| Total cost | $36,335,946 | $39,750,000 | $53,400,000 |

[1] Pt. D of the Education Professions Development Act subsumes previous separate authorities and expands program to all areas; therefore, 1969 estimate is not broken down. These previous areas, however, will be supported at least at the 1968 level.

[2] Average costs include about ½ for stipends and dependents' allowances and ½ for instructional costs to institutions. The higher average cost for institutes for counseling personnel reflects a higher proportion of academic-year programs rather than short-term summer programs.

*Higher education personnel*

*Doctoral followships*

The purpose of the Graduate Fellowship Program under Title IV of the National Defense Education Act is to (1) increase the number and qualifications of persons preparing for careers as college or university teachers, (2) encourage the development and full utilization of quality graduate programs leading to the doctorate, and (3) promote a wider geographical distribution of such programs. These aims are met by the awarding of three-year fellowships to qualified graduate students and accompanying grants to help defray the costs of their education to the institutions where they are studying. The Act currently authorizes for 1969 such appropriations as may be necessary for continuing second and third year awards; the authorization for new awards expires on June 30, 1968. Proposed legislation would authorize 7,500 initial-year awards for 1969.

The Graduate Fellowship Program has contributed significantly to increasing enrollments for doctoral study, in preparing an augmented supply of college and university teachers, strengthening the scope and level of doctoral training facilities, and expanding the capacity of such facilities in all geographic sectors of the country. The universe of participants in the program represents virtually all doctoral-degree granting institutions, while the vast majority of doctoral study programs are approved for support.

College and university enrollments generally are continuing to rise, and the need for qualified college teachers remains acute. Projections of enrollments in higher education expand from 6.5 million in the fall of 1967 to 8.0 million in

the fall of 1972. It is estimated that approximately 211,000 new full-time-equivalent professional staff members will be needed over the next five years to meet this demand.

The fiscal year 1967 appropriation of $80,842,000 is supporting 14,792 fellows in academic year 1967–68—6,000 new awards and 8,792 continuing fellows. The estimate of $8,600,000 in 1968 will provide for 15,328 fellows, including 3,328 in their first year of tenure and 12,000 continuing awards, during academic year 1968–69.

The request of $86,600,000 for fiscal year 1969 represents no increase over estimate of $8,600,000 in 1968 will provide for 15,328 fellows, including 3,328 the continuation costs in 1969 will be less than in the previous year. Therefore, the 1969 estimate will not only maintain the same number of total fellowships, 15,328; but will support 6,000 new awards, the same level of new awards as in 1967.

Following is a table which gives a more detailed breakdown of costs included in the estimate.

COLLEGE TEACHER FELLOWSHIPS

| | Average cost | 1967 [1] | | 1968 [2] | | 1969 [3] | |
|---|---|---|---|---|---|---|---|
| | | Number | Amount | Number | Amount | Number | Amount |
| First year: | | | | | | | |
| Academic | $4,900 | 6,000 | $29,400,000 | 3,328 | $16,307,200 | 6,000 | $29,400,000 |
| Summer [4] | 500 | 3,900 | 1,950,000 | 2,510 | 1,255,300 | 5,139 | 2,569,500 |
| Second year [5]: | | | | | | | |
| Academic | 5,200 | 6,000 | 31,200,000 | 6,000 | 31,200,000 | 3,328 | 17,305,500 |
| Summer [4] | 525 | 3,900 | 2,047,500 | 4,500 | 2,362,500 | 3,000 | 1,575,000 |
| Third year [5]: | | | | | | | |
| Academic | 5,500 | 2,792 | 15,356,000 | 6,000 | 33,000,000 | 6,000 | 33,000,000 |
| Summer [4] | 550 | 1,615 | 888,500 | 4,500 | 2,475,000 | 5,000 | 2,750,000 |
| Total | | 14,792 | 80,842,000 | 15,328 | 86,600,000 | 15,328 | 86,600,000 |

[1] Includes 1967–68 academic year and 1968 summer session.
[2] Includes 1968–69 academic year and 1969 summer session.
[3] Includes 1969–70 academic year and 1970 summer session.
[4] Estimates assume that about 85 percent of the fellows each year elect to take their summer enrollment option, based on the fact that graduate enrollment is normally a year-round operation.
[5] Rewarding of vacated fellowships is authorized; therefore, no dropouts are reflected.

| | 1st-year level | 2d-year level | 3d-year level |
|---|---|---|---|
| Formula for calculationg academic year average costs: | | | |
| Stipend | $2,000 | $2,200 | $2,400 |
| Dependents' allowances | 400 | 500 | 600 |
| (Rate) | (1 at $400) | (1¼ at $400) | (1½ at $400) |
| Institutional costs | 2,500 | 2,500 | 2,500 |
| Total | 4,900 | 5,200 | 5,500 |
| Formula for calculating summer average costs: | | | |
| Stipend | 400 | 400 | 400 |
| Dependents' allowances | 100 | 125 | 150 |
| Total | 500 | 525 | 550 |

*Institutes and training programs*

Part E of the Education Professions Development Act authorizes grants to, or contracts with, colleges and universities to assist them in training persons who are serving or preparing to serve as college teachers, administrators, or educational specialists in all areas of higher education. Institutes for higher education personnel were previously included under Title VI–B of the Higher Education Act which authorized training only for college teachers, media specialists, and librarians in the use of equipment and other teaching aids. Funds may be used to assist in covering the cost of training or sutdy, including short-term or regular-session institutes and other pre-service and in-service training programs; and to support fellowships or traineeships, except fellowships leading to a doctorate which are eligible for support under Title IV of the National Defense Education Act.

The purpose of the program is to assist in alleviating the critical shortage of adequately trained educational personnel for junior colleges, technical institutes, and other higher education institutions. The number of two-year institutions has

increased dramatically. The directory of the American Association of Junior Colleges shows 820 such institutions in 1967—an increase of 100 over 1965. Over 225 additional two-year institutions are now in the process of being established with a target opening date of 1970. A severe shortage of faculty and staff is also apparent in colleges and universities because of the great increase in college enrollments.

In awarding funds for these training programs, advisory panels, which will be broadly representative of the academic community, will give special consideration to the needs of developing institutions, including junior colleges. Also included will be the training of college administrators and other educational specialists who have not been provided for in previous legislation for the training of higher education personnel. This program can most effectively supplement the college teacher fellowships program under the National Defense Education Act by supporting high quality non-doctoral programs which can make a valuable contribution in training higher educational personnel so desperately needed by the Nation's rapidly expanding network of community and four-year colleges.

The 1969 request of $15,000,000, an increase of $12,500,000 over the 1968 appropriation of $2,500,000, will support training for about 7,645 personnel compared to 2,300 in 1968. Included are $7,671,300 for 1,365 graduate fellows in the first year of two-year fellowships, and $7,328,700 for 150 summer and short-term institutes which would provide an average of six weeks of training to a total of 6,280 participants who are serving or preparing to serve as teachers, administrators, or educational specialists in institutions of higher education. The following table provides more detail on costs included in the estimate.

INSTITUTES AND TRAINING PROGRAMS FOR HIGHER EDUCATION PERSONNEL

| | 1967 [1] [2] | | | 1968 [1] [3] | | | 1969 [4] [5] | | |
|---|---|---|---|---|---|---|---|---|---|
| | Number | Average cost | Amount | Number | Average cost | Amount | Number | Average cost | Amount |
| Institutes | 43 | $55,172 | $2,372,418 | 47 | $47,960 | $2,254,000 | 150 | $48,858 | $7,328,700 |
| Workshops | 8 | 15,947 | 127,582 | 15 | 16,400 | 246,000 | | None | None |
| Fellowships | | None | None | | None | None | 1,365 | [6] 5,620 | 7,671,300 |
| Total | 51 | | 2,500,000 | 62 | | 2,500,000 | | | 15,000,000 |

| | 1967 [1] | | 1968 [1] | | 1969 [4] | |
|---|---|---|---|---|---|---|
| | Number of participants | Participant average cost | Number of participants | Participant average cost | Number of participants | Participant average cost |
| Institutes | 1,700 | $1,395 | 1,800 | $1,252 | 6,280 | $1,167 |
| Workshops | 300 | 425 | 500 | 492 | None | None |
| Fellowships | None | None | None | None | 1,365 | [6] 5,620 |
| Total | 2,000 | | 2,300 | | 7,645 | |

[1] Title VI–B faculty development program.
[2] Includes 1967 summer sessions and 1967–68 academic year.
[3] Includes 1968 summer sessions and 1968–69 academic year.
[4] Title V–E training programs for higher education personnel.
[5] Includes 1969 summer sessions and 1969–70 academic year.
[6] Includes $2,000 stipend for academic year (1st year student), $600 academic year allowance for 1 dependent, $400 summer stipend, $120 summer allowance for 1 dependent, $2,500 allowance to institutions for tuition, fees, etc.—an average cost per student of $5,620

*Encouragement of educational personnel*

The purpose of Section 504 of the Education Professions Development Act is to identify and encourage capable secondary school youth interested in a career in education; to publicize available opportunities for careers in education; to encourage qualified persons to enter or reenter the field of education; and to encourage people in other professions to undertake teaching on a part-time or temporary basis. The Section authorizes grants and contracts with State and local educational agencies, higher education institutions, and other organizations.

To achieve these purposes, the appropriation request of $1,500,000 will support the following activities:

| | |
|---|---|
| (1) Occupational and motivational analysis | $450,000 |
| (2) Mass media programs | 200,000 |
| (3) Coordination of recruiting and publicity activities | 100,000 |
| (4) Experimental and model programs | 500,000 |
| (5) Package programs | 250,000 |
| Total | $1,500,000 |

*Occupational and motivational analysis.*—To publicize opportunities available in education, data must be collected on the demand for teachers in education, such as academic areas experiencing teacher shortages, regions of the country with teacher shortages, use of teacher aides, teachers' salaries by discipline and by region, and teacher aides' salaries.

Some of this data has been collected in different agencies and for different purposes. But if this information is to serve any effective purposes it must be assimilated in a central location, supplemented by additional data where information gaps occur, and then be analyzed systematically in order to gain a clear picture of education as an occupation. An amount of $200,000 is requested to collect and analyze this data.

Analysis is also needed to determine why good teachers enter the field; why good teachers leave the field (for reasons other than retirement or family responsibilities); why former teachers do not reenter the field; what prospective teachers, or undergraduate students in general, think about a career in education. Inquiring into these and related questions may not only reveal motivations that educators themselves do not recognize, but may also disclose unfavorable, commonly-held attitudes about teaching to which school authorities and teacher training institutions might effectively address themselves and which a properly designed motivational program could seek to modify or overcome. Therefore, $250,000 is requested for motivational analysis.

*Mass media programs.*—National, regional, and local media may be used in recruiting programs developed as a result of the occupational and motivational analyses. Many of these media such as television, radio, newspapers, and magazines regularly reserve time or space for the "free" (that is, not subject to rates of commercial advertisers) promotion of projects in the public interest. Thus, if it is possible to enlist the cooperation of communications industry associations, the primary cost for the broadcast and publication of motivational materials on careers in education will be those of producing the commercial message itself, such as the TV filmstrip or the advertising layout. In addition, part of the funds would be used to produce materials for local audiences through universities, parent-teacher associations, student groups, and local TV and radio stations. An amount of $200,000 is requested to provide for promotional materials such as:

(a) Filmstrips for use by TV stations (including costs of making prints).
(b) Taped recordings for use by radio stations.
(c) Advertising mats for newspapers and magazines.

*Coordination of recruiting and publicity activities.*—$100,000 is requested to conduct State and regional conferences to secure the assistance of State, local, and college and university personnel in the development of recruiting programs; and to help them plan mechanisms for using the media material at the State and local levels. The conferences might be conducted by universities, professional associations, or State education agencies.

*Experimental and model programs.*—$500,000 is requested for experimental and model programs for universities, State and local education agencies, and private, profit and nonprofit organizations for regional, State, or local recruiting programs that will respond to the particular needs of regions, States, and localities, or the specific needs of the various academic disciplines and specialties. The general provisions for these programs would be as follows:

(a) Diversity of approach and innovation will be encouraged.
(b) Programs should provide useful models for recruiting activities in other areas.
(c) Projects should reflect program priorities outlined in guidelines for other sections of the Education Professions Development Act.

*Package programs.*—Some proposals submitted under other sections of the Education Professions Development Act will undoubtedly include their own promotional and recruitment component. A local school agency, for example, might submit a proposal to train mature high school graduates with families

as teacher aides. Such a program would require promotional effort. Therefore, $250,000 is requested for use in conjunction with grants awarded under other sections of the Act. The distinction between Package Programs and the Experimental and Model Programs outlined above is that the experimental programs will emphasize the major goal of attracting interest in educational careers while the package programs will stress some other activity authorized under the Education Professions Development Act, such as training, and will include promotional efforts only as a necessary adjunct to the major program purpose.

| | 1968 estimate | 1969 estimate | Increase or decrease |
|---|---|---|---|
| 3. Program support: | | | |
| (a) Evaluation | | $315,000 | +$315,000 |
| (b) Project review | | 423,000 | +423,000 |
| (c) Advisory council | | 175,000 | +175,000 |
| Total appropriation and obligations | | 913,000 | +913,000 |

JUSTIFICATION

An amount of $913,000 is requested for necessary program support activities in order to (1) implement an immediate and long-range evaluation program of the manpower status and needs of the educational profession; (2) provide for the use of consultants and field readers in reviewing applications and advising on other professional matters; and (3) fund necessary expenses for the National Advisory Council on Education Professions Development. A new Bureau of Educational Personnel Development has been established to administer and coordinate these programs.

*Evaluation*

A total of $315,000 is requested for program evaluation activities.

Section 503 of the Education Professions Development Act requires the Office of Education to make systematic studies of the Nation's existing and future personnel needs in the field of education, including preschool, elementary and secondary, vocational and technical, adult, and higher education programs. It is necessary, therefore, to establish a systematic and comprehensive mechanism for gathering and analyzing information on education personnel for all levels of education. Based on this data collection and its refinement, the Office is also required to publish an annual report which presents in detail its views of the state of the education profession and the trends desirable in education in the future throughout the Nation. The report must indicate the priorities for this Act in relation to the plans and progress in other Federal agencies. The Office, therefore, must systematically assess and evaluate all Federal programs for training educational personnel. This report will be the major document on educational personnel published by the Office. Clearly, it will provide the basis for extending, curtailing, or enlarging all programs under the Act, and will be the heart of the new Bureau. Therefore, $35,000 is requested for contracts with independent agencies to develop evaluation models for educational personnel development programs.

A careful evaluation of the effectiveness of the State programs for recruiting and training personnel under Part B–2 of the Act is a necessary requirement for subsequent program development in later years. Thus, $35,000 is requested to support this program evaluation activity.

For the preschool, elementary, secondary, adult, and vocational teacher programs under Part C of the Act, the 1969 estimate would support about 283 programs for 4,760 fellowship awards, as well as approximately 75 program development grants to strengthen graduate schools of education. $45,000 is requested to fund evaluations on the effectiveness of these programs.

Also included is $180,000 to evaluate the 800 institutes and training programs for 31,400 elementary, secondary, and other educational personnel under Part D of the Act.

Finally, $20,000 is estimated for evaluation of the institutes and training programs for about 7,645 higher education personnel under Part D of the Act. The evaluation component is particularly important in regard to the programs for two-year community colleges. Although there is a critical demand for personnel in these institutions, it is not at all clear what types of programs will effectively meet these needs.

*Project review*

For field readers to review applications submitted for assistance under these programs and for consultants to provide other professional services, $423,000 is requested.

This estimate includes $3,000 for consultants in connection with the appraisal studies on the status and needs of the educational profession. These consultants will work closely with the Office of Education professional staff to determine significant trends in the profession, especially the development and effects of new technologies. About $2,000 will be used for personnel compensation and benefits, and about $1,000 will fund necessary travel.

To support the recruiting program authorized under Section 504 of the Act, $4,000 is requested to hire consultants to assist in program development. They would provide needed professional expertise in evaluating the results of the occupational and motivational analyses, and in the evaluation of proposals for model and experimental recruiting programs at universities and State and local education agencies. The estimate includes about $2,700 for personnel compensation and benefits and $1,300 for travel.

For the program of grants to States to assist local communities in attracting and training teachers and teacher aides, $29,000 is requested. $4,000 would be used in conjunction with the Division of Program Resources to hire consultants to assist the States in designing their plans and to provide them with assistance in program development. This amount includes about $2,700 for personnel compensation and benefits and $1,300 for travel. $25,000 would be used to hire approximately 35 professionals for four days to read and evaluate the plans submitted by the States for the allocation and use of their funds.

An amount of $86,000 is requested for the elementary, secondary, and other teacher fellowship programs. $80,000 will be used to contract with 130 field readers to evaluate an estimated 1,250 program proposals to be received. $6,000 is requested to hire consultants to assist in program development, and includes $4,000 for personnel compensation and benefits, and $2,000 for travel.

For the Part D institutes and training programs for elementary, secondary, and other personnel, $279,000 is requested. $9,000 will be used to hire consultants for advice on the development of specific programs and on broad program strategies, and includes $6,000 for personnel compensation and benefits and $3,000 for travel. $270,000 will be used to contract with professionals in the field to read and evaluate up to 3,000 program proposals expected to be submitted in fiscal year 1969 under this new, expanded authority. This compares to 1,600 proposals in 1968 for Titles V–A and XI institutes under the National Defense Education Act.

Finally, this category includes $22,000 for training programs for higher education personnel under Part E of the Act. $4,000 ($2,700 for personnel compensation and benefits and $1,300 for travel) is requested for consultants to advise on the overall development of programs for higher education personnel. $18,000 would be used to contract with 30 professionals to read and evaluate proposals submitted for assistance.

*Advisory Council*

Under Section 502 of the Education Professions Development Act, the National Advisory Council on Education Professions Development, appointed by the President with its own funding authorizations, is directed to review all Federal programs for the training and development of educational personnel. Based on this review, the Council is required to publish an annual report evaluating the effectiveness of Federal programs in meeting quantitative and qualitative needs for education personnel, including its recommendations for changes in such programs. $175,000 of the $200,000 authorized is requested for the operation of the Council in 1969. $148,000 will be used for travel and compensation for three meetings of the Council; $15,000 is necessary to publish the annual report; and $12,000 is requested for part-time staff support for necessary research and report writing.

BIOGRAPHICAL SKETCH

Name: Don Davies.
Position: Associate Commissioner for Educational Personnel Development.
Birthplace and date: Minneapolis, Minnesota, December 28, 1926.
Education: University of Southern California, Los Angeles, 1944; Stanford Univ., 1948, B.A. journalism, political science history; Stanford Univ., 1949, M.A. education; Teachers College, Columbia Univ., 1956, Ed. D. curriculum and instruction teacher education.

Experience:
Present: Associate Commissioner for Bureau of E.P.D.
Aug. 1961: Executive Secretary of the National Commission on Teacher Education and Professional Standards, National Education Association.
1957: Associate Professor of Education and Director of Student Teaching, Univ. of Minnesota.
1956: Assistant Professor of Education, San Francisco State College (Calif.).
1953: Instructor and Director of Student Teaching, Adelphi College (Garden City, N.Y.).
1949: Teacher of English and Journalism, Beverly Hills High School (Calif.).
Association memberships: American Association of University Professors; American Educational Research Association; Kappa Delta Pi; National Society for the Study of Education; Phi Delta Kappa.
Recent activities:
Former Member, National Advisory Committee, J.F.K. Center for Research in Education and Human Development, Nashville, Tenn.
Former Member, National Committee for Education in Family Finance
Former Member, National Advisory Committee, The Research and Development Center for Teacher Education, Univ. of Texas, Austin
Former Member, Evaluation Panel, Title-III Elementary & Secondary Education Act of 1965
Former Member and vice-chairman, National Advisory Council for Education Professions Development Act
Former Member, Board of Directors, Central Atlantic Regional Educational Laboratory
Previous Activities: President, Minnesota Assoc. for Higher Education; Board of Directors, Minneapolis Citizens Committee for Public Education.

### BUDGET REQUEST AND STATUTORY AUTHORITY

Senator Hill. Mr. Don Davies. You may proceed in your own way, sir.

Mr. Davies. Thank you, Mr. Chairman.

I am most happy to appear before you for the first time as head of the new Bureau of Educational Personnel Development. We are requesting $215,913,000 to assist in improving the quality of educational personnel and in overcoming shortages of adequately trained educators in critical areas. The funds requested under this activity are authorized under the Education Professions Development Act (amendments to title V of the Higher Education Act of 1965) and title IV of the National Defense Education Act.

In general, the new act expands the coverage and flexibility of certain previous authorizations for the training of educational personnel, and supplements those authorities with two entirely new programs. Taken as a whole, the act is a highly promising vehicle for meeting the Nation's critical needs for educational personnel.

### QUANTITY AND QUALITY INCREASE OF EDUCATIONAL PERSONNEL

The purpose of the act is to increase both the quantity and the quality of educational personnel. It will do this by stimulating and assisting the educational community to find new and effective solutions to longstanding manpower and training problems. Since high-quality personnel are the key to effective education, the education professions development activities provide vital support for all of the other educational programs supported by the Office of Education.

BUDGET REQUEST INCREASES

Our request of $215,913,000 represents a net increase of $52,063,000 above the 1968 comparable appropriations for these programs. This increase provides for new programs for State grants for recruitment of educational personnel of $15 million and a program for encouraging persons to undertake educational careers of $1.5 million; and increases in ongoing programs for graduate fellowships and institutes of $22.150 million and an additional $12.5 million for training personnel for higher education. The increase also includes $913,000 for program support activities. Our requested funding level will provide for both the continuation of worthwhile projects sponsored under previous legislation absorbed in the Education Professions Development Act; and for planning, pilot and operational projects under the new authorities of that act.

BUDGET BUREAU REDUCTION

Senator HILL. The Budget request is quite a bit below the Department's request, is it not?

Mr. DAVIES. The Department's request was $253,713,000.

Senator HILL. The Budget allowed you $215,913,000.

Mr. DAVIES. That is correct, sir.

Senator HILL. You may proceed.

STATE GRANTS FOR RECRUITMENT OF EDUCATIONAL PERSONNEL

Mr. DAVIES. We are requesting $15 million to initiate a new program for State grants for the recruitment and training of educational personnel. These grants which are allotted to States on the basis of pupil enrollment, may be used for recruiting persons who are "otherwise engaged" in the community to teaching and recruiting and training teacher aides. Up to one-third of the allotment to each State may be used for the teacher aides.

This program provides new opportunities to lower the barriers between the school and community and to aid schools in using effectively the talents available in the community. For example, a school district may organize a systematic plan to bring artists and scientists into the schools to work with young people on a part-time basis. The program also makes it possible to tap the large reservoir of women in the community who are already qualified to teach, but who are not now teaching.

Under the provisions of the act, all but 3 percent of the funds granted to each State must be reallocated to local educational agencies. Those agencies have wide flexibility in the type of recruitment and training programs in which they may engage. We are encouraging the States and localities to focus these funds on their most pressing needs. Based on past experience we believe that between 6,000 and 10,000 educational personnel will be recruited and trained under this program.

DEVELOPMENT OF EDUCATIONAL PERSONNEL

For graduate fellowships for preschool, elementary, secondary, adult, and vocational personnel we are requesting $43.5 million, an increase of $8.5 million over the 1968 appropriations. In addition, for these same types of personnel, our request includes $53.4 million, an

increase of $13,650,000 over 1968, for institutes and other training programs. These activities will be administered as one program.

We intend to pass on to States, localities, and higher education institutions much of the flexibility that the Education Professions Development Act provides. While we are suggesting a set of national priorities for projects that benefit the disadvantaged, and for the projects that train administrators, teacher trainers, preschool personnel, and auxiliary personnel, such as teacher aides, we shall encourage applicant agencies and institutions to go beyond these priorities and identify those critical quantitative and qualitative needs that they see as deserving attention, and to submit proposals for projects that will contribute to meeting those needs.

These programs will support approximately 4,760 fellowships, an increase of 670 over 1968, as well as 75 program development grants. We also anticipate that approximately 800 institutes and other training programs will be funded, including approximately 31,400 participants, or 8,900 more than will be trained in 1968.

Senator HILL. Not much increase?

Mr. DAVIES. Not much.

The significant increase is in the flexibility of the kind of personnel that can be trained.

Senator HILL. Rather than the number to be trained, is that correct?

Mr. DAVIES. Yes, sir; although there is an increase in the number.

Senator HILL. But no great increase, is that correct?

Mr. DAVIES. Compared to the number of educational personnel in the United States it is not a large increase.

Senator HILL. That is correct.

### PART E: TRAINING OF HIGHER EDUCATION PERSONNEL

Mr. DAVIES. Part E of the Education Professions Development Act authorizes training programs and fellowships other than those which are eligible under the National Defense Graduate Fellowship program, for personnel who are serving or preparing to serve in higher education. This program, for which $15 million is requested, replaces a smaller one authorized under title VI–B of the Higher Education Act which provides training, primarily in the area of educational media, for higher education personnel.

Priority will be given to projects for developing personnel for junior and community colleges, institutions which are currently being established at a rate of over 50 per year. We anticipate that about 7,600 personnel will be trained under this part in fiscal year 1969 compared to about 2,300 in 1968. This number includes both graduate fellows and participants in short term institutes.

### DOCTORAL FELLOWSHIP PROGRAM

We are also requesting $86.6 million for continuation of the doctoral fellowship program designed to fill the need for qualified college teachers, authorized under title IV of the National Defense Education Act. This funding level represents no increase over 1968 and our 1969 estimate will maintain the same total number of fellowships, 15,328.

SECTION 504: ENHANCEMENT PROFESSION OF EDUCATOR

To encourage educational careers through special projects, our request includes $1.5 million for section 504 of the Education Professions Development Act. That section provides authority for programs designed to increase the attractiveness of education as an employer. They may include activities such as the encouragement of capable youth to seek careers in education, the publicizing of available opportunities in education, and the encouragement of qualified persons who are not now in the field of education to enter that field. During the first year we shall emphasize experimental programs to explore a variety of approaches to attracting persons to education. These may range from the use of mass media to the support of projects directed toward specific areas of critical personnel shortages. Also, efforts will be made to analyze the reasons for which persons enter or do not enter the profession of education.

PROGRAM SUPPORT

Finally, we are requesting $913,000 for various program support services. This amount includes $315,000 for evaluating the effectiveness of projects funded under the Education Professions Development Act, $423,000 for reviewing project applications submitted to the Office under the various parts of that act, and $175,000 for the costs of the National Advisory Council on Education Professions Development authorized under the new act. This Presidentially-appointed Council is separate organizationally from the Office of Education. It will review all Federal programs that contribute to the development of educational personnel and submit a report of its findings to the President and Congress in January of each year. The funds requested will provide both for Council meetings and for staff support.

In summary, Mr. Chairman, we feel that the appropriations requested will provide for continuing worthwhile training activities that have been supported under previous authorizations, and for exercising new initiative toward meeting the critical needs for educational personnel.

We shall be happy to respond to any questions you may have.

Senator HILL. In spite of the reductions the Budget Bureau made you feel that you can make adequate progress with the funds?

Mr. DAVIES. Yes, sir, I think we can make a good beginning.

WITNESS BIOGRAPHY

Senator HILL. What was your background before you came with the Department?

Mr. DAVIES. I was executive secretary of an organization known as the National Commission on Teacher Education and Professional Standards of the National Education Association, which was an organization devoted to many of the same aims as expressed in this act.

Senator HILL. Except you did not have the money to do the job?

Mr. DAVIES. No, we didn't.

Senator HILL. You theorized but you didn't have the money to do the practical side of it, is that right?

Mr. DAVIES. Yes.

Senator HILL. Well, you are giving us a good presentation here this morning.

Mr. DAVIES. Thank you, sir.

Senator HILL. What is your State, if I may ask? Minnesota?

Mr. DAVIES. I was born in Minnesota but most of my childhood and education was in the State of California.

Senator HILL. That is quite a State. The most populous State in the Union now.

Mr. DAVIES. Yes, it is.

Senator HILL. Despite the fact you have left there.

Mr. DAVIES. They have managed quite well without me.

Senator HILL. I imagine you are still carrying on these programs?

Mr. DAVIES. I give them advice by correspondence.

Senator HILL. Certainly. Some of the programs you referred to here are being carried on in California, aren't they?

Mr. DAVIES. They are, yes.

Senator HILL. I want to thank you very much, sir.

Mr. DAVIES. I enjoyed being here.

## TEACHER CORPS

**STATEMENT OF RICHARD A. GRAHAM, DIRECTOR**

**ACCOMPANIED BY:**

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### APPROPRIATION ESTIMATE

"TEACHER CORPS

"For the Teacher Corps authorized in part B of title V of the Higher Education Act of 1965, as amended, [$13,500,00] *$31,235,000* [for the purposes of section 514 of said Act]: *Provided*, That none of these funds may be used to pay in excess of 90 per centum of the salary and other emoluments in the Teacher Corps: *Provided further*, That none of these funds may be spent on behalf of any Teacher Corps program in any local school system prior to approval of such program by the State educational agency of the State in which the school system is located: *Provided further, That not to exceed $135,000 shall be available for necessary expenses for services of specialists in reviewing applications for assistance, and for program evaluation.*"

### EXPLANATION OF LANGUAGE CHANGES

The proposed appropriation language provides for the deletion of the phrase, "for the purposes of section 514 of said Act," and inserts the following provision: "Provided further, That not to exceed $135,000 shall be available for necessary expenses for services of specialists in reviewing applications of assistance, and for program evaluation."

The purpose of these changes is to provide authorization for program support within the appropriation.

AMOUNTS AVAILABLE FOR OBLIGATION

| | 1968 | 1969 |
|---|---|---|
| Total appropriation | $13,500,000 | $31,235,000 |

OBLIGATIONS BY ACTIVITY

| | 1968 estimate | 1969 estimate | Increase or decrease |
|---|---|---|---|
| Operations and training: | | | |
| Training costs | $2,609,650 | $17,414,935 | +$14,805,285 |
| Transportation costs | 286,500 | 796,600 | +510,100 |
| Salaries and benefits | 9,873,305 | 11,720,085 | +1,846,780 |
| Local administration | 730,545 | 1,168,380 | +437,835 |
| Program support | | 135,000 | +135,000 |
| Total obligations | 13,500,000 | 31,235,000 | +17,735,000 |

OBLIGATIONS BY OBJECT

| | | | |
|---|---|---|---|
| Total number of permanent positions | | | |
| Full-time equivalent of all other positions | | 1 | +1 |
| Average number of all employees | | 1 | +1 |
| Personnel compensation: | | | |
| Positions other than permanent | | $20,000 | +$20,000 |
| Other personnel compensation | | | |
| Total personnel compensation | | 20,000 | +20,000 |
| Personnel benefits | | 1,000 | +1,000 |
| Travel and transportation of persons | | 14,000 | +14,000 |
| Other services | | 100,000 | +100,000 |
| Grants, subsidies, and contributions | $13,500,000 | 31,100,000 | +17,600,000 |
| Total obligations by object | 13,500,000 | 31,235,000 | +17,735,000 |

SUMMARY OF CHANGES

| | | |
|---|---|---|
| 1968 enacted appropriation | | $13,500,000 |
| 1968 total estimated obligations | | 13,500,000 |
| 1969 estimated obligations | | 31,235,000 |
| Total change | | +17,735,000 |

| | Base amount | Change from base amount |
|---|---|---|
| INCREASES | | |
| A. Built-in | | |
| B. Program: | | |
| 1. Recruit 1,500 new corpsmen at the beginning of fiscal year 1969 | | $3,712,500 |
| 2. Operations and training support for the 1,500 new corpsmen during fiscal year 1969 | | 11,130,500 |
| 3. Recruit 1,500 new corpsmen in summer, 1969 | | 3,712,500 |
| 4. Operations and training for 1968 and 1969 corpsmen in fall 1969 | | 3,506,600 |
| 5. Program support | | 135,000 |
| Total program increases | | 22,197,100 |
| DECREASES | | |
| A. Built-in: 1. Operation and training costs for corpsmen completing their service | $13,500,000 | −4,462,100 |
| Total decreases | | −4,462,100 |
| Total net changes requested | | +17,735,000 |

### Explanation of Changes

An amount of $3,712,500 is requested to recruit 1,500 new Corpsmen in the summer of 1968 and to provide their pre-service training and provide transportation to their in-service teaching assignments.

An amount of $11,130,500 is requested to provide first year funding for the 1,500 Corpsmembers to be taken on in the summer of 1968. This includes in-service training, salaries and benefits, local school administration, a discretionary allowance, and in-service summer training.

An amount of $3,712,500 is requested to recruit 1,500 new Corpsmembers in the summer of 1969, provide their pre-service training and provide transportation to their in-service teaching assignments.

An amount of $3,506,600 is requested to provide in-service training and operations in the fall of 1969 for Corps members recruited in 1968 and 1969. This includes a half year of in-service training and ten percent (four weeks) of anticipated operations costs (salaries and benefits, local school administration, and the discretionary allowance).

The decrease of $4,462,100 in operations and training costs results from the removal of the 1966 group of Corpsmen who will complete their two years of service at the end of fiscal year 1968.

An amount of $135,000 is requested to provide services of specialists in reviewing applications for assistance, and for program evaluation.

TEACHER CORP—OFFICE OF EDUCATION

| | 1968 estimate | 1969 estimate | Increase or decrease |
|---|---|---|---|
| Operations and training: | | | |
| Training costs | $2,609,650 | $17,414,935 | +$14,805,285 |
| Transportation costs | 286,500 | 796,600 | +510,100 |
| Salaries and benefits | 9,873,305 | 11,720,085 | +1,846,780 |
| Local administration | 730,545 | 1,168,380 | +437,835 |
| Program support | | 135,000 | +135,000 |
| Total appropriation and obligations | 13,500,000 | 31,235,000 | +17,735,000 |

### Justification of Estimate

The Teacher Corps was established under Part B, Title V of the Higher Education Act of 1965 to assist urban and rural areas of poverty to improve the quality of their educational offering; to attract into teaching, and especially into poverty areas, able and dedicated people intending to make teaching a career; and to provide the opportunity for experienced teachers to devote part of their careers to the schools that need their services most critically. Teaching teams, under the guidance of experienced teachers, afford a unique experience-based training opportunity for future teachers of disadvantaged children.

The Education Professions Development Act, Public Law 90–35, approved June 29, 1967, extends the program an additional three years through 1970, and authorizes $46,000,000 for fiscal year 1969. This Act also provides the following major amendments to the program:

(1) Local educational agencies and colleges and universities have responsibility for the recruitment, selection and enrollment of Teacher Corps members compared with the previous authority which vested these responsibilities primarily in the Office of Education.

(2) State educational agency approval of the local educational agency's request for Corps members is required, as is State educational agency approval of arrangements for the training of Teacher Corps members.

(3) The Federal contribution for the compensation of Teacher Corps members represents an amount agreed to by the local educational agency and the Commissioner after consideration of the agency's ability to pay such compensation. The Federal share is limited to 90 percent, except in exceptional cases, when in the first year of a program, the amount might be more when the operation of this provision would be such as to deny the benefits of the Teacher Corps program to educationally disadvantaged students.

(4) Teacher interns are compensated at the lowest rate for teaching full-time in the school system in which they teach, or at a rate of $75 per week plus $15 per dependent, whichever is less.

(5) Students in their third and fourth year of undergraduate study are eligible for participation in the Teacher Corps.

(6) The name of the program is changed from the National Teacher Corps to the Teacher Corps.

(7) Teacher Corps members are permitted to be assigned to a migrant group not in a regular school, which is taught by a public or other nonprofit agency, if the number of migrant children makes such an assignment feasible.

(8) Teacher Corps members are permitted to be assigned to schools operated by the Bureau of Indian Affairs.

A pre-service training period is provided to introduce Corps members to the problems they will face while teaching and working in poverty areas. Specially developed courses and work related to the causes and effects of poverty are included. After this pre-service training, the Teacher Corps interns, in teams led by experienced teachers, begin their service in local schools where they assume increasingly difficult professional and professional-support assignments as they progress toward full teacher status. During the two years of service, interns take additional in-service training at institutions of higher education leading to advanced degrees and professional certification.

The following constitutes a more detailed description of the various aspects of the program.

*Recruitment and assignment of corps members*

Public Law 90–35 authorizes the Commissioner of Education to enter into contracts with colleges, universities, and local educational agencies under which they have the responsibility to recruit, select, and enroll Teacher Corps members; and, upon approval by the appropriate State educational agency, to furnish teaching teams to local educational agencies. The Office of Education is authorized to: (1) publicize the Teacher Corps program to acquaint qualified persons of teaching opportunities and the needs of disadvantaged areas and encourage them to apply, and (2) provide technical assistance to the local agencies and institutions in their recruitment and screening of Teacher Corps members. This includes a referral service which provides information on programs throughout the Nation to persons who are interested in serving in other areas. An allowance of $25 per corps member is included in this budget to permit compensation of the universities for recruitment, screening, and selection of new corps members. Expenses incurred may be travel, brochures, posters, telephone, and similar expenses.

Local school districts and higher education institutions submit joint proposals for utilization of Corpsmen through their respective State education agencies to the U.S. Office of Education. Local districts make the individual assignments in cooperation with the institutions.

*Pre-service training*

Pre-service programs are designed to provide the interns with the initial training needed to equip them to enter upon their teaching assignments. This training is also a key part of the selection process. Universities and school systems have an opportunity to assess the interns during this trial period and screen out those Corps members who do not meet requirements.

The interns focus upon developing an understanding of the students with whom they will work, the effect of prolonged poverty, and the effect of cultural isolation. The programs provide the interns with opportunity to observe groups of children in the classroom, to participate in guided teaching situations, and to evaluate these experiences as a means of understanding educational theory and children. These sessions enable the experienced teachers, who assist in the pre-service training, to join the interns as a teaching team. In a number of universities (USC, Temple, Pittsburgh, Detroit, San Diego, Catholic U.) experienced teachers have received special training in supervisory skills.

All Corpsmen receive an orientation to familiarize them with the community where they will be assigned for teaching. This includes practical knowledge about the community resources and social and economic problems which exist in the area.

Costs of the pre-service training programs, which run about three months, include stipend and dependency allowances for interns, salaries for experienced teachers, instructional, supervisory and other institutional costs. Allowances average $90 per week per intern—a weekly stipend of $75 plus an allowance of $15 per week for each dependent. This stipend is substantially the same as that

allowed for comparable teacher training institutes under Title XI of the National Defense Education Act.

During the pre-service training period, experienced teachers are used primarily as university faculty or staff members to assist the institutions in training the interns. For this duty they are paid salaries based upon the university salary schedule for similar assignments. These salaries, averaging $175 per week per experienced teacher, are included in the institutional cost estimate for instruction. During pre-service training other instructional costs for interns per week are approximately the same as for NDEA institutes and are less than NDEA institutes for the second summer instruction.

*In-service program*

Once the intern arrives at his teaching assignment with a local school district, he enters upon an In-service Program. Activities during the In-service Program center around the gradual introduction of the intern into the responsibilities of teaching. The Teacher Corps internship is experience-based preparation for teaching in poverty schools. It is felt that the teacher of the disadvantaged must be involved in the community to understand the culture of poverty. An essential difference beween the Teacher Corps and regular teacher education programs is the emphasis upon school-related community involvement.

The Teacher Corps In-service Program requires three forms of intern involvement: (1) internship teaching in a local school, (2) school related community service, and (3) study for a baccalaureate or masters degree. An intern usually spends half a day or more in the school, part of the day in school-related community service, and part time attending university courses. Evenings and weekends are used by interns for extended involvement in these areas. After-school tutoring sessions, home visitations, and field trips account for much of the intern's evening and weekend time.

Initial activities of the internship include observation of regular teachers to learn routines, procedures, and techniques, and assisting librarians, guidance counselors, reading specialists, attendance coordinators, subject chairmen, and audio-visual aids resource personnel.

The gradual assuming of teaching responsibilities begins with observation and includes assisting the teacher, tutoring students on a one-to-one basis, working with small groups, and the teaching of half a class or more. Interns are advanced in this sequence when they are ready to proceed from one level to the next.

Outside the schools, continuing community contacts are made with social agency personnel in housing, welfare, library, police, youth programs, after-school centers, or adult education programs. Individual families in the community surrounding the school are visited.

The interns are being prepared to teach children who, too often, have been failed by traditional educational methods. The education of Corpsmen is exploratory, practical, and realistic, combining experimental techniques and practical necessity.

In-service training costs leading to a master's degree are estimated on the basis of members attending the university on a part-time basis, and are prorated accordingly. The rates used in the estimate are based on a percentage of the $2,500 institutional payment for instructional costs made to institutions of higher education for a full academic year in the comparable graduate fellowship program under Title IV of the National Defense Education Act. No stipend is paid to the intern since he is receiving a salary from the local education agency.

The fiscal year 1969 budget also provides for 6 semester hours classroom credit per academic year for experienced teachers. This training would consist of:

1. methods of supervising teaching-interns (techniques of clinical supervision, use of video tape, microteaching, etc.)
2. dynamics of team development and leadership roles in team teaching
3. planning and administering project activities
4. coordinating a school-university program and developing their competency as adjunct instructors
5. developing effective school-community activities
6. new, innovative techniques and resources for teaching disadvantaged children

Some of this training can be provided at the local program level.

*Role of institutions of higher education*

Institutions of higher education, in cooperation with local school districts, provide over a two-year period, summer pre-service training and in-service aca-

demic training for the Corpsmen, leading to certification and an undergraduate or graduate degree for the interns.

Training institutions of higher education are selected on the basis of their ability to provide a quality training program as well as proximity to local school districts with high concentrations of disadvantaged children where Corpsmen will be assigned for teaching.

*Transportation*

Travel of Corpsmen is provided from their places of residence to the pre-service training sites and charged to funds available at the time of travel. The cost of return travel for the estimated 10 percent of trainees not selected for teaching assignments who return to their homes, and for Corpsmen who decide to terminate their tour after entering upon their in-service training, is also provided.

Travel from institutions to teaching assignments for those completing training is paid by the local education agency which is reimbursed by the Office of Education. Only persons completing the pre-service training program are provided transportation of dependents and household effects, and then only from residence to site of teaching assignment.

Travel costs average about $100 from a Corps member's residence to the pre-service training institution and $100 to transport dependents and/or household goods to the in-service site. In most cases the pre-service and in-service sites are the same or the Corps member is sufficiently near the in-service site so that the transportation costs to the in-service site are essentially for dependents and/or household goods. Accordingly, an average of $200 is included for members and their families who may be expected to return to their original residences at the end of their two years of service.

*Salaries*

Salaries for interns who were enrolled prior to enactment of the amendments (June 29, 1967) are based upon the beginning step of the local school district schedule. The law now provides that members recruited after that date be compensated at a rate equal to the lowest rate paid by such agency for teaching full time in the grade to which the intern is assigned, or $75 per week plus $15 per week for each dependent, whichever is less. Salaries for experienced teachers are based upon the prevailing schedule at the local school district.

In 1969, experienced teacher salaries are estimated at approximately $9,540. This includes an increment for assuming team leader responsibilities for interns in addition to their own teaching workload and reflects the general salary practices in local school districts.

The experienced teachers' salaries are in line with salaries paid for local teachers of comparable training and experience. Over 60 percent of the experienced teachers recruited in the first group of Corps members possess a master's degree and about 75 percent of these experienced teachers have eight or more years of teaching experience.

*Benefits*

The estimates include 8.8 percent of the total salary for employers' contributions for such items as social security, health benefits, workmen's compensation, and retirement. The Federal Government is authorized to pay 90 percent of such costs.

*Discretionary allowance*

The estimate includes an allowance of $50 per corps member to purchase quickly and simply any needed training aid, book, equipment, or service which was not available through normal channels and which could better enable him to reach and teach his students. The use of these funds would be supervised by a team leader or other local school official.

*Local administrative costs*

Local school district administrative costs vary among school districts and are negotiated on the basis of individual circumstances such as the number of Corps members, location of assignments, and availability of local administrative support. Based on past experience, an average of $10 per week per Corps member is included in the request.

Effective use of Corpsmen necessitates that they devote their efforts to teaching and study at the university, and that their involvement in school administration be minimal. Where a number of teaching teams are used in a school district, it will be necessary to coordinate and supervise their activities and

their involvement in the district's entire school program. School district administrators will also need to handle Corps members' salary and fringe benefits, including payments for protection of experienced teachers' tenure, retirement and medical rights.

*Summer training*

Usually the first summer of the Corps members' tour is spent in pre-service training. During the second summer, the intern continues his in-service academic training at an institution of higher education.

Graduate course costs are based on the $2,500 for 24 credit hours formula used for in-service training. Therefore tuition costs for 8 credit hours of summer courses would cost approximately $800. These courses include both standard catalog and specially developed courses.

Team leaders will also be given an opportunity to come together at regional institutes to receive instruction, guidance, and exchange ideas, values, and experiences on which to build a better program the following year. A $750 grant would cover university expenses, $500, travel, $100, and a stipend of $75 per week for two weeks.

*Earning of teaching certificates*

As an integral part of the program, the law provides for training leading to certification and an undergraduate or graduate degree for interns while they are serving in local school districts. Interns will have an average of 18 credit hours for course work during the academic year and for their internship experience. Additional credit hours will be earned during the summer.

*Program accomplishments, fiscal year 1967 and 1968*

A 1967 appropriation of $11,323,700 provided for in-service training for 1,200 during the 1966–67 academic year and summer of 1967. It also provided for pre-service training of 1,150 new Corpsmen during the summer or fall of 1967.

A $13.5 million appropriation for FY 1968 will allow 900 Corpsmen to complete their two-year training program begun in 1966. It will also provide 1967–68 academic year training for 1,035 Corpsmen recruited in 1967.

*Request for fiscal year 1969*

The 1969 request of $31,100,000 consists of the following:

1. $9,037,893 for the final year costs of the corpsmen added in 1967.
2. $16,557,014 for recruiting and providing pre-service training for 1,500 new corpsmen added in the summer of 1968, and for the cost of in-service training, salaries and local school administration for this group for their first year (academic year 1968–69) and for half their in-service training and 4 weeks of salary and school administration costs in their second year (academic year 1969–70).
3. $5,505,093 to provide for recruiting and pre-service training for 1,500 new corpsmen in the summer of 1969 to fund half a year of in-service training and four weeks of salary costs and local school administration.

*Program support, $135,000*

| | |
|---|---|
| Evaluation | $100,000 |
| Program review | 35,000 |

The program support request of $135,000 would be used to do a small segment of the overall evaluation necessary to measure how effectively the Corps has met its objectives:

1. To strengthen educational opportunities for children in areas with concentrations of low-income families:

2. To attract and prepare persons to become teachers in such areas through coordinated work-study experiences, and;

3. To encourage colleges and universities, schools and State Departments of Education to work together to broaden and improve their teacher education programs.

A. *Evaluation, $100,000*

The impact of the Teacher Corps will first be measured on the:

1. *University.*—An indepth assessment and evaluation of changes in the "traditional" teacher training program will be made, focusing on curriculum changes (which ones are effective and which aren't and how can these effect other teacher training programs?), the amount of cooperation between the

liberal arts and education departments at the university, the enthusiasm of the faculty and the actual operation of the program, the rapport between university and local school.

2. *Local school.*—A visitation and questionnaire approach evaluating the impact of the Corps on instructional and curriculum procedures traditionally operating in the school, a measurement of regular faculty attitude toward the Corpsmen, the role of the Corpsmen in the school (are they given enough responsibility? Is the training they receive satisfactory? How do the 2nd year interns compare to regular beginning teachers?), the changes effected in achievement and attitude of the children reached by the Corps, a measurement of the role of the experienced teacher. (Are they leading? What are the strengths and weaknesses of their roles? Does the team concept work and should it be used in all teacher training programs?)

3. *The community.*—Using visitation, questionnaire, and achievement and attitude test instruments, an assessment will be made of the current worth of this activity as an integral part of the work-study program. What impact is this activity having on the achievement of the child . . . and on the learning of the intern? Which activities are most effectively making an impact on the child's learning and the Corps members training? Should this concept be extended to all disadvantaged schools?

B. *Program review, $35,000*

1. Advisory committee.—Four committee members and two hired evaluation technicians will advise the Teacher Corps staff on a design for research. Further they will approve the design, instruments and criteria finally selected.

2. Two hired educational research technicians to plan overall evaluation design, assign priorities to projects, secure financial resources, devise instruments and supervise the advisory panel.

Immediately following is a table detailing the various elements which go to make up the total costs for the Teacher Corps in 1967, 1968, and 1969.

## TEACHER CORPS

| | 1967 actual | | | 1968 estimated | | | 1969 estimated | | |
|---|---|---|---|---|---|---|---|---|---|
| | Number | Cost per Corps-member | Amount | Number | Cost per Corps-member | Amount | Number | Cost per Corps-member | Amount |
| **1966 CORPS** | | | | | | | | | |
| Transportation to teaching assignment | 1,252 | $61 | $76,160 | | | | | | |
| Salaries during teaching assignment: | | | | | | | | | |
| Interns | 950 | 4,822 | 4,580,900 | 713 | $5,336 | $3,804,568 | | | |
| Experienced teachers | 270 | 8,722 | 2,354,940 | 202 | 9,950 | 2,009,900 | | | |
| Subtotal, salaries | [1] 1,220 | | 6,935,840 | [2] 915 | | 5,814,468 | | | |
| Local school administration | 1,220 | 400 | 488,000 | 915 | 400 | 366,000 | | | |
| Inservice training for interns | | | | 713 | 1,900 | 1,354,700 | | | |
| Inservice summer training for interns | 759 | 1,447 | 1,098,480 | | | | | | |
| Transportation to residence at end of service | | | | 915 | 200 | 183,000 | | | |
| Total (cost of 1966 Corps in fiscal year 1967 and 1968) | | | 8,598,480 | | | 7,718,168 | | | |
| **1967 CORPS** | | | | | | | | | |
| Transportation to preservice training | 1,150 | 100 | 115,000 | | | | | | |
| Preservice training (provided during summer): | | | | | | | | | |
| Interns | 920 | 2,280 | 2,097,600 | | | | | | |
| Experienced teachers | 230 | 2,100 | 483,000 | | | | | | |
| Subtotal | 1,150 | | 2,580,600 | | | | | | |
| Transportation to residence (estimated 10 percent not entering service) | 115 | 101 | 11,615 | | | | | | |
| Transportation to teaching assignment | | | | 1,035 | [3] 100 | 103,500 | | | |
| Summer training: | | | | | | | | | |
| Interns | | | | | | | 827 | [4] $1,880 | $1,554,760 |
| Experienced teachers | | | | | | | 156 | 750 | 117,000 |
| Subtotal | | | | | | | 983 | | 1,671,760 |
| Salaries during teaching assignment: | | | | | | | | | |
| Interns | | | | 450 | 3,525 | 1,586,250 | 827 | 3,525 | 2,915,175 |
| Late starts | | | | 421 | [5] 2,709 | 1,140,461 | | | |
| Experienced teachers | | | | 84 | 9,136 | 767,424 | 156 | 9,543 | 1,488,708 |
| Late starts | | | | 80 | [5] 7,023 | 561,840 | | | |
| Subtotal | | | | [6] 1,035 | | 4,055,975 | [7] 983 | | 4,403,883 |

| | | | | | | |
|---|---|---|---|---|---|---|
| Local school administration: | | | | | | |
| Regular starting time | 534 | 400 | 213,600 | 983 | 400 | 393,200 |
| Late starts | 501 | [5] 307 | 153,807 | | | |
| Subtotal | 1,035 | | 367,407 | 983 | | 393,200 |
| Discretionary allowance | | | | 983 | [8] 50 | 49,150 |
| Inservice training: | | | | | | |
| Interns | 450 | 1,900 | 855,000 | 827 | 1,900 | 1,571,300 |
| Late starts | 421 | [9] 950 | 399,950 | | | |
| Subtotal | 871 | | 1,254,950 | 827 | | 1,571,300 |
| Second summer costs (for late starting interns) | | | | [9] 400 | [4] 1,880 | 752,000 |
| Transportation to residence at end of service | | | | 983 | 200 | 196,600 |
| **Total (Cost of 1967 corps in 1967, 1968, and 1969)** | 2,707,215 | | 5,781,832 | | | 9,037,893 |
| 1968 CORPS | | | | | | |
| Recruiting cost | | | | 1,500 | [10] 25 | 37,500 |
| Transportation to preservice training | | | | 1,500 | 100 | 150,000 |
| Preservice training (provided during summer): | | | | | | |
| Interns | | | | 1,250 | 2,280 | 2,850,000 |
| Experienced teachers | | | | 250 | 2,100 | 525,000 |
| Subtotal | | | | 1,500 | | 3,375,000 |
| Transportation to residence (estimated 10 percent not entering service) | | | | 150 | 100 | 15,000 |
| Transportation to teaching assignment | | | | 1,350 | 100 | 135,000 |
| Salaries during teaching assignment: | | | | | | |
| Interns | | | | 1,125 | 3,525 | 3,965,625 |
| Experienced teachers | | | | 225 | 9,540 | 2,146,528 |
| Subtotal | | | | [6] 1,350 | | 6,112,153 |
| Local school administration | | | | 1,350 | 400 | 540,000 |
| Discretionary allowance | | | | 1,350 | [8] 50 | 67,500 |
| Inservice training: | | | | | | |
| Interns | | | | 1,125 | 1,900 | 2,137,500 |
| Experienced teachers | | | | 225 | 450 | 101,250 |
| Subtotal | | | | 1,350 | | 2,238,750 |
| Summer training: | | | | | | |
| Interns | | | | 1,070 | [4] 1,880 | 2,011,600 |
| Experienced teachers | | | | 214 | 750 | 160,500 |
| Subtotal | | | | [7] 1,284 | | 2,172,100 |

See footnotes at end of table, p. 861.

| | 1967 actual | | | 1968 estimated | | | 1969 estimated | | |
|---|---|---|---|---|---|---|---|---|---|
| | Number | Cost per Corps-member | Amount | Number | Cost per Corps-member | Amount | Number | Cost per Corps-member | Amount |
| 1968 CORPS—Continued | | | | | | | | | |
| Inservice training: | | | | | | | | | |
| Interns | | | | | | | 1,070 | 950 | 1,016,500 |
| Experienced teachers | | | | | | | 214 | 225 | 48,150 |
| Subtotal | | | | | | | [7] 1,284 | | [11] 1,064,650 |
| Salaries during teaching assignment: | | | | | | | | | |
| Interns | | | | | | | 1,070 | 352.48 | 377,153 |
| Experienced teachers | | | | | | | 214 | [12] 1,002.00 | 214,428 |
| Subtotal | | | | | | | 1,284 | | [13] 591,581 |
| Local school administration | | | | | | | 1,284 | 40 | [13] 51,360 |
| Discretionary allowance | | | | | | | 1,284 | 5 | [13] 6,420 |
| Total (cost of 1968 corps in 1969) | | | | | | | | | 16,557,014 |
| 1969 corps | | | | | | | | | |
| Recruiting cost | | | | | | | 1,500 | [10] 25 | 37,500 |
| Transportation to presrvice training | | | | | | | 1,500 | 100 | 150,000 |
| Preservice training: | | | | | | | | | |
| Interns | | | | | | | 1,250 | 2,280 | 2,850,000 |
| Experienced teachers | | | | | | | 250 | 2,100 | 525,000 |
| Subtotal | | | | | | | 1,500 | | 3,375,000 |
| Transportation to residence (estimated 10% not entering service) | | | | | | | 150 | 100 | 15,000 |
| Transportation to teaching assignment | | | | | | | 1,350 | 100 | 135,000 |
| Inservice training: | | | | | | | | | |
| Interns | | | | | | | 1,125 | 950 | 1,068,750 |
| Experienced teachers | | | | | | | 225 | 225 | 50,625 |
| Subtotal | | | | | | | 1,350 | | [11] 1,119,375 |
| Salaries during teaching assignment: | | | | | | | | | |
| Interns | | | | | | | 1,125 | 352.48 | 396,540 |
| Experienced teachers | | | | | | | 225 | 959.68 | 215,928 |
| Subtotal | | | | | | | [6] 1,350 | | [13] 612,468 |

| | | | |
|---|---|---|---|
| Local school administration | 1,350 | 40 | [13] 54,000 |
| Discretionary allowance | 1,350 | 5 | [13] 6,750 |
| Total (cost of 1969 Corps in 1969) | | | 5,505,093 |
| Program support (administration) in fiscal year 1969 | | | 135,000 |
| Total by fiscal year | 11,305,695 | 13,500,000 | 31,235,000 |

[1] The average number of Corps members in service during fiscal year 1967, calculated as of mid-year.

[2] Remaining after attrition from the 940 Corps members in the program as of June 1967.

[3] Includes travel to residence for dropouts during the fiscal year.

[4] The cost of summer training for interns is based on $800 for tuition and an average stipend of $90 per week for 12 weeks for each intern expected to be in the summer program.

[5] Unit costs were reduced (approximately 23.1 percent) proportionate to the inservice starting dates which fall after Sept. 15, 1967.

[6] Considers 10 percent attrition from total number recruited.

[7] Considers 5 percent attrition from prior year.

[8] To purchase training aids not available through the schools.

[9] Represents the cost of ½ year (or 1 semester) of inservice training for the 421 interns who started after Nov. 15, 1967. These interns are scheduled for a second summer of training to make up for the 1 fall semester that they missed. The difference between 421 and 400 in number of interns represents 5 percent attrition.

[10] To permit compensation of the universities for recruiting, screening, and selection of potential Corps members.

[11] Represents tuition costs for ½ year (or 1 semester) of inservice training in fiscal year 1970 to facilitate program continuity.

[12] Considers a 5 percent salary increase in the second year for experienced teachers.

[13] Represents 10 percent (4 weeks) of the costs of salaries and local school administration in fiscal year 1970 to facilitate program continuity.

BIOGRAPHICAL SKETCH

Name: Richard A. Graham.
Position: Director, Teacher Corps.
Birthplace and Date: Chicago, Illinois, November 6, 1920.
Education: Cornell University, Bachelor of Mechanical Engineering.
Experience:
Present: Director, Teacher Corps.
1965: Commissioner, Equal Employment Opportunity Commission.
1964: Director of the Peace Corps in Tunisia.
1964: Director of Recruitment for the Peace Corps.
1957: Co-founder of Jordan Controls, Inc., Chairman Local School Board in Mequon, Wis.
1946: Sales Manager, Graham Transmissions Company.
1942–46: U.S. Army.
Association Memberships: Professional Engineer, State of Wisconsin.

BUDGET REQUEST AND STATUTORY AUTHORITY

Senator HILL. Mr. Graham of the Teacher Corps.

Mr. GRAHAM. Mr. Chairman, I appreciate this opportunity to testify on behalf of the administration's request for $31,235,000 to support the Teacher Corps during fiscal year 1969. The Teacher Corps was authorized by Congress as part of the Higher Education Act of 1965 and was first funded in May of 1966. It is almost 2 years old.

The question was whether the Teacher Corps would work, whether it would be a local program responsive to local needs, whether a federally supported program would help schools and universities attract and train people for the hard-pressed schools. These are some of the answers.

TEACHING IN INNER-CITY AND RURAL SCHOOLS

Americans have shown that they will seek out the toughest assignment in education—teaching in our inner-city schools and depressed rural areas—if they can count on proper training for the job.

The Teacher Corps this past year and a half has shown that plenty of people will apply, that universities and school systems can train them for the job and that the schools can use them well. There have been over 15,000 applications for 2,000 jobs and, perhaps most important, this past year and a half has shown that dedicated young people can learn to do their job. Parents and school principals say that they have helped perk up the schools, helped bring new hope.

BUDGET BUREAU REDUCTION

Senator HILL. How much did the Bureau of the Budget cut your request?

Mr. GRAHAM. The Department's request was $41,235,000. The request for the appropriation is $31,235,000.

Senator HILL. A $10 million reduction.

Mr. GRAHAM. Yes, sir.

Senator HILL. All right, sir.

PAST AND PRESENT CORPS MEMBERS

Mr. GRAHAM. Here is the record so far: The first class of Corps members, who will be leaving the Corps in June, entered service in the summer of 1966. The second class of Corps members entered service last summer and early fall. There are now 1,840 Corps members

in the program, 1,500 interns, and 340 team leaders. A total of 849 Corps members will be leaving in June.

Senator HILL. These people who are leaving are going to teaching jobs?

Mr. GRAHAM. Teaching jobs. Most of the school systems want these people to stay on the job. They like what they have seen in these young people.

CORPS PROGRAMS

The Corps has members in 48 programs serving in 124 local school districts, and studying at 54 universities in 29 States, Puerto Rico, and the District of Columbia. Twenty-nine of these 48 programs operate in major urban settings; 19 of them in the Nation's 25 largest cities. The other 19 programs have been developed in middle-sized industrial cities. Eleven Teacher Corps programs serve only rural areas, and eight programs serve both city and rural schools.

The Teacher Corps is a number of locally controlled and operated programs. It has been pointed to as an example of what creative federalism can offer. The National Government provides needed funds and a format for constructive change. Local schools and universities draft proposals, which are then approved by the State departments of education and funded by the Teacher Corps. The local schools and universities, working together, operate the programs.

Senator HILL. The Federal Government provides the funds.

RECRUITMENT AND APPLICANTS

Mr. GRAHAM. Yes, sir; up to 90 percent of them.

Recruitment is also carried on by local schools and universities and State departments of education—with technical help from the Teacher Corps in Washington, as provided by the legislation. Teacher Corps maintains in Washington a roster of intern applicants from areas which do not have programs. Local Teacher Corps programs have found this roster extremely helpful in finding well-qualified applicants who seek assignments in their areas. We also provide, on request, a screening service for all applicants. This service helps local program directors in making their selections.

EDUCATIONAL OPPORTUNITIES FOR POOR CHILDREN

The first purpose of the Teacher Corps is to strengthen the educational opportunities available to children in areas having concentrations of low-income families. The crisis in the education of the disadvantaged represents a very real danger to the stability of our society. But the difficulties in reaching and teaching children from impoverished backgrounds are immense. The key to quality education is the quality of the teacher. And in our poverty area schools, the teacher shortage, generally across the Nation, is at its worst. As Dr. A. Harry Passow reported in his landmark study of the District of Columbia schools, what is needed is a new generation of teachers who have chosen to go into poverty education, and who are specifically trained for the job.

COLLEGE AND UNIVERSITY ENLARGED TEACHER PREPARATION PROGRAMS

The second purpose of the Teacher Corps is to encourage colleges and universities to broaden their program of teacher preparation. School systems and universities already point with pride to what they have accomplished with Teacher Corps. Fully 85 percent of the universities have developed new courses for their Teacher Corps programs, courses focused on the education of the disadvantaged. Many are now making these courses available to their regular students. The States of New York and New Jersey are now launching their own State Teacher Corps programs, with some technical assistance from us.

But to be really successful in this delicate effort of institutional change, adequate planning time is essential. Universities want to plan new courses and hire new staff for their Teacher Corps programs. Universities, as you know, do their planning at least 6 months and sometimes a year in advance. Local boards of education must vote at least 10 percent matching funds for intern and team leader salaries. They must have time to recruit and select outstanding candidates. The local school, university, and the State department of education must all participate in the program planning process if the program is to be effective. If this planning is to be of a maximum effectiveness, ample time for development must be provided before the programs begin.

But these programs—in the universities and in the schools—must be large enough generally, 35 to 75 people, to begin to bring about the changes they seek, changes in teacher preparation, changes in the schools. The schools and universities must be able to count on their programs for 3 or 4 years—long enough for their changes to take hold.

Senator HILL. It takes that much time?

Mr. GRAHAM. Yes, sir. They say that if they undertake a program which gets started but then fades away or has to move out after a year or two they really have not gained anything, the money has been wasted. So they want to pursue what they have begun.

During the past 2 years the uncertainty of funding has required that schools and universities make extraordinary efforts to mount their Teacher Corps programs at the last minute. The quality of some programs has suffered but most of them have just worked harder.

BUDGET REQUEST

Therefore, to continue this program, at a level sufficient to assure that the money will be well spent, we are requesting $31.235 million for fiscal year 1969. This will support 1,500 Corps members who would be enrolled in the summer and fall of 1968. And most important, it will provide funds for another 1,500 Corps members who will be enrolled in the summer of 1969. This advance funding will permit States and school systems and universities to begin planning in the fall of 1968 for programs that will begin early in the summer of 1969.

NEA RECOMMENDATION FOR CORPS EXPANSION AND EXTENSION

The National Education Association has urged expansion and extension of the Teacher Corps because its work has proven "to be essential in meeting the challenges of modern America."

In the brief period of its existence, the Teacher Corps has already made an impact on American education,

said Braulio Alonso, president of the 1-million-member professional teachers organization.

The young people involved as interns, with few exceptions, have brought new vitality to the school systems in which they serve.

Referring to the colleges and institutions which groom and train tomorrow's teachers, Alonso observed:

Perhaps more importantly, because of the potentially far-reaching effect on teacher education institutions, the Teacher Corps program has led teacher educators to make their curriculums more meaningful, more applicable to the situation that a greater number of beginning teachers face in the disadvantaged urban and rural communities.

Dr. Alonso quotes from the recent report of the National Advisory Commission on Civil Disorders in which the Teacher Corps program is cited as "a sound instrument" for the—

major national effort to attract to the teaching profession well-qualified and highly motivated young people and to equip them to work effectively with disadvantaged students.

He concludes:

I am sure I speak for the dedicated teachers throughout the Nation and the more than 1 million members of the NEA. We applaud the efforts of the Teacher Corps and wholeheartedly support the proposal that their ranks be expanded, extended, and supported by the citizens and the Government of these United States.

Thank you sir.

Senator HILL. Thank you.

Who is Dr. Alonso?

Mr. GRAHAM. He is president of the NEA.

Senator HILL. Does he give full time to it?

Mr. GRAHAM. No, sir; he is not a staff man.

Mr. DAVIES. He is from Tampa, Fla. He is principal of a high school.

Senator HILL. He does not give full time but he is the elected president?

Mr. DAVIES. Yes, sir.

Senator HILL. You say he is principal of a high school in Tampa, Fla.?

Mr. DAVIES. Yes, sir; he is principal of a large high school in Tampa, Fla.

Senator HILL. You have brought us a good statement. You tell Dr. Alonso you have quoted him aptly and well. Thank you.

Mr. GRAHAM. Thank you, Mr. Chairman.

## Higher Educational Activities

**STATEMENT OF PETER P. MUIRHEAD, ASSOCIATE COMMISSIONER FOR HIGHER EDUCATION**
**ACCOMPANIED BY:**
**HAROLD HOWE II, COMMISSIONER OF EDUCATION**
**PRESTON VALIEN, DEPUTY ASSISTANT COMMISSIONER FOR HIGHER EDUCATION**
**S. WILLIAM HERRELL, EXECUTIVE OFFICER, BUREAU OF HIGHER EDUCATION**
**BERNARD SISCO, ASSISTANT COMMISSIONER FOR ADMINISTRATION**
**LEON SCHWARTZ, DEPUTY ASSISTANT COMMISSIONER FOR ADMINISTRATION**
**JOE G. KEEN, BUDGET OFFICER**
**MRS. SALLY H. BOND, BUDGET ANALYST**
**JAMES B. CARDWELL, DEPUTY ASSISTANT SECRETARY, BUDGET**

### Appropriation Estimate

#### HIGHER EDUCATIONAL ACTIVITIES

"For grants, loans, contracts, payments, and advances under titles III[,] *and* IV (except payments under parts C and D) [,V (except part B)] and *Part A of title* VI of the Higher Education Act of 1965, as amended, under the Higher Education Facilities Act of 1963, as amended, under title[s] II [and IV] of the National Defense Education Act of 1958, as amended (20 U.S.C. [ch. 17] *421–429*), under section 22 of the Act of June 29, 1935, as amended (7 U.S.C. 329), and for grants under part C of title I of the Economic Opportunity Act of 1964, as amended, [$1,158,194,000] *$708,127,000*, of which [$30,000,000] *$35,000,000* shall be for the purposes of title III of the Higher Education Act of 1965, [$144,600,000] *$149,100,000* shall be for programs under part A of title IV of that Act, of which $140,600,000 shall be for educational opportunity grants and shall remain available through June 30, [1969] *1970*, [$40,000,000] *$77,400,000* to remain available until expended shall be [for interest payments] for loan insurance programs under part B of title IV of that Act [, $35,000,000 shall be for the program under part C of title V of that Act] *: including not to exceed $2,000,000 for computer services in connection with payments of interest and fees*, [$17,000,000] *$14,500,000* shall be for the purposes of *Part A of title* VI of the Act of which amounts reallotted [under part A] shall remain available through June 30, [1969] *1970*, $139,900,000 shall be for grants for college work-study programs under part C of title I of the Economic Opportunity Act of 1964 of which amounts reallotted shall remain available through June 30, [1969] *1970*, [$100,000,000] *$34,000,000* shall be for grants for construction of public community colleges and technical institutes and [$300,000,000] *$33,000,000* shall be for grants for construction of other academic facilities under title I of the Higher Education Facilities Act of 1963 which amounts shall remain available through June 30, [1969] *1970*, [$50,000,000] *$8,000,000*, to remain available until expended shall be for grants for construction of graduate academic facilities under title II of that Act, $192,000,000 shall be for *Federal* capital contributions to student loan funds *established in accordance with agreements pursuant to section 204* and loans for non-Federal capital contributions to student loan funds under title II of the National Defense Education Act of 1958, of which not to exceed $2,000,000 shall be for such loans for non-Federal contributions, and $11,950,000 shall be for the purposes of section 22 of the Act of June 29, 1935*: Provided, That not to exceed $1,320,000 shall be available for*

*necessary expenses of advisory committees, for services of specialists in reviewing applications for assistance, and for program evaluation: Provided further, That allotments to States for college work-study programs for the fiscal year ending June 30, 1969, shall include, in addition to funds appropriated herein, funds appropriated for this purpose for the fiscal year ending June 30, 1968, but not allotted to States for that fiscal year."*

EXPLANATION OF LANGUAGE CHANGES

Elimination is requested of "V (except part B)" and "shall be for the program under part C of title V of that Act." A separate appropriation account is proposed for the Education Professions Development Act, approved June 29, 1967, in order to consolidate the educational personnel programs authorized therein. The two proposed changes, therefore, will provide for transfer of the teacher fellowship program under Part C of the Act to "Education Professions Development Activities."

Inclusion of "Part A of title" and "Part A of" and exclusion of "under part A" are proposed in order to clarify the legal citation for undergraduate instructional equipment grants under Title VI of the Higher Education Act. The program of institutes under Part B has been transferred to "Education Professions Development Activities" since Part E of the Education Professions Development Act subsumes the old authority under Title VI–B.

Deletion is requested of "s" and "and IV" in order also to transfer the graduate fellowship program for college teachers under Title IV of the National Defense Education Act to "Education Professions Development Activities."

Substitutions of "1970" for "1969" will provide two-year availability of funds as authorized for the programs of educational opportunity grants, undergraduate instructional equipment, work-study, and undergraduate facilities construction grants.

For the insured student loan program, it is proposed that "for interest payments" be deleted, and that the following be inserted: "including not to exceed $2,000,000 for computer services in connection with payments of interest and fees." Proposed amendments would provide additional authority for lenders' fees and for advances for reserve funds; and would permit appropriations for both to remain available until expended. The first change would accommodate these amendments. The second change will provide funds for computer services in processing interest payments and fees.

The requested inclusion of "Provided, That not to exceed $1,320,000 shall be available for necessary expenses of advisory committees, for services of specialists in reviewing applications for assistance and for program evaluation" will provide for the appropriation of funds for necessary program support expenses.

Inclusion of the following provision is proposed: "Provided further, That allotments to States for college work-study programs for the fiscal year ending June 30, 1969, shall include, in addition to funds appropriated herein, funds appropriated for this purpose for the fiscal year ending June 30, 1968, but not allotted to States for that fiscal year."

Public Law 90-218, the 1968 Continuing Resolution, provides that allotments to States in 1968 be made under the cost reduction amount rather than the total amount appropriated. Further, the 1968 appropriation language, in accordance wtih the enabling legislation for the work-study program, provides for carryover of reallotted amounts only. The requested wording will provide that the $5,600,000 reduction in 1968 be carried over and made available for obligation in 1969.

The remaining changes reflect updated legal citations, and provide more clarity and consistency in the language.

## AMOUNTS AVAILABLE FOR OBLIGATION

| | 1968 | 1969 |
|---|---|---|
| Appropriation | $1,158,194,000 | $708,127,000 |
| Comparative transfer to "Education Professions Development Activities" | −124,100,000 | |
| Unobligated balance brought forward | 48,123,890 | 197,472,023 |
| Cutback required by H.J. Res. 888: | | |
| Reduction below obligation level in the 1968 President's budget: | | |
| Unobligated balance lapsing | −6,098,000 | |
| Unobligated balance carried forward | −163,148,133 | |
| Subtotal | −169,246,133 | |
| Reduction because of unanticipated carryover balances: Unobligated balance carried forward | −34,323,890 | |
| Total cutback | −203,570,023 | |
| Other unobligated balances lapsing | −1,800,000 | |
| Total currently authorized for obligation | 876,847,867 | 905,599,023 |
| Plus: Proposed release of reserves for increased pay and postal costs | 98,000 | |
| Total available for obligation | 876,945,867 | 905,599,023 |
| Disposition of cutback: | | |
| To be used for pay and postal costs in this account | 98,000 | |
| To be returned to the Treasury | 6,000,000 | |
| To be carried forward for obligation in 1969 | 197,472,023 | |
| Total cutback | 203,570,023 | |

## OBLIGATIONS BY ACTIVITY

| | 1968 estimate | | 1969 estimate | | Increase or decrease | |
|---|---|---|---|---|---|---|
| | Positions | Amount | Positions | Amount | Positions | Amount |
| Program assistance: | | | | | | |
| a. Strengthening developing institutions | | $30,000,000 | | $35,000,000 | | +$5,000,000 |
| b. Colleges of agriculture and mechanic arts | | 11,950,000 | | 11,950,000 | | |
| c. Undergraduate instructional equipment and other resources | | 14,500,000 | | 14,500,000 | | |
| Construction: | | | | | | |
| a. Public community colleges and technical institutes | | 67,000,000 | | 67,000,000 | | |
| b. Other undergraduate facilities | | 207,452,112 | | 133,000,000 | | −74,452,112 |
| c. Graduate facilities | | 33,000,000 | | 25,576,994 | | −7,423,006 |
| d. State administration and planning | | 7,000,000 | | 7,000,000 | | |
| e. Technical services | 253 | 2,744,000 | 253 | 3,557,000 | | +813,000 |
| Student aid: | | | | | | |
| a. Educational opportunity grants | | 137,027,101 | | 158,100,000 | | +21,072,899 |
| b. Direct loans | | 187,400,000 | | 193,400,000 | | +6,000,000 |
| c. Insured loans | | 44,572,654 | | 109,695,029 | | +65,122,375 |
| d. Work-study programs | | 134,300,000 | | 145,500,000 | | +11,200,000 |
| Program support | | | | 1,320,000 | | +1,320,000 |
| Total obligations | 253 | 876,945,867 | 253 | 905,599,023 | | +28,653,156 |

## OBLIGATIONS BY OBJECT

| | 1968 estimate | 1969 estimate | Increase or decrease |
|---|---|---|---|
| Total number of permanent positions | 253 | 253 | |
| Full-time equivalent of other positions | 4 | 10 | +6 |
| Average number of all employees | 226 | 258 | +32 |
| Personnel compensation: | | | |
| Permanent positions | $2,236,000 | $2,747,000 | +$511,000 |
| Positions other than permanent | 25,000 | 152,000 | +127,000 |
| Other personnel compensation | 25,000 | 25,000 | |
| Total personnel compensation | 2,286,000 | 2,924,000 | +638,000 |
| Personnel benefits | 169,000 | 205,000 | +36,000 |
| Travel and transportation of persons | 119,000 | 387,000 | +268,000 |
| Transportation of things | 13,000 | 49,000 | +36,000 |
| Rent, communications, and utilities | 74,000 | 108,000 | +34,000 |
| Printing and reproduction | 58,000 | 25,000 | −33,000 |
| Other services | 4,011,000 | 9,636,000 | +5,625,000 |
| Supplies and materials | 11,000 | 30,000 | +19,000 |
| Equipment | 3,000 | 13,000 | +10,000 |
| Investments and loans | 193,284,654 | 204,500,000 | +11,215,346 |
| Grants, subsidies, and contributions | 676,917,213 | 687,722,023 | +10,804,810 |
| Total obligations by object | 876,945,867 | 905,599,023 | +28,653,156 |

## SUMMARY OF CHANGES

| | |
|---|---|
| 1968 enacted appropriation | $1,158,194,000 |
| Comparative transfer to "Education professions development activities" | −124,100,000 |
| Unobligated balance brought forward | 48,123,890 |
| Cutback required by H.J. Res. 888: | |
| Reduction below obligation level in the 1968 President's budget | −169,246,133 |
| Reduction because of unanticipated carryover balances | −34,323,890 |
| Other unobligated balances lapsing | −1,800,000 |
| Proposed release of reserves for increased pay and postal costs | 98,000 |
| 1968 estimated obligations | 876,945,867 |
| 1969 requested appropriation | 708,127,000 |
| Unobligated balance brought forward | 197,472,023 |
| 1969 estimated obligations | 905,599,023 |
| Total change | +28,653,156 |

| | Base | | Changes from base | |
|---|---|---|---|---|
| | Positions | Amount | Positions | Amount |
| **INCREASES** | | | | |
| Program: | | | | |
| 1. Program assistance: Strengthening developing institutions | | $30,000,000 | | $5,000,000 |
| 2. Construction: Technical services—Costs to fund presently authorized level: | | | | |
| (1) Reduction in lapse rate | 253 | 2,455,000 | | 541,000 |
| (2) Increased costs of other services | | 289,000 | | 272,000 |
| 3. Student aid: | | | | |
| (a) Educational opportunity grants: | | | | |
| (1) Grants to higher education institutions | | 133,027,101 | | 16,572,899 |
| (2) Identification and encouragement of educational talent | | 4,000,000 | | 4,500,000 |
| (b) Direct loans: Contributions to loan funds | | 184,000,000 | | 6,000,000 |
| (c) Insured loans: | | | | |
| (1) Advance for reserve funds | | 7,284,654 | | 5,215,346 |
| (2) Payments for interest, fees, and computer services | | 37,288,000 | | 59,907,029 |
| (d) Work-study programs | | 134,300,000 | | 11,200,000 |
| 4. Program support | | | | 1,320,000 |
| Total increases | | | | 110,528,274 |
| **DECREASES** | | | | |
| Program: | | | | |
| Construction: | | | | |
| (a) Other undergraduate facilities | | 207,452,112 | | −74,452,112 |
| (b) Graduate facilities | | 33,000,000 | | −7,423,006 |
| Total decreases | | | | −81,875,118 |
| Total net change requested | | | | +28,653,156 |

EXPLANATION OF CHANGES

For strengthening developing institutions under Title III of the Higher Education Act, an increase of $5,000,000 will result in a total of $35,000,000. About 350 developing colleges will participate in cooperative arrangements with other institutions and organizations, an increase of 50 over 1968. For National Teaching Fellowships, the increase will also permit raising the yearly allowance per dependent from $400 to $600 in order to provide consistency with other Federal fellowships programs.

An increase of $813,000 will provide a total of $3,557,000 for technical architectural and engineering services provided in connection with the higher education construction program. This increase is required to provide full funding for 253 positions of which 204 man-years were funded in 1968, and includes increased pay costs of $57,000.

An additional amount of $16,572,899 for Educational Opportunity Grants under Part A, Title IV of the Act will provide a total of $149,600,000 for approximately 284,100 students, or 8,000 over the 1968 level. The average award is expected to increase from $480 to $525.

Also under this same Part, an increase of $4,500,000 will result in a total of $8,500,000 for about 135 projects, 55 more than in 1968, to identify needy youths and school dropouts and to encourage them to complete their education.

For direct loans to students under Title II of the National Defense Education Act, an additional $6,000,000 will provide a total of $190,000,000 for Federal contributions to loan funds. This amount will support loans to approximately 408,000 students, or 3,000 more than the 1968 level, as well as an increase in the average loan from $605 to $650.

For the insured student loan program under Part B, Title IV of the Higher Education Act, an additional amount of $5,215,346 will result in a total of $12,500,000 for advances for reserve funds to State and nonprofit private guarantee agencies. Proposed legislation would merge the similar program for vocational students with this program, and would authorize the Federal Government to reinsure loans guaranteed by these agencies at 80 percent of defaults. It is estimated that these funds will insure $641,250,000 in new loans to some 750,000 students, an increase of 190,000 over 1968.

Also under the insured student loan program, an additional $59,907,029 will provide a total level of $97,195,029 for payments for interest, fees, and computer services. About 1,688,583 loans totaling $1,350,522,000 will be outstanding at the end of 1969, and virtually all of these are eligible for interest benefits. Moreover, proposed legislation would authorize payments to lenders for processing loans and converting them to repayment status. The total 1969 level includes $95,195,029 estimated for interest and fees payments due in that year, as well as $2,000,000 for computer services in processing these increasing numbers of loans.

An increase of $11,200,000 will provide a total of $145,500,000 for work-study programs under Title I–C of the Economic Opportunity Act. An estimated 240,000 students will be provided part-time jobs by the fall term of 1969, an additional 30,000 over those employed in the fall of 1968.

For necessary support activities in connection with the programs under this account, an amount of $1,320,000 is requested. This includes $1,117,000 for program evaluation studies, $163,000 for consultants to review applications and advise on other professional matters, and $40,000 for expenses for statutory advisory committees.

Decreases totaling $81,875,118 are estimated for the Higher Education Facilities Act in order to give higher priority to "human resource" programs such as student aid and teacher education. A reduction of $74,452,112 for undergraduate construction for four-year institutions under Title I will provide a total of $133,000,000 for about 306 projects, or 172 below the 1968 level. The level for public community colleges and technical institutes, also under Title I, will remain the same—$67,000,000 for 165 projects. A decrease of $7,423,006 will result in a total of $25,576,994 for approximately 33 graduate construction projects under Title II, a reduction of nine from the 1968 level.

EXPLANATION OF TRANSFERS

| | 1968 estimate | 1969 estimate | Purpose |
|---|---|---|---|
| Comparative transfer to: "Education Professions Development Activities": | | | |
| Elementary and secondary teacher fellowship programs | $35,000,000 | $43,500,000 | To provide a coordinated presentation of educational personnel training programs under the Education Professions Development Act and title IV of the National Defense Education Act. |
| College teacher fellowships | 86,600,000 | 86,600,000 | |
| Institutes and training programs for higher education personnel. | 2,500,000 | 15,000,000 | |

HIGHER EDUCATIONAL ACTIVITIES—OFFICE OF EDUCATION

| | 1968 estimate | 1969 estimate | Increase or decrease |
|---|---|---|---|
| 1. Program assistance: | | | |
| (a) Strengthening developing institutions | $30,000,000 | $35,000,000 | +$5,000,000 |
| (b) Colleges of Agriculture and Mechanic Arts | 11,950,000 | 11,950,000 | |
| (c) Undergraduate instructional equipment and other resources | 14,500,000 | 14,500,000 | |
| Total appropriation and obligations | 56,450,000 | 61,450,000 | +5,000,000 |

JUSTIFICATION

*Strengthening developing institutions*

Title III of the Higher Education Act of 1965 provides support to institutions of higher education which, because of inadequate financial resources, cannot achieve their potential for contributing significantly to the educational resources of the Nation. Termed "developing institutions," they are further defined as struggling for survival and isolated from the main currents of academic life. Title III support is in the form of grants for cooperative arrangements and national teaching fellowships. Cooperative arrangements may be among developing institutions, or between developing institutions and stronger colleges and universities and/or business entities and industry. National teaching fellowships are awarded to outstanding graduate students and junior faculty members of colleges and universities to teach at developing institutions.

The authorization for the program expires on June 30, 1968. Proposed legislation would extend the program for 5 years and provide an indefinite authorization for fiscal year 1969.

In fiscal year 1967, an appropriation of $30,000,000 was available. A total of 560 proposals was submitted requesting $57,000,000 and involving 558 developing colleges in 49 States, the District of Columbia, Puerto Rico, and Guam. The overwhelming need for faculty support was evidenced by slightly more than 2,300 requests for national teaching fellowships. A total of 411 cooperative grants was awarded to 501 institutions in 47 States, the District of Columbia, Puerto Rico, and Guam, and awards were made for 1,523 national teaching fellowships. The number of students benefited by this support was approximately 450,000.

This demand for Title III funds has continued in 1968, as is shown by the current processing of applications. With the logging-in process nearly completed, the most recent program statistics indicate receipt of 500 applications requesting approximately $111,000,000. Of the 500 applications, 135 are from institutions which are seeking support for the first time; the remaining 365 have been funded previously. To date, a total of 3,342 National Teaching Fellowships have been requested.

The need to formulate a funding strategy which will take account of the newly emerging patterns of institutional relationships and program types is urgent. This is in addition to decisions which relate to the most effective distribution of Title III funds between developing institutions qualifying for initial support and those which have been previously funded. A comparison of the 1968 proposed funding strategy and the pattern of requests by broad program categories follows.

| Program categories | Projected allocation | Funds requested |
|---|---|---|
| Curriculum and faculty development | $12,437,500 | $60,922,137 |
| Administrative improvement | 5,500,000 | 6,534,074 |
| Student services | 1,500,000 | 6,248,895 |
| Planning and other | 1,000,000 | 9,358,569 |
| National teaching fellowships | 9,562,500 | 27,520,269 |
| Total | 30,000,000 | 110,583,944 |

Following are some examples of the types of cooperative arrangements which are being funded:

*Administrative Improvement.*—The lack of administrative capability to locate sufficient and continuing sources of financial support has been one of the primary factors impeding institutional development. Developing institutions often are unable to cultivate such sources. To overcome this problem, Title III funds are enabling the Cooperative College Development Program of the Phelps-Stokes Fund in helping 12 predominantly Negro and 3 predominantly white institutions strengthen and/or initiate the development function in their institutions. Specific attention is being directed toward administrative management and planning, development of alumni relationships, and the responsibilities of the development office. (Amount of grant—$225,000)

*Curriculum Development Consortium.*—This program will provide a new curriculum designed to overcome imbalances in academic achievements of a group of students from educationally and culturally limited environments. It will also expedite and enrich continuing educational growth of the students. In each of thirteen participating developing institutions, the program will serve 100 entering freshmen and will be staffed by 8 teachers, a counselor, and director. The developing institutions will be working cooperatively with the Institute for Services to Education and will be using the same educational materials and plan. It is anticipated that an evaluative basis for curriculum revision and design will result from this endeavor. The Office of Economic Opportunity and the Carnegie Corporation of New York are also supporting aspects of this program. (Amount of grant—$2,514,068)

*Project Success.*—A grant to Chicago City Junior College, Urban Education Center, Illinois, with its cooperating partner of Science Research Associates, provides a learning laboratory for disadvantaged entering freshmen. It will be an experimental center, expanding opportunity for students through open-endedness in time for them to acquire basic communication skills. Students will be encouraged to stay as long per day as they will (up to ten hours) and as many weeks per year as needed to acquire basic communication skills. Academic counseling, vocational guidance, and personal counseling will be provided intensively for students. A core communication thrust will be made emphasizing listening, speaking, reading, and writing. These communication skills will be directed at content from the areas of general education organized by a theme approach. (Amount of grant—$158,800)

*College Education Achievement Program.*—This program seeks to attack a problem of many predominantly Negro institutions—the level of preparation of entering students. Students who have the potential for doing college work, but do not have the necessary skills will be recruited to attend the preparatory centers set up on the campuses of the eleven participating colleges. They will be regularly enrolled freshmen assigned to a special course of study. The curriculm will have heavy emphasis on improving communications skills—speaking, reading, writing, and listening—and the new mathematics. The cooperating partner will be the College Education Achievement Project of the Southern Association of Colleges and Schools. (Amount of grant—$1,051,000.)

*Shared Educational Television Instruction By a Consortium.*—This consortium is an attempt on the part of thirteen developing institutions of Nebraska to share their best instruction through the Statewide educational television network. The University of Nebraska, Creighton University, and the Municipal University of Omaha will act as the cooperating partners and offer expertise needed in getting such a comprehensive program underway. By sharing their most capable faculty, in many disciplinary areas, a contribution will be made to the academic atmosphere of each institution. Since many of these colleges are located in isolated areas, an educational television system offers an accessible source of enrichment that might otherwise be difficult to provide through the more traditional types of cooperative arrangements such as visiting scholars or guest lecturers. (Amount of grant—$145,057.)

The 1969 request of $35,000,000, a $5,000,000 increase over 1968, will support cooperative programs in about 350 developing colleges, an increase of 50 over 1968; and will maintain the same number of National Teaching Fellowships—1,275. This increase is urgently needed for the following reasons:

1. At this point, some of the programs being supported in developing institutions should be continued with higher levels of support because they promise to serve as real demonstrations for use by developing institutions in a wider geographical spectrum.

2. Since existing and proposed Federal programs at this particular period in higher education place large emphasis on the disadvantaged student, programs of this nature should receive continuing support and new programs should be implemented in areas where inner city problems are intense.

3. Title III is the only program now existing which addresses itself to the academic needs—financial and otherwise—in undergraduate education at small colleges, including junior and community colleges.

4. Among the developing institutions, the predominantly Negro college will be helped over a longer than one-year period since they are in such stringent financial circumstances. Therefore, Title III commitments to multiple-year programs will continue, in addition to the expected increase in new program applications.

5. Inter-institutional cooperation, which is a requirement under this program, will encourage colleges to engage in long-range planning which in effect leads to greater economies in individual institutional management and growth. To further an effort of this kind, increased funding would include allocations for cooperative program planning grants such as were awarded in 1967.

6. With the increased enrollments which are inevitable in the years ahead, strengthening the quality of all institutions is a necessity to which the Title III program can respond within the framework of its mission. Coupled with the need to provide higher education for a greater number of young people is the need to prepare more adequately youth for career responsibilities and opportunities. Response to this need is presently a part of a number of Title III grants.

The following table provides a more detailed breakdown of costs for each year.

## PROGRAM ASSISTANCE—STRENGTHENING DEVELOPING INSTITUTIONS

| | 1967 actual | | | 1968 estimate | | | 1969 estimate | | |
|---|---|---|---|---|---|---|---|---|---|
| | Number | Average Cost | Amount | Number | Average Cost | Amount | Number | Average Cost | Amount |
| Number of developing colleges participating in cooperative arrangements | 501 | $37,309 | $18,688,250 | 300 | $68,100 | $20,437,500 | 350 | $70,900 | $24,800,000 |
| National teaching fellowships | 1,523 | [1] 7,427 | 11,311,750 | 1,275 | [1] 7,500 | 9,562,500 | 1,275 | [1] 8,000 | 10,200,000 |
| Total | | | 30,000,000 | | | 30,000,000 | | | 35,000,000 |

[1] Average costs are computed as follows:

| | 1967 | 1968 | 1969 |
|---|---|---|---|
| Stipends | $6,427 | $6,500 | $6,500 |
| Dependents' allowances | 1,000 | 1,000 | 1,500 |
| (Rate) | (2½ at 400) | (2½ at 400) | (2½ at 600) |
| Total | 7,427 | 7,500 | 8,000 |

*Colleges of agriculture and mechanic arts*

The annual appropriation of $11,950,000 under the Bankhead-Jones Act, in conjunction with the permanent appropriation of $2,550,000 authorized by the Second Morrill Act, is used by the 68 land-grant colleges and universities to support instruction in agriculture and the mechanic arts.

These funds may "be applied only to instruction in agriculture, the mechanic arts, the English language and the various branches of mathematical, physical, natural, and economic science, with special reference to their applications in the industries of life, and to the facilities for such instruction," and "for providing courses for the special preparation of instructors for teaching the elements of agriculture and the mechanic arts." The term "facilities" is defined as instructional equipment; these grants may not be used for purchasing land or for purchasing or erecting buildings. The Act requires the institutions to offer instruction in military tactics, but no part of the Federal appropriations may be used for such instruction. About 94 percent of the funds each year is used for salaries of instructors, and the remaining six percent supports instructional equipment.

The amount of this appropriation is small compared with the total income of all 68 land-grant colleges and universities, but it is of considerable importance to the smaller ones. In some institutions this program provides the principal support for instruction in agriculture or in engineering. In fact, such colleges and universities depend on this appropriation for support of particular essential departments or activities. In these times of rising costs and rapidly increasing enrollments, this assistance is most important to the further development of these institutions which enroll about 20 percent of the Nation's degree-credit enrollment of about 6.5 million students.

For fiscal year 1969, the full authorization of $11,950,000 is requested for the annual appropriation. The Act provides that $7,650,000 shall be paid annually to the several States and Puerto Rico in equal shares and that $4,300,000 shall be allotted and paid annually on the basis of population. The permanent appropriation provides $50,000 to each State and Puerto Rico.

*Undergraduate instructional equipment and other resources*

*Television Equipment.*—Title VI, Part A of the Higher Education Act provides matching grants to higher education institutions in order to purchase instructional television equipment and materials, and for related minor remodeling. Funds are allotted among States on the basis of higher education enrollment and per-capita income, and are administered by State Commissions which determine the Federal share for each project. Such share is limited to 50 percent, except that it may be increased to 80 percent in cases of hardship on the part of the institution. The authorization for the program expires on June 30, 1968. Proposed legislation would extend the program for five years and provide an indefinite authorization for fiscal year 1969.

While the benefits to be derived from the use of television systems as instruments of direct instruction have been repeatedly demonstrated at all levels, it is at the college and university level that the most acute and far reaching demands have been placed upon this type of equipment. The impact of television on direct instruction at the elementary and secondary levels is illustrated by a five-fold growth in enrollments in television instruction over the three-year period 1962–65 (from approximately 3,000,000 to 15,000,000 enrollments), and a corresponding increase in the number of types of subject matter courses offered by television. This has in part made it necessary that colleges and universities, especially those training teachers, improve and increase their ability to handle direct instruction by means of closed-circuit television. The pressing needs of expanded student enrollments and changing technology further accelerate the needs for television equipment.

Elaborate closed-circuit television installations are presently in use in relatively few colleges and universities, but there is a growing demand for large numbers of medium and small size closed-circuit installations to meet the growing needs for uniform instructional lectures and demonstrations for large enrollment courses. In addition, television methods and distribution provide new ways to broaden and enrich curricula, to extend the effectiveness of skilled and talented teachers, and to improve the quality of teachers and prospective teachers through immediate play-back of their own actual teaching situations. Through video-recordings, lectures, demonstrations, and other instructional means can be recorded, up-dated, and reused to meet complex scheduling problems and to accommodate uniformly large numbers of students on the same or different campuses.

Capital costs for the installation of a complete television complex with broadcast capability on campus may run as high as $300,000 while small individual items may run less than $1,000 each. Only about one-third of approximately 2,400 accredited institutions of higher education have been financially able to install entire and necessary systems.

The program is making an effective beginning in expanding and improving such instruction. The 1969 request of $1,500,000 will continue the effort to utilize more fully the instructional capabilities of up-to-date closed-circuit television systems. Following is a comparison by year of levels of support.

| Fiscal year | Federal funds | Number of projects | Average cost | |
|---|---|---|---|---|
| | | | Total | Federal share |
| 1967 | $1,470,073 | 142 | $20,706 | $10,353 |
| 1968 (estimate) | 1,500,000 | 132 | 22,700 | 11,350 |
| 1969 (estimate) | 1,500,000 | 132 | 22,700 | 11,350 |

*Other Equipment.*—Part A of Title VI also authorizes grants to institutions of higher education for acquisition of other than television equipment and minor remodeling, in order to improve undergraduate instruction. The authorization for the program expires on June 30, 1968. Proposed legislation would extend the program for five years and provide an indefinite authorization for fiscal year 1969.

The program is designed to assist in raising the quality of instruction in higher education institutions by supporting acquisition of equipment for use in courses dealing with science, mathematics, foreign languages, history, geography, government, education, the arts, English, and other humanities. The program is particularly aimed at those colleges and universities, both public and private, which are trying to improve themselves but which, for financial reasons, are unable to participate in the educational revolution brought about through the use of new techniques for learning.

To participate, as in the television equipment program, States must submit, through designated State commissions, a plan to the Commissioner outlining project priorities and their method of determination, and the methods of determining the Federal percent of the cost of each project. Ordinarily, this share is limited to 50 percent of the cost, but may be increased to not more than 80 percent where an institution can prove that it has insufficient resources and that the inability to attain them precludes participation. State allotments are based on the number of students enrolled in institutions of higher education in each State, and its relative per-capita income.

The appropriation of $13,000,000 for fiscal year 1968 will maintain the laboratory and other special equipment grant program at about the same level as the first two years of the program. The appropriation request for 1969 of $13,000,000 will continue to help meet the increasing demands for this much-needed equipment. Following is a breakdown by year of level of support.

| Fiscal year | Federal funds | Number of projects | Average cost | |
|---|---|---|---|---|
| | | | Total | Federal share |
| 1967 | $12,935,685 | 720 | $35,932 | $17,966 |
| 1968 (estimate) | 13,000,000 | 730 | 35,600 | 17,800 |
| 1969 (estimate) | 13,000,000 | 730 | 35,600 | 17,800 |

LAND-GRANT COLLEGES AND UNIVERSITIES—1967 OBLIGATIONS, 1968 ALLOTMENT, AND 1969 ESTIMATE

| State or outlying area | Total | Nelson funds [1] | Total | Bankhead-Jones funds [2] | |
|---|---|---|---|---|---|
| | | | | Uniform grants | Variable grants [3] |
| Total | $14,500,000.00 | $2,550,000 | $11,950,000.00 | $7,650,000 | $4,300,000.00 |
| Alabama [4] | 277,646.77 | 50,000 | 227,646.77 | 150,000 | 77,646.77 |
| Alaska | 205,375.74 | 50,000 | 155,375.74 | 150,000 | 5,375.74 |
| Arizona | 230,950.92 | 50,000 | 180,950.92 | 150,000 | 30,950.92 |
| Arkansas [4] | 242,457.70 | 50,000 | 192,457.70 | 150,000 | 42,457.70 |
| California | 573,580.45 | 50,000 | 523,580.45 | 150,000 | 373,580.45 |
| Colorado | 241,689.37 | 50,000 | 191,689.37 | 150,000 | 41,689.37 |
| Connecticut | 260,259.69 | 50,000 | 210,259.69 | 150,000 | 60,259.69 |
| Delaware [4] | 210,607.86 | 50,000 | 160,607.86 | 150,000 | 10,607.86 |
| Florida [4] | 317,693.07 | 50,000 | 267,693.07 | 150,000 | 117,693.07 |
| Georgia [4] | 293,723.48 | 50,000 | 243,723.48 | 150,000 | 93,723.48 |
| Hawaii | 215,040.29 | 50,000 | 165,040.29 | 150,000 | 15,040.29 |
| Idaho | 215,848.39 | 50,000 | 165,858.39 | 150,000 | 15,858.39 |
| Illinois | 439,617.91 | 50,000 | 389,617.91 | 150,000 | 239,617.91 |
| Indiana | 310,822.39 | 50,000 | 260,822.39 | 150,000 | 110,822.39 |
| Iowa | 265,543.59 | 50,000 | 215,543.59 | 150,000 | 65,543.59 |
| Kansas | 251,783.16 | 50,000 | 201,783.16 | 150,000 | 51,783.16 |
| Kentucky [4] | 272,213.59 | 50,000 | 222,213.59 | 150,000 | 72,213.59 |
| Louisiana [4] | 277,415.79 | 50,000 | 227,415.79 | 150,000 | 77,415.79 |
| Maine | 223,038.35 | 50,000 | 173,038.35 | 150,000 | 23,038.35 |
| Maryland [4] | 273,699.93 | 50,000 | 223,699.93 | 150,000 | 73,699.93 |
| Massachusetts [4] | 322,375.97 | 50,000 | 272,375.97 | 150,000 | 122,375.97 |
| Michigan | 385,948.61 | 50,000 | 335,948.61 | 150,000 | 185,948.61 |
| Minnesota | 281,143.75 | 50,000 | 231,143.75 | 150,000 | 81,143.75 |
| Mississippi [4] | 251,771.99 | 50,000 | 201,771.99 | 150,000 | 51,771.99 |
| Missouri | 302,677.15 | 50,000 | 252,677.15 | 150,000 | 102,677.15 |
| Montana | 216,038.46 | 50,000 | 166,038.46 | 150,000 | 16,038.46 |
| Nebraska | 233,545.74 | 50,000 | 183,545.74 | 150,000 | 33,545.74 |
| Nevada | 206,780.74 | 50,000 | 156,780.74 | 150,000 | 6,780.74 |
| New Hampshire | 214,425.84 | 50,000 | 164,425.84 | 150,000 | 14,425.84 |
| New Jersey | 344,200.66 | 50,000 | 294,200.66 | 150,000 | 144,200.66 |
| New Mexico | 222,604.76 | 50,000 | 172,604.76 | 150,000 | 22,604.76 |
| New York | 598,896.69 | 50,000 | 548,896.69 | 150,000 | 398,896.69 |
| North Carolina [4] | 308,294.73 | 50,000 | 258,294.73 | 150,000 | 108,294.73 |
| North Dakota | 215,032.54 | 50,000 | 165,032.54 | 150,000 | 15,032.54 |
| Ohio | 430,710.26 | 50,000 | 380,710.26 | 150,000 | 230,710.26 |
| Oklahoma [4] | 255,340.72 | 50,000 | 205,340.72 | 150,000 | 55,340.72 |
| Oregon | 242,039.72 | 50,000 | 192,039.72 | 150,000 | 42,039.72 |
| Pennsylvania | 469,048.73 | 50,000 | 419,048.73 | 150,000 | 269,048.73 |
| Puerto Rico | 255,846.05 | 50,000 | 205,846.05 | 150,000 | 55,846.05 |
| Rhode Island | 220,429.07 | 50,000 | 170,429.07 | 150,000 | 20,429.07 |
| South Carolina [4] | 256,631.61 | 50,000 | 206,631.61 | 150,000 | 56,631.61 |
| South Dakota | 216,175.06 | 50,000 | 166,175.06 | 150,000 | 16,175.06 |
| Tennessee [4] | 284,785.74 | 50,000 | 234,785.74 | 150,000 | 84,785.74 |
| Texas [4] | 427,698.26 | 50,000 | 377,698.26 | 150,000 | 227,698.26 |
| Utah | 221,169.21 | 50,000 | 171,169.21 | 150,000 | 21,169.21 |
| Vermont | 209,267.04 | 50,000 | 159,267.04 | 150,000 | 9,267.04 |
| Virginia [4] | 294,289.96 | 50,000 | 244,289.96 | 150,000 | 94,289.96 |
| Washington | 267,817.72 | 50,000 | 217,817.72 | 150,000 | 67,817.72 |
| West Virginia | 244,220.14 | 50,000 | 194,220.14 | 150,000 | 44,220.14 |
| Wisconsin | 293,929.34 | 50,000 | 243,929.34 | 150,000 | 93,929.34 |
| Wyoming | 207,845.30 | 50,000 | 157,845.30 | 150,000 | 7,845.30 |

[1] Permanent appropriation. Act approved Aug. 30, 1890, as amended; and act approved Mar. 4, 1907.
[2] Annual appropriation. Act approved June 29, 1935, as amended June 12, 1952, and July 14, 1960.
[3] Based on U.S. Census of Population.
[4] 2 land-grant institutions in this State receive a stipulated proportion of the funds allotted.

UNDERGRADUATE INSTRUCTIONAL EQUIPMENT AND OTHER RESOURCES

TELEVISION EQUIPMENT (HIGHER EDUCATION ACT, TITLE VI-A)

| State of outlying area | 1967 obligations | 1968 estimate | 1969 estimate |
|---|---|---|---|
| Total | $1,470,073 | [1] $1,500,000 | [2] $1,500,000 |
| Alabama | 22,347 | 24,704 | 24,642 |
| Alaska | | 868 | 871 |
| Arizona | 18,382 | 17,266 | 17,385 |
| Arkansas | 14,000 | 14,390 | 14,357 |
| California | 167,319 | 164,029 | 165,796 |
| Colorado | 20,119 | 21,098 | 21,197 |
| Connecticut | 17,002 | 17,024 | 17,080 |
| Delaware | | 2,735 | 2,762 |
| District of Columbia | 5,171 | 11,203 | 11,197 |
| Florida | 38,111 | 39,965 | 39,876 |
| Georgia | 26,108 | 26,363 | 26,193 |
| Hawaii | 4,978 | 5,314 | 5,340 |
| Idaho | 6,225 | 6,598 | 6,612 |
| Illinois | 67,856 | 66,341 | 66,232 |
| Indiana | 38,755 | 38,043 | 37,812 |
| Iowa | 26,460 | 26,595 | 26,188 |
| Kansas | 23,926 | 22,670 | 22,676 |
| Kentucky | 23,515 | 24,592 | 24,541 |
| Louisiana | 28,748 | 28,672 | 28,561 |
| Maine | 6,500 | 6,220 | 6,175 |
| Maryland | 21,785 | 21,417 | 21,441 |
| Massachusetts | 50,440 | 52,261 | 52,376 |
| Michigan | 66,763 | 66,468 | 65,723 |
| Minnesota | 33,504 | 32,885 | 32,819 |
| Mississippi | 13,589 | 19,224 | 19,211 |
| Missouri | 35,900 | 35,927 | 35,989 |
| Montana | 6,258 | 6,133 | 6,167 |
| Nebraska | 13,876 | 13,326 | 13,231 |
| Nevada | 1,565 | 1,548 | 1,592 |
| New Hampshire | 5,973 | 6,451 | 6,446 |
| New Jersey | 26,246 | 25,840 | 26,038 |
| New Mexico | 8,528 | 8,269 | 8,286 |
| New York | 120,071 | 117,053 | 117,817 |
| North Carolina | 36,613 | 37,726 | 37,500 |
| North Dakota | 7,120 | 6,944 | 6,953 |
| Ohio | 70,469 | 68,888 | 68,742 |
| Oklahoma | 26,488 | 25,234 | 25,127 |
| Oregon | 18,951 | 19,645 | 19,742 |
| Pennsylvania | 73,787 | 77,041 | 76,950 |
| Rhode Island | 8,546 | 8,042 | 8,040 |
| South Carolina | 15,063 | 15,873 | 15,814 |
| South Dakota | 7,178 | 7,358 | 7,313 |
| Tennessee | 31,923 | 31,409 | 31,238 |
| Texas | 84,010 | 84,339 | 84,278 |
| Utah | 17,205 | 17,296 | 17,470 |
| Vermont | 4,590 | 4,626 | 4,574 |
| Virginia | 25,576 | 25,945 | 25,836 |
| Washington | 29,029 | 32,342 | 32,243 |
| West Virginia | 14,696 | 14,436 | 14,415 |
| Wisconsin | 35,836 | 36,322 | 36,073 |
| Wyoming | 2,973 | 2,973 | 3,003 |
| American Samoa | | | |
| Guam | | 295 | 295 |
| Puerto Rico | | 11,596 | 11,588 |
| Virgin Islands | | 178 | 177 |

[1] One-half distributed on the basis of total full-time and full-time equivalent of degree-credit and non-degree-credit enrollment in higher education institutions, fall 1966; and ½ on the basis of State products of (1) fiscal year 1968 allotment ratios based on per capita income, with limits of .66⅔ and .33⅓ and (2) fall 1966 enrollment, as above.

[2] One-half distributed on the basis of estimated full-time and full-time equivalent of degree-credit and non-degree-credit enrollment in higher education institutions, fall 1966; and ½ on the basis of State products of (1) fiscal year 1969 allotment ratios based on per capita income, with limits of .66⅔ and .33⅓ and (2) the fall 1966 enrollment, as above.

OTHER EQUIPMENT (HIGHER EDUCATION ACT, TITLE VI-A)

| State or outlying area | 1967 obligations | 1968 estimate | 1969 estimate |
|---|---|---|---|
| Total | $12,935,685 | [1] $13,000,000 | [2] $13,000,000 |
| Alabama | 193,668 | 214,103 | 213,568 |
| Alaska | 6,638 | 7,522 | 7,546 |
| Arizona | 149,948 | 149,639 | 150,677 |
| Arkansas | 127,683 | 124,712 | 124,423 |
| California | 1,450,104 | 1,421,587 | 1,436,897 |
| Colorado | 173,121 | 182,848 | 183,708 |
| Connecticut | 147,353 | 147,542 | 148,026 |
| Delaware | 17,786 | 23,705 | 23,935 |
| District of Columbia | 80,497 | 97,092 | 97,045 |
| Florida | 330,296 | 346,368 | 345,592 |
| Georgia | 207,884 | 228,476 | 227,007 |
| Hawaii | 43,142 | 46,048 | 46,279 |
| Idaho | 53,305 | 57,177 | 57,298 |
| Illinois | 588,086 | 574,954 | 574,008 |
| Indiana | 325,436 | 329,704 | 327,707 |
| Iowa | 229,325 | 230,486 | 226,966 |
| Kansas | 207,355 | 196,475 | 196,528 |
| Kentucky | 210,391 | 213,125 | 212,681 |
| Louisiana | 249,146 | 248,493 | 247,530 |
| Maine | 56,399 | 53,911 | 53,515 |
| Maryland | 188,796 | 185,616 | 185,822 |
| Massachusetts | 437,154 | 452,923 | 453,925 |
| Michigan | 577,607 | 576,059 | 569,601 |
| Minnesota | 293,104 | 284,999 | 284,433 |
| Mississippi | 163,685 | 166,604 | 166,490 |
| Missouri | 311,137 | 311,367 | 311,910 |
| Montana | 52,890 | 53,155 | 53,446 |
| Nebraska | 107,979 | 115,495 | 114,670 |
| Nevada | 13,563 | 13,418 | 13,793 |
| New Hampshire | 49,934 | 55,911 | 55,869 |
| New Jersey | 227,465 | 223,944 | 225,661 |
| New Mexico | 73,910 | 71,663 | 71,813 |
| New York | 1,040,626 | 1,014,470 | 1,021,083 |
| North Carolina | 317,314 | 326,964 | 325,004 |
| North Dakota | 61,709 | 60,183 | 60,260 |
| Ohio | 610,733 | 597,024 | 595,764 |
| Oklahoma | 229,566 | 218,697 | 217,771 |
| Oregon | 164,245 | 170,258 | 171,098 |
| Pennsylvania | 639,488 | 667,690 | 666,892 |
| Rhode Island | 74,064 | 69,697 | 69,676 |
| South Carolina | 130,542 | 137,566 | 137,059 |
| South Dakota | 62,211 | 63,769 | 63,381 |
| Tennessee | 295,053 | 272,215 | 270,735 |
| Texas | 728,084 | 730,942 | 730,408 |
| Utah | 152,737 | 149,899 | 151,406 |
| Vermont | 39,778 | 40,092 | 39,643 |
| Virginia | 221,728 | 224,857 | 223,910 |
| Washington | 251,586 | 280,294 | 279,435 |
| West Virginia | 127,359 | 125,109 | 124,928 |
| Wisconsin | 310,579 | 314,790 | 312,632 |
| Wyoming | 25,764 | 25,769 | 26,024 |
| American Samoa | | | |
| Guam | 3,045 | 2,559 | 2,557 |
| Puerto Rico | 104,687 | 100,499 | 100,430 |
| Virgin Islands | | 1,536 | 1,535 |

[1] One-half distributed on the basis of total full-time and full-time equivalent of degree-credit and non-degree-credit enrollment in higher education institutions, fall 1966; and ½ on the basis of State products of (1) fiscal year 1968 allotment ratios based on per capita income with limits of .66⅔ and .33⅓ and (2) fall 1966 enrollment, as above.

[2] One-half distributed on the basis of estimated full-time and full-time equivalent of degree-credit and non-degree-credit enrollment in higher education institutions, fall 1966; and ½ on the basis of State products of (1) fiscal year 1969 allotment ratios based on per capita income, with limits of .66⅔ and .33⅓ and (2) the fall 1966 enrollment, as above.

APPROPRIATION

| | 1968 estimate | | 1969 estimate | | Increase or decrease | |
|---|---|---|---|---|---|---|
| | Positions | Amount | Positions | Amount | Positions | Amount |
| 2. Construction: | | | | | | |
| (a) Public community colleges and technical Institutes | | $100,000,000 | | $34,000,000 | | −$66,000,000 |
| (b) Other undergraduate facilities | | 300,000,000 | | 33,000,000 | | −267,000,000 |
| (c) Graduate facilities | | 50,000,000 | | 8,000,000 | | −42,000,000 |
| (d) State administration and planning | | 7,000,000 | | 7,000,000 | | |
| (e) Technical services: | | | | | | |
| Personnel compensation and benefits | 253 | 2,455,000 | 253 | 2,996,000 | | +541,000 |
| Other expenses | | 289,000 | | 561,000 | | +272,000 |
| Subtotal | 253 | 2,744,000 | 253 | 3,557,000 | | +813,000 |
| Total appropriation | 253 | 459,744,000 | 253 | 85,557,000 | | −374,187,000 |

OBLIGATIONS

| | | | | | | |
|---|---|---|---|---|---|---|
| Construction: | | | | | | |
| (a) Public community colleges and technical institutes | | $67,000,000 | | $67,000,000 | | |
| (b) Other undergraduate facilities | | 207,452,112 | | 133,000,000 | | −$74,452,112 |
| (c) Graduate facilities | | 33,000,000 | | 25,576,994 | | −7,423,006 |
| (d) State administration and planning | | 7,000,000 | | 7,000,000 | | |
| (e) Technical services: | | | | | | |
| Personnel compensation and benefits | 253 | 2,455,000 | 253 | 2,996,000 | | +541,000 |
| Other expenses | | 289,000 | | 561,000 | | +272,000 |
| Subtotal | 253 | 2,744,000 | 253 | 3,557,000 | | +813,000 |
| Total obligations | 253 | 317,196,112 | 253 | 236,133,994 | | −81,062,118 |

JUSTIFICATION

The Higher Education Facilities Act of 1963 is making a significant contribution by providing additional college and university academic facilites to meet the demands of increasing enrollments and rising costs in the Nation. Some decreases are recommended for fiscal year 1969 in order to give higher priority to programs contributing to "human resources" such as student aid and teacher training. These decreases, however, do not reflect the current construction picture in terms of project approvals in prior years which are not yet completed. For example, including construction loans which are discussed under "Higher Education Facilities Loan Fund," it is anticipated that the number of projects under construction at the end of each year will total almost 1,400 in 1968 and over 1,500 in 1969. This compares with new project approvals of 687 and 503 for 1968 and 1969 respectively.

APPROPRIATION

| | 1968 estimate | 1969 estimate | Increase or decrease |
|---|---|---|---|
| 3. STUDENT AID | | | |
| (a) Educational opportunity grants: | | | |
| (1) Grants to higher education institutions | $140,600,000 | $140,600,000 | ---------- |
| (2) Identification and encouragement of educational talent | 4,000,000 | 8,500,000 | +$4,500,000 |
| (b) Direct loans: | | | |
| (1) Contributions to loan funds | 190,000,000 | 190,000,000 | ---------- |
| (2) Loans to educational institutions | 2,000,000 | 2,000,000 | ---------- |
| (3) Cancellation of student loans | 1,400,000 | 1,400,000 | ---------- |
| (c) Insured loans: | | | |
| (1) Advances for reserve funds | | 12,500,000 | +12,500,000 |
| (2) Payments for interest, fees, and computer services | 40,000,000 | 64,900,000 | +24,900,000 |
| (d) Work-study programs | 139,900,000 | 139,900,000 | ---------- |
| Total appropriation | 517,900,000 | 559,800,000 | +41,900,000 |

OBLIGATIONS

| | | | |
|---|---|---|---|
| STUDENT AID | | | |
| (a) Educational opportunity grants: | | | |
| (1) Grants to higher education institutions | $133,027,101 | $149,600,000 | +$16,572,899 |
| (2) Identification and encouragement of educational talent | 4,000,000 | 8,500,000 | +4,500,000 |
| (b) Direct Loans: | | | |
| (1) Contribution to loan funds | 184,000,000 | 190,000,000 | +6,000,000 |
| (2) Loan to educational institutions | 2,000,000 | 2,000,000 | ---------- |
| (3) Cancellation of student loans | 1,400,000 | 1,400,000 | ---------- |
| (c) Insured Loans: | | | |
| (1) Advances for reserve funds | 7,284,654 | 12,500,000 | +5,215,346 |
| (2) Payments for interest, fees, and computer services | 37,288,000 | 97,195,029 | +59,907,029 |
| (d) Work-study programs | 134,300,000 | 145,500,000 | +11,200,000 |
| Total obligations | 503,299,755 | 606,695,029 | +103,395,274 |

JUSTIFICATION

The Nation's rapid technological development is causing a severe shortage of competent, well-trained professional and technical personnel; and it appears that this shortage will become more acute in the future. The number of high school graduates who are capable of securing a college education and thus alleviating the critical shortage of trained personnel is mounting each year. However, the costs of obtaining a college education are rising at an alarming rate and increasing numbers of high school graduates are finding it impossible to pursue a higher education without financial help. In the past few years, the Administration and Congress have authorized and funded a comprehensive program of grants, loans, and work opportunities to assist students in obtaining a college education. Such a program is vitally important if the United States is to meet present shortages and future needs.

Three of the four programs offering aid to college students are administered by the colleges and universities. The institutions are being encouraged, to the extent of available funds, to use these three programs to develop a financial aid "package" to fit each eligible student's needs. Educational Opportunity Grants are aimed towards the neediest students—those from lower income families who could not attend college if they had to go into debt for every credit hour or every new textbook. The National Defense Student Loan Program assists students who are unable to obtain loans from commercial sources and are in need of these funds to pursue a higher education. The College Work-Study Program supplements the other two categories of aid by providing part-time employment opportunities to students. Although a student cannot earn sufficient funds from this program to pay for all of his costs, he can defray a portion of them.

The proposed Educational Opportunity Act would amend these three programs beginning in fiscal year 1970 to make them more consistent and flexible in terms of the needs of individual students and their administration by the institutions.

Some of the major changes would be as follows: (1) Present State allotment formulas would be replaced by a national funding pattern so that each institution would receive the same proportionate share of its annual request as other institutions; (2) up to 20 percent of the funds allocated to an institution for use in one of the three programs could be transferred by the institution to the other programs; (3) the amount an undergraduate could borrow annually under the direct loan program would be increased from $1,000 to $1,500; and (4) varying administrative overhead authorities would be replaced with a single annual allowance for each institution of up to three percent of program funds or $125,000, whichever is less.

The fourth program of financial aid to college students is the Insured Loan Program which is geared toward youths from middle- and upper-middle income families who are excluded from virtually all other forms of aid but whose families are finding it increasingly difficult to bear the brunt of rising college costs. The cost of attending college is now the second largest expenditure a family will make and, unlike the cost of a home which is the largest expenditure, falls due in a period of only four or five years. This program permits a student to borrow for his education from his local bank and it defers repayment until college is completed.

The following table provides a general idea of the extent to which these programs are reaching the Nation's total college population:

| | Fiscal year 1967 | Fiscal year 1968 | Fiscal year 1969 |
|---|---|---|---|
| Total fall degree-credit enrollment in higher education institutions | 6,055,000 | 6,541,000 | 6,923,000 |
| Educational opportunity grants: | | | |
| Number of students aided | 226,800 | 276,100 | 284,100 |
| Percent of total enrollment | 3.7 | 4.2 | 4.1 |
| Direct loans: | | | |
| Number of students aided | 394,000 | 405,000 | 408,000 |
| Percent of total enrollment | 6.5 | 6.2 | 5.9 |
| Insured loans: | | | |
| Number of students aided | 330,088 | 560,000 | 750,000 |
| Percent of total enrollment | 5.5 | 8.6 | 10.8 |
| Work-study programs: | | | |
| Number of students aided | [1] 220,000 | [1] 212,500 | [1] 227,500 |
| Percent of total enrollment | 3.6 | 3.2 | 3.3 |

[1] Represents average of number of students employed in each semester.

Note.—Amounts and percentages are not additive since many students participate in more than 1 program.

CONSTRUCTION—PUBLIC COMMUNITY COLLEGES AND TECHNICAL INSTITUTES

| State or outlying areas | 1967 obligations | 1968 estimate | 1969 estimate |
|---|---|---|---|
| Totals | $102,145,969 | [1] $67,000,000 | [2] $67,000,000 |
| Alabama | 2,396,883 | 1,626,768 | 1,621,641 |
| Alaska | | 59,393 | 59,801 |
| Arizona | 894,687 | 640,961 | 649,785 |
| Arkansas | 51,023 | 874,834 | 871,911 |
| California | 6,953,420 | 5,265,020 | 5,396,371 |
| Colorado | 1,087,393 | 748,599 | 756,103 |
| Connecticut | 343,054 | 701,230 | 707,056 |
| Delaware | 166,211 | 128,815 | 131,767 |
| District of Columbia | | 115,866 | 115,807 |
| Florida | 2,913,451 | 1,871,424 | 1,864,788 |
| Georgia | 1,431,073 | 1,680,197 | 1,661,784 |
| Hawaii | 411,401 | 261,525 | 264,459 |
| Idaho | 702,034 | 321,697 | 323,238 |
| Illinois | 4,078,102 | 2,674,158 | 2,666,241 |
| Indiana | 4,236,985 | 1,660,821 | 1,641,737 |
| Iowa | 1,750,499 | 1,147,069 | 1,113,841 |
| Kansas | 3,304,158 | 828,828 | 829,870 |
| Kentucky | 1,900,212 | 1,454,405 | 1,449,974 |
| Louisiana | 1,033,992 | 1,478,016 | 1,468,756 |
| Maine | | 448,711 | 442,938 |
| Maryland | 2,043,113 | 1,080,666 | 1,083,916 |
| Massachusetts | 3,374,158 | 1,732,775 | 1,742,120 |
| Michigan | 5,568,663 | 2,720,894 | 2,659,478 |
| Minnesota | 2,336,291 | 1,491,648 | 1,486,857 |
| Mississippi | 1,956,209 | 1,002,140 | 1,001,635 |
| Missouri | 3,317,147 | 1,582,831 | 1,589,332 |
| Montana | 269,315 | 292,342 | 295,600 |
| Nebraska | 862,979 | 568,520 | 561,081 |
| Nevada | | 89,723 | 95,663 |
| New Hampshire | | 263,667 | 263,486 |
| New Jersey | 2,808,790 | 1,784,573 | 1,816,324 |
| New Mexico | 677,378 | 478,603 | 480,746 |
| New York | 6,513,280 | 4,036,894 | 4,098,941 |
| North Carolina | 3,837,983 | 2,159,919 | 2,138,248 |
| North Dakota | 120,725 | 312,788 | 313,750 |
| Ohio | 5,207,048 | 3,463,504 | 3,451,103 |
| Oklahoma | 1,391,903 | 1,027,455 | 1,020,125 |
| Oregon | 1,237,240 | 777,176 | 785,397 |
| Pennsylvania | 6,397,743 | 4,311,271 | 4,303,939 |
| Rhode Island | 470,762 | 296,236 | 296,281 |
| South Carolina | 1,668,208 | 1,192,296 | 1,185,418 |
| South Dakota | | 346,331 | 342,799 |
| Tennessee | 1,954,355 | 1,563,455 | 1,549,432 |
| Texas | 5,646,676 | 3,572,262 | 3,569,878 |
| Utah | 725,641 | 479,868 | 489,310 |
| Vermont | 256,338 | 179,007 | 175,414 |
| Virginia | 2,181,329 | 1,553,572 | 1,542,328 |
| Washington | 1,735,224 | 1,115,036 | 1,108,781 |
| West Virginia | 377,926 | 953,457 | 951,614 |
| Wisconsin | 2,519,948 | 1,633,948 | 1,612,931 |
| Wyoming | 202,769 | 134,560 | 137,266 |
| American Samoa | | 14,264 | 14,257 |
| Guam | | 35,100 | 35,083 |
| Puerto Rico | 1,137,198 | 753,272 | 752,893 |
| Virgin Islands | 60,978 | 10,710 | 10,705 |
| Adjustment | 1,634,074 | | |

[1] Distributed on the basis of the State products of (1) total high school graduates, 1965–66, and (2) fiscal year 1968 allotment ratios, with limits of 0.66⅔ and 0.33⅓.

[2] Distributed on the basis of the State products of (1) total high school graduates, 1965–66, and (2) fiscal year 1969 allotment ratios, with limits of 0.66 ⅔ and 0.33 ⅓.

CONSTRUCTION—OTHER UNDERGRADUATE FACILITIES

| State or outlying areas | 1967 obligations | 1968 estimate | 1969 estimate |
|---|---|---|---|
| Total | $344,929,969 | [1] $200,000,000 | [1] $133,000,000 |
| Alabama | 5,352,342 | 3,198,834 | 2,127,225 |
| Alaska | 356,954 | 169,998 | 113,048 |
| Arizona | 3,505,921 | 1,877,254 | 1,248,374 |
| Arkansas | 2,726,356 | 1,793,588 | 1,192,736 |
| California | 38,451,541 | 21,845,718 | 14,527,401 |
| Colorado | 4,272,966 | 2,483,671 | 1,651,642 |
| Connecticut | 5,437,890 | 2,676,180 | 1,779,660 |
| Delaware | 815,887 | 467,984 | 311,209 |
| District of Columbia | 2,180,238 | 1,203,447 | 800,293 |
| Florida | 6,901,622 | 5,196,834 | 3,455,895 |
| Georgia | 7,452,120 | 3,745,661 | 2,490,865 |
| Hawaii | 1,298,329 | 759,930 | 505,353 |
| Idaho | 1,210,839 | 816,985 | 543,295 |
| Illinois | 18,096,189 | 10,163,100 | 6,758,461 |
| Indiana | 6,836,334 | 5,132,091 | 3,412,841 |
| Iowa | 5,758,223 | 3,273,427 | 2,176,829 |
| Kansas | 2,667,208 | 2,646,008 | 1,759,595 |
| Kentucky | 5,266,600 | 3,003,519 | 1,997,341 |
| Louisiana | 7,353,311 | 3,519,830 | 2,340,687 |
| Maine | 1,721,346 | 890,680 | 592,302 |
| Maryland | 5,324,809 | 3,253,871 | 2,163,824 |
| Massachusetts | 9,594,404 | 6,360,586 | 4,229,790 |
| Michigan | 14,545,616 | 9,268,702 | 6,163,687 |
| Minnesota | 7,509,089 | 4,251,238 | 2,827,073 |
| Mississippi | 3,410,619 | 2,240,072 | 1,489,647 |
| Missouri | 7,254,417 | 4,539,156 | 3,018,539 |
| Montana | 1,596,219 | 786,225 | 522,841 |
| Nebraska | 2,969,273 | 1,640,176 | 1,090,717 |
| Nevada | 710,165 | 328,371 | 218,367 |
| New Hampshire | 1,129,210 | 770,006 | 512,054 |
| New Jersey | 8,952,786 | 5,055,032 | 3,361,596 |
| New Mexico | 1,952,241 | 1,099,511 | 731,175 |
| New York | 30,572,706 | 16,867,427 | 11,216,838 |
| North Carolina | 8,425,519 | 4,748,834 | 3,157,974 |
| North Dakota | 1,422,445 | 788,666 | 524,463 |
| Ohio | 17,654,479 | 10,074,030 | 6,699,230 |
| Oklahoma | 5,314,236 | 2,821,022 | 1,875,980 |
| Oregon | 4,126,807 | 2,442,360 | 1,624,169 |
| Pennsylvania | 19,210,288 | 11,036,512 | 7,339,280 |
| Rhode Island | 1,714,172 | 950,233 | 631,905 |
| South Carolina | 4,217,126 | 2,200,358 | 1,463,238 |
| South Dakota | 1,586,877 | 839,615 | 558,344 |
| Tennessee | 6,980,387 | 3,669,668 | 2,440,329 |
| Texas | 17,864,492 | 10,481,437 | 6,970,156 |
| Utah | 2,982,629 | 1,690,586 | 1,124,239 |
| Vermont | 893,673 | 506,765 | 336,998 |
| Virginia | 6,468,321 | 3,702,340 | 2,462,057 |
| Washington | 6,469,743 | 3,921,752 | 2,607,965 |
| West Virginia | 4,352,888 | 1,841,829 | 1,224,817 |
| Wisconsin | 8,281,590 | 4,778,123 | 3,177,452 |
| Wyoming | 675,113 | 376,968 | 250,684 |
| American Samoa | | 21,645 | 14,394 |
| Guam | 153,633 | 60,490 | 40,225 |
| Puerto Rico | 3,057,797 | 1,692,829 | 1,125,732 |
| Virgin Islands | | 28,826 | 19,169 |
| Adjustment | —106,016 | | |

[1] ½ distributed on the basis of the estimated full-time and full-time equivalent of degree-credit and nondegree-credit enrollment in institutions of higher education, fall 1966, and ½ on the basis of enrollment in grades 9-12 of public and nonpublic schools, fall 1966.

CONSTRUCTION—STATE ADMINISTRATION

| State and outlying areas | 1967 obligations | 1968 estimate | 1969 estimate |
|---|---|---|---|
| Total | $2,402,538 | [1] $3,000,000 | [1] $3,000,000 |
| Alabama | 21,696 | 52,985 | 52,985 |
| Alaska | 13,900 | 18,000 | 18,000 |
| Arizona | 17,842 | 41,808 | 41,808 |
| Arkansas | 18,132 | 42,239 | 42,239 |
| California | 99,393 | 183,020 | 183,020 |
| Colorado | 31,000 | 45,031 | 45,031 |
| Connecticut | 46,319 | 46,319 | 46,319 |
| Delaware | 30,023 | 30,023 | 30,023 |
| Florida | 33,258 | 66,164 | 66,164 |
| Georgia | 23,424 | 57,468 | 57,468 |
| Hawaii | 32,500 | 32,501 | 32,501 |
| Idaho | 29,492 | 33,215 | 33,215 |
| Illinois | 102,040 | 102,040 | 102,040 |
| Indiana | 66,461 | 66,461 | 66,461 |
| Iowa | 52,323 | 52,323 | 52,323 |
| Kansas | 20,136 | 47,169 | 47,169 |
| Kentucky | 51,125 | 51,125 | 51,125 |
| Louisiana | 36,292 | 55,295 | 55,295 |
| Maine | 22,664 | 34,638 | 34,638 |
| Maryland | 27,327 | 51,709 | 51,709 |
| Massachusetts | 59,320 | 73,097 | 73,097 |
| Michigan | 37,110 | 95,632 | 95,632 |
| Minnesota | 27,033 | 60,269 | 60,269 |
| Mississippi | 45,013 | 45,013 | 45,013 |
| Missouri | 25,062 | 62,307 | 62,307 |
| Montana | 14,676 | 33,056 | 33,056 |
| Nebraska | 17,268 | 39,789 | 39,789 |
| Nevada | 12,210 | 21,759 | 21,759 |
| New Hampshire | 13,812 | 32,518 | 32,518 |
| New Jersey | 66,511 | 66,511 | 66,511 |
| New Mexico | 37,477 | 35,677 | 35,677 |
| New York | 152,753 | 152,753 | 152,753 |
| North Carolina | 26,958 | 65,883 | 65,883 |
| North Dakota | 15,000 | 33,107 | 33,107 |
| Ohio | 46,346 | 106,846 | 106,846 |
| Oklahoma | 49,816 | 49,816 | 49,816 |
| Oregon | 44,981 | 45,006 | 45,006 |
| Pennsylvania | 113,560 | 113,560 | 113,560 |
| Rhode Island | 19,476 | 34,183 | 34,183 |
| South Carolina | 34,450 | 45,302 | 45,302 |
| South Dakota | 33,314 | 33,314 | 33,314 |
| Tennessee | 52,935 | 57,203 | 57,203 |
| Texas | 67,104 | 108,267 | 108,267 |
| Utah | 17,251 | 39,499 | 39,499 |
| Vermont | 30,000 | 30,641 | 30,641 |
| Virginia | 46,692 | 56,060 | 56,060 |
| Washington | 50,360 | 54,702 | 54,702 |
| West Virginia | 36,350 | 42,780 | 42,780 |
| Wisconsin | 61,750 | 63,488 | 63,488 |
| Wyoming | 27,199 | 27,199 | 27,199 |
| District of Columbia | 34,662 | 34,837 | 34,837 |
| American Samoa | | | |
| Canal Zone | | | |
| Guam | 6,000 | 6,000 | 6,000 |
| Puerto Rico | 40,929 | 40,929 | 40,929 |
| Virgin Islands | 2,721 | 6,000 | 6,000 |
| Adjustment | 261,092 | | |
| Reserve | | 77,464 | 77,464 |

[1] Allocations determined in direct relationship to individual total State allotments for grants under both programs during fiscal year 1967, with each State, Puerto Rico, and the District of Columbia receiving a minimum of $18,000 and the outlying areas of Guam and the Virgin Islands receiving $6,000.

CONSTRUCTION—STATE PLANNING

| State or outlying area | 1967 obligations | 1968 estimate | 1969 estimate |
|---|---|---|---|
| Total | $3,916,009 | $4,000,000 | $4,000,000 |
| Alabama | 64,238 | 66,488 | 66,488 |
| Alaska | 23,212 | 23,267 | 23,267 |
| Arizona | 40,148 | 40,904 | 40,904 |
| Arkansas | 47,302 | 47,557 | 47,557 |
| California | 285,282 | 288,928 | 288,928 |
| Colorado | 51,828 | 51,945 | 51,945 |
| Connecticut | 65,844 | 67,011 | 67,011 |
| Delaware | 25,694 | 25,859 | 25,859 |
| District of Columbia | 44,090 | 43,435 | 43,435 |
| Florida | 89,204 | 88,483 | 88,483 |
| Georgia | 81,612 | 83,388 | 83,388 |
| Hawaii | 28,150 | 28,180 | 28,180 |
| Idaho | 32,118 | 32,710 | 32,710 |
| Illinois | 168,190 | 167,394 | 167,394 |
| Indiana | 85,554 | 84,386 | 84,386 |
| Iowa | 77,962 | 76,602 | 76,602 |
| Kansas | 69,786 | 70,135 | 70,135 |
| Kentucky | 68,180 | 69,663 | 69,663 |
| Louisiana | | 61,591 | 61,591 |
| Maine | 42,192 | 41,589 | 41,589 |
| Maryland | 72,852 | 74,187 | 74,187 |
| Massachusetts | 132,566 | 133,664 | 133,664 |
| Michigan | 134,172 | 135,511 | 135,511 |
| Minnesota | 84,094 | 82,535 | 82,535 |
| Mississippi | 66,282 | 64,965 | 64,965 |
| Missouri | 96,300 | 95,634 | 95,634 |
| Montana | 33,286 | 33,032 | 33,032 |
| Nebraska | 47,594 | 46,346 | 46,346 |
| Nevada | 23,066 | 23,001 | 23,001 |
| New Hampshire | 36,060 | 37,976 | 37,966 |
| New Jersey | 85,846 | 84,639 | 84,639 |
| New Mexico | 35,038 | 35,112 | 35,112 |
| New York | 265,864 | 259,521 | 259,521 |
| North Carolina | 97,380 | 97,980 | 97,980 |
| North Dakota | 35,330 | 34,455 | 34,455 |
| Ohio | 147,020 | 146,560 | 146,560 |
| Oklahoma | 64,968 | 63,095 | 63,095 |
| Oregon | 57,000 | 59,010 | 59,010 |
| Pennsylvania | 189,214 | 190,824 | 190,824 |
| Rhode Island | 36,206 | 35,898 | 35,898 |
| South Carolina | 58,100 | 57,999 | 57,999 |
| South Dakota | 36,206 | 37,510 | 37,510 |
| Tennessee | 79,860 | 78,444 | 78,444 |
| Texas | 161,328 | 161,708 | 161,708 |
| Utah | 37,958 | 37,707 | 37,707 |
| Vermont | 34,892 | 34,775 | 34,775 |
| Virginia | 79,568 | 79,867 | 79,867 |
| Washington | 66,866 | 68,950 | 68,950 |
| West Virginia | 49,200 | 48,899 | 48,899 |
| Wisconsin | 96,650 | 95,275 | 95,275 |
| Wyoming | 26,716 | 26,689 | 26,689 |
| Guam | 21,005 | 21,238 | 21,238 |
| Puerto Rico | 36,936 | 36,615 | 36,615 |
| Virgin Islands | | 20,864 | 20,864 |

STUDENT AID

EDUCATIONAL OPPORTUNITY GRANTS (HIGHER EDUCATION ACT TITLE IV-A)

| State or outlying area | 1967 obligations | 1968 estimate [1] | 1969 estimate [1] |
|---|---|---|---|
| Total | $108,772,899 | $50,700,000 | $33,400,000 |
| Alabama | 2,267,200 | 718,369 | 473,245 |
| Alaska | 48,900 | 21,639 | 14,255 |
| Arizona | 956,700 | 570,370 | 375,747 |
| Arkansas | 1,461,800 | 480,519 | 316,555 |
| California | 6,207,200 | 5,086,242 | 3,350,701 |
| Colorado | 1,354,500 | 739,673 | 487,279 |
| Connecticut | 1,258,950 | 630,689 | 415,483 |
| Delaware | 236,650 | 96,401 | 63,507 |
| District of Columbia | 832,650 | 427,836 | 281,848 |
| Florida | 2,688,650 | 1,200,155 | 790,634 |
| Georgia | 1,799,150 | 854,832 | 563,144 |
| Hawaii | 194,450 | 178,501 | 117,592 |
| Idaho | 443,800 | 210,385 | 138,597 |
| Illinois | 4,707,500 | 2,495,496 | 1,643,976 |
| Indiana | 3,691,400 | 1,405,165 | 925,691 |
| Iowa | 2,428,400 | 982,096 | 646,983 |
| Kansas | 2,180,700 | 859,108 | 565,961 |
| Kentucky | 2,361,000 | 787,654 | 518,888 |
| Louisiana | 1,992,300 | 946,466 | 623,510 |
| Maine | 549,600 | 203,615 | 134,137 |
| Maryland | 935,250 | 748,148 | 492,862 |
| Massachusetts | 4,134,000 | 1,864,781 | 1,228,475 |
| Michigan | 4,830,400 | 2,292,475 | 1,510,230 |
| Minnesota | 3,164,200 | 1,199,948 | 790,498 |
| Mississippi | 1,891,100 | 606,182 | 399,339 |
| Missouri | 2,854,300 | 1,293,068 | 851,843 |
| Montana | 591,700 | 227,980 | 150,188 |
| Nebraska | 904,200 | 487,134 | 320,913 |
| Nevada | 122,250 | 59,065 | 38,911 |
| New Hampshire | 469,400 | 210,953 | 138,971 |
| New Jersey | 2,045,300 | 894,661 | 589,382 |
| New Mexico | 723,700 | 270,522 | 178,214 |
| New York | 8,704,050 | 3,989,452 | 2,628,161 |
| North Carolina | 3,081,050 | 1,199,483 | 790,192 |
| North Dakota | 613,050 | 248,870 | 163,950 |
| Ohio | 4,924,750 | 2,457,488 | 1,618,937 |
| Oklahoma | 1,832,000 | 864,095 | 569,246 |
| Oregon | 1,506,300 | 667,895 | 439,994 |
| Pennsylvania | 5,469,000 | 2,544,149 | 1,676,027 |
| Rhode Island | 580,800 | 287,020 | 189,082 |
| South Carolina | 872,950 | 479,512 | 315,891 |
| South Dakota | 791,350 | 243,263 | 160,256 |
| Tennessee | 2,469,650 | 1,035,012 | 681,842 |
| Texas | 5,885,300 | 2,786,197 | 1,835,483 |
| Utah | 998,350 | 609,321 | 401,407 |
| Vermont | 364,250 | 160,556 | 105,771 |
| Virginia | 1,716,200 | 822,638 | 541,935 |
| Washington | 1,916,000 | 1,054,029 | 694,370 |
| West Virginia | 1,189,350 | 480,196 | 316,342 |
| Wisconsin | 3,408,950 | 1,268,199 | 835,460 |
| Wyoming | 380,300 | 108,118 | 71,226 |
| American Samoa | | | |
| Guam | 13,950 | 7,661 | 5,047 |
| Puerto Rico | 846,550 | 335,672 | 221,133 |
| Virgin Islands | 4,700 | 1,046 | 689 |
| Adjustment | 876,749 | | |

[1] Amounts represent initial-year awards only; continuing awards are not allotted by statutory formula. Distributed on the basis of full-time degree-credit enrollment in higher education institutions, fall 1965.

STUDENT AID—DIRECT LOANS (NATIONAL DEFENSE EDUCATION ACT, TITLE II)

| State or outlying area | 1967 obligations | 1968 estimate | 1969 estimate |
|---|---|---|---|
| Total | $176,316,012 | [1] $190,000,000 | [1] $190,000,000 |
| Alabama | 2,744,890 | 2,831,305 | 2,831,305 |
| Alaska | 72,249 | 85,286 | 85,286 |
| Arizona | 1,534,987 | 1,860,011 | 1,860,011 |
| Arkansas | 1,831,677 | 1,893,867 | 1,893,867 |
| California | 13,827,050 | 17,106,264 | 17,106,264 |
| Colorado | 2,890,366 | 2,915,266 | 2,915,266 |
| Connecticut | 2,557,339 | 2,485,729 | 2,485,729 |
| Delaware | 184,157 | 230,061 | 230,061 |
| Florida | 4,381,256 | 4,730,161 | 4,730,161 |
| Georgia | 2,468,021 | 3,105,844 | 3,105,844 |
| Hawaii | 226,827 | 271,354 | 271,354 |
| Idaho | 644,702 | 682,624 | 682,624 |
| Illinois | 9,110,776 | 9,835,480 | 9,835,480 |
| Indiana | 5,588,271 | 5,538,167 | 5,538,167 |
| Iowa | 4,003,281 | 3,870,730 | 3,870,730 |
| Kansas | 3,433,542 | 3,385,997 | 3,385,997 |
| Kentucky | 2,933,320 | 3,104,373 | 3,104,373 |
| Louisiana | 2,909,715 | 3,553,117 | 3,553,117 |
| Maine | 795,333 | 802,507 | 802,507 |
| Maryland | 1,984,531 | 2,141,327 | 2,141,327 |
| Massachusetts | 7,386,646 | 7,349,650 | 7,349,650 |
| Michigan | 7,651,233 | 9,035,316 | 9,035,316 |
| Minnesota | 4,818,229 | 4,729,346 | 4,729,346 |
| Mississippi | 2,404,120 | 2,389,139 | 2,389,139 |
| Missouri | 4,879,896 | 5,096,358 | 5,096,358 |
| Montana | 772,154 | 898,537 | 898,537 |
| Nebraska | 1,659,127 | 1,860,542 | 1,860,542 |
| Nevada | 138,155 | 232,794 | 232,794 |
| New Hampshire | 850,351 | 831,428 | 831,428 |
| New Jersey | 3,164,298 | 3,526,121 | 3,526,121 |
| New Mexico | 1,088,167 | 1,066,207 | 1,066,207 |
| New York | 15,553,954 | 15,723,601 | 15,723,601 |
| North Carolina | 4,384,253 | 4,727,514 | 4,727,514 |
| North Dakota | 1,126,287 | 980,870 | 980,870 |
| Ohio | 8,117,898 | 9,685,682 | 9,685,682 |
| Oklahoma | 3,442,646 | 3,405,650 | 3,405,650 |
| Oregon | 2,497,386 | 2,632,370 | 2,632,370 |
| Pennsylvania | 9,278,684 | 10,027,236 | 10,027,236 |
| Rhode Island | 1,127,382 | 1,131,228 | 1,131,228 |
| South Carolina | 1,477,761 | 1,889,895 | 1,889,895 |
| South Dakota | 1,004,295 | 958,771 | 958,771 |
| Tennessee | 4,144,200 | 4,079,286 | 4,079,286 |
| Texas | 7,309,159 | 8,155,009 | 8,155,009 |
| Utah | 880,251 | 1,268,662 | 1,268,662 |
| Vermont | 621,120 | 632,799 | 632,799 |
| Virginia | 2,563,954 | 3,049,292 | 3,049,292 |
| Washington | 3,962,064 | 4,154,236 | 4,154,236 |
| West Virginia | 1,880,356 | 1,892,594 | 1,892,594 |
| Wisconsin | 4,990,303 | 4,998,341 | 4,998,341 |
| Wyoming | 343,686 | 426,126 | 426,126 |
| District of Columbia | 1,711,032 | 1,686,226 | 1,686,226 |
| American Samoa | | | |
| Canal Zone | | | |
| Guam | | | |
| Puerto Rico | 926,875 | 1,000,580 | 1,000,580 |
| Virgin Islands | 4,075 | 4,124 | 4,124 |
| Adjustment | 33,725 | | |

[1]Distributed on the basis of fall 1965 full-time degree-credit enrollment in higher education institutions.

STUDENT AID—INSURED LOANS—ADVANCES FOR RESERVE FUNDS (HIGHER EDUCATION ACT, TITLE IV-B)

| State and outlying area | 1967 obligations | | 1968 estimate (unobligated balance) (brought forward) | | 1969 estimate [1] |
|---|---|---|---|---|---|
| | Higher education | Vocational education | Higher education | Vocational education | |
| Totals | $10,215,345 | $297,671 | $7,284,654 | $1,577,329 | $12,500,000 |
| Alabama | 143,078 | 12,772 | 186,655 | 21,786 | 240,950 |
| Alaska | 25,000 | 10,000 | 50,000 | | 25,000 |
| Arizona | 131,277 | 10,000 | | 3,759 | 95,929 |
| Arkansas | 168,000 | 10,000 | | 7,607 | 122,765 |
| California | 642,000 | | 837,865 | 155,099 | 1,081,400 |
| Colorado | 78,664 | 18,275 | 95,710 | | 127,422 |
| Connecticut | | | 201,314 | 21,099 | 147,108 |
| Delaware | 75,000 | | | 10,000 | 29,268 |
| District of Columbia | 37,667 | | 49,818 | 10,000 | 63,433 |
| Florida | 193,556 | | 252,507 | 46,750 | 325,957 |
| Georgia | 306,792 | | 112,989 | 43,995 | 306,752 |
| Hawaii | 65,000 | 10,000 | 17,365 | | 56,936 |
| Idaho | 75,000 | 10,000 | | | 46,192 |
| Illinois | 881,200 | | | 92,355 | 643,929 |
| Indiana | 445,121 | | | 46,651 | 325,268 |
| Iowa | 247,111 | | | 25,899 | 180,575 |
| Kansas | 201,866 | 10,000 | | 11,157 | 147,512 |
| Kentucky | 135,497 | | 176,766 | 32,727 | 228,194 |
| Louisiana | 85,115 | | 241,808 | 34,263 | 238,896 |
| Maine | 92,956 | | | 10,000 | 67,927 |
| Maryland | 121,901 | | 165,481 | 30,119 | 210,002 |
| Massachusetts | 363,941 | | 95,524 | 48,155 | 335,750 |
| Michigan | 689,173 | | | 72,229 | 503,607 |
| Minnesota | 307,036 | 11,893 | | 20,286 | 224,365 |
| Mississippi | 230,174 | | | 24,124 | 168,198 |
| Missouri | 393,212 | 15,231 | | 25,980 | 287,336 |
| Montana | 75,000 | 10,000 | | | 44,685 |
| Nebraska | 125,738 | 10,000 | | 3,178 | 91,882 |
| Nevada | 75,000 | 10,000 | | | 25,001 |
| New Hampshire | 75,000 | | | 10,000 | 41,300 |
| New Jersey | 473,869 | | | 49,664 | 346,276 |
| New Mexico | 44,222 | 10,681 | 57,691 | | 74,472 |
| New York | 98,480 | | 1,287,133 | 145,220 | 1,012,525 |
| North Carolina | 223,670 | | 291,795 | 54,024 | 376,671 |
| North Dakota | 72,230 | 10,000 | 2,770 | | 44,032 |
| Ohio | | | 876,259 | 91,837 | 640,320 |
| Oklahoma | 228,137 | 10,000 | | 13,910 | 166,709 |
| Oregon | 152,992 | | | 16,034 | 111,798 |
| Pennsylvania | 416,730 | | 543,654 | 100,654 | 701,793 |
| Rhode Island | 89,432 | | | 10,000 | 65,352 |
| South Carolina | 122,129 | 10,902 | 159,325 | 18,596 | 205,670 |
| South Dakota | 75,000 | 10,000 | | | 44,773 |
| Tennessee | 341,936 | | 29,432 | 38,922 | 271,374 |
| Texas | 419,919 | 37,486 | 547,816 | 63,938 | 707,164 |
| Utah | 96,238 | 10,086 | | | 70,325 |
| Vermont | 50,000 | | 25,000 | 10,000 | 27,989 |
| Virginia | 191,721 | 9,261 | 250,114 | 37,046 | 322,867 |
| Washington | 262,165 | 10,155 | | 17,321 | 191,575 |
| West Virginia | 172,972 | 10,000 | | 8,129 | 126,398 |
| Wisconsin | | | 345,144 | 36,173 | 252,211 |
| Wyoming | 75,000 | 10,000 | | | 25,000 |
| American Samoa | | | 75,000 | 10,000 | 25,000 |
| Guam | | | 75,000 | 10,000 | 25,000 |
| Puerto Rico | 122,429 | 10,929 | 159,719 | 18,642 | 206,177 |
| Virgin Islands | | | 75,000 | 10,000 | 25,000 |
| Trust Territory | | | | 10,000 | |

[1] Distributed on the basis of the population aged 18 to 22 (Apr. 1, 1960), with a minimum of $25,000. Amount includes both college and vocational student loan reserves based on proposed legislation which would merge the programs.

STUDENT AID—WORK-STUDY PROGRAMS (ECONOMIC OPPORTUNITY ACT, TITLE I-C)

| State or outlying area | 1967 obligations | 1968 estimate | 1969 estimate |
|---|---|---|---|
| Total | $134,099,347 | [1] $134,300,000 | [1] $145,500,000 |
| Alabama | 3,873,439 | 3,288,811 | 3,563,082 |
| Alaska | 172,386 | 114,209 | 123,734 |
| Arizona | 1,232,630 | 1,236,513 | 1,339,632 |
| Arkansas | 2,723,642 | 1,975,803 | 2,140,576 |
| California | 15,262,765 | 10,960,046 | 11,874,064 |
| Colorado | 2,191,867 | 1,480,456 | 1,603,919 |
| Connecticut | 1,496,671 | 1,389,663 | 1,505,555 |
| Delaware | 202,640 | 271,172 | 293,787 |
| District of Columbia | 721,707 | 652,969 | 707,424 |
| Florida | 3,580,871 | 3,609,753 | 3,910,790 |
| Georgia | 2,397,018 | 3,670,777 | 3,976,902 |
| Hawaii | 455,966 | 444,271 | 481,321 |
| Idaho | 605,473 | 507,431 | 549,749 |
| Illinois | 5,587,939 | 5,835,064 | 6,321,681 |
| Indiana | 2,251,675 | 3,094,248 | 3,352,294 |
| Iowa | 1,745,269 | 2,238,625 | 2,425,315 |
| Kansas | 1,814,968 | 1,698,906 | 1,840,588 |
| Kentucky | 2,781,638 | 2,889,083 | 3,130,019 |
| Louisiana | 2,716,009 | 3,295,109 | 3,569,906 |
| Maine | 657,051 | 649,130 | 703,264 |
| Maryland | 1,344,929 | 2,000,068 | 2,166,864 |
| Massachusetts | 6,693,603 | 3,443,943 | 3,731,151 |
| Michigan | 4,379,107 | 5,165,064 | 5,595,807 |
| Minnesota | 2,731,419 | 2,709,659 | 2,935,632 |
| Mississippi | 3,808,694 | 2,781,022 | 3,012,946 |
| Missouri | 2,533,957 | 3,255,492 | 3,526,985 |
| Montana | 1,939,414 | 520,705 | 564,130 |
| Nebraska | 1,147,330 | 1,142,175 | 1,237,427 |
| Nevada | 332,258 | 168,411 | 182,457 |
| New Hampshire | 552,569 | 422,463 | 457,694 |
| New Jersey | 2,299,434 | 2,853,533 | 3,091,504 |
| New Mexico | 1,287,347 | 848,002 | 918,722 |
| New York | 9,688,586 | 8,999,979 | 9,750,536 |
| North Carolina | 4,085,293 | 4,699,579 | 5,091,502 |
| North Dakota | 813,667 | 610,560 | 661,478 |
| Ohio | 3,349,276 | 5,966,983 | 6,464,602 |
| Oklahoma | 2,100,487 | 2,089,928 | 2,264,220 |
| Oregon | 3,659,991 | 1,339,727 | 1,451,453 |
| Pennsylvania | 4,803,363 | 6,887,674 | 7,462,074 |
| Rhode Island | 308,612 | 583,934 | 632,631 |
| South Carolina | 1,067,639 | 2,549,370 | 2,761,976 |
| South Dakota | 713,517 | 666,383 | 721,956 |
| Tennessee | 3,494,830 | 3,468,324 | 3,757,566 |
| Texas | 7,110,637 | 7,988,814 | 8,655,045 |
| Utah | 1,152,769 | 943,337 | 1,022,006 |
| Vermont | 351,722 | 329,367 | 356,835 |
| Virginia | 1,456,399 | 3,113,643 | 3,373,306 |
| Washington | 2,204,374 | 2,071,817 | 2,244,596 |
| West Virginia | 1,690,208 | 1,690,626 | 1,831,616 |
| Wisconsin | 4,113,363 | 2,763,300 | 2,993,747 |
| Wyoming | 435,695 | 238,079 | 257,934 |
| Guam | 109,242 | | |
| Puerto Rico | 693,363 | 2,686,000 | 2,910,000 |
| Virgin Islands | 15,630 | | |
| Adjustment | −841,001 | | |

[1] 2 percent reserved for the outlying areas; balance distributed on the basis of ⅓ on total high school graduates, 1965-66, ⅓ on full-time degree credit enrollment in higher education institutions, fall 1965; and ⅓ on the basis of estimated "related children under 18" in families with incomes of less than $3,000 per annum (1959).

| | 1968 estimate | 1969 estimate | Increase or decrease |
|---|---|---|---|
| 4. PROGRAM SUPPORT | | | |
| (a) Evaluation | | $1,117,000 | +$1,117,000 |
| (b) Project review | | 163,000 | +163,000 |
| (c) Advisory committees | | 40,000 | +40,000 |
| Total appropriation and obligations | | 1,320,000 | +1,320,000 |

JUSTIFICATION

An amount of $1,320,000 is required for necessary program support activities in order to (1) provide for much needed program evaluation studies; (2) provide for the use of consulants in reviewing applications and advising on other professional matters; and (3) fund necessary expenses for authorized advisory committees.

BIOGRAPHICAL SKETCH

Name: Peter P. Muirhead.

Position: Associate Commissioner for Higher Education.

Birthplace and date: Ayr. Scotland, November 27, 1911.

Education: State University of New York (Albany), B.S.; University of Rochester, M.A.; Cornell University, Graduate Study; New York University, Graduate Study; Syracuse University, Graduate Study.

Experience:

Present: Associate Commissioner for Higher Education.

1961–64: Assistant Commissioner of Education (Program and Legislative Planning).

1959–61: Director, Higher Education Programs, National Defense Education Act.

1958–59: Chief, Student Loan Program, NDEA.

1948–58: Director, New York State Regents Examinations and Scholarship Programs (New York State Education Department).

1944–48: Supervisor of Secondary Schools (New York State Education Department).

1937–44: Supervising Principal (Henrietta, New York).

1934–37: High School History Teacher (Avon, New York).

Association memberships: American Society for Public Administration, Foreign Policy Association, Alexandria Council on Human Relations, Alexandria Little Theater, St. Andrews Society, and University of Rochester Alumni Association.

Awards:

Superior Service Award, April 10, 1964. For notable contributions to the development of the National Education Improvement Act and for professional and technical assistance on the significant portions of the Act enacted in 1963.

Under Secretary Cohen's Certificate of Appreciation, January 4, 1966. For contribution to the Development of the Legislative Program for Health, Education, and Welfare.

Outstanding Service Award. University of the State of New York (1953 and 1957).

Publications: Articles published in Junior College Journal, May 1961; American Council on Education, April 1962; College and University, Summer 1964; Vital Speeches, Vol. 30, 1964; American Association of University Women, March 1966; and College and University Business, June 1966.

BUDGET REQUEST AND CARRYOVER FUNDS

Senator HILL. Mr. Muirhead, we welcome you back.

Mr. MUIRHEAD. It is very nice to be here, Mr. Chairman. I do have a short statement. With your permission I should like to read it now.

Mr. Chairman and members of the committee: I welcome this opportunity to present our 1969 request of $708,127,000 for "Higher educational activities" whereby the Federal Government helps colleges and universities to improve the quality of higher education while increasing its accessibility to more and more young people through the reduction of financial barriers.

The requested appropriation, plus a carryover of $197,472,000, will support a program level of $905,599,000 in 1969, an increase of $28,653,000 over the 1968 level.

Senator HILL. How did you happen to have that carryover?

Mr. MUIRHEAD. We had a carryover largely as a result of cost reduction in 1968.

STUDENT AID PROGRAM SUPPORT

A decrease in funds for the construction programs will permit us to maintain at current levels and in some cases increase our support for the vital areas of student aid and program assistance during this period of severe budgetary restraint. It is our conviction that the proposed budget, with its emphasis on student aid and program support, will enable us in the coming year to make further progress in fulfilling the President's commitment that no American be denied an education for lack of funds.

Senator HILL. In other words, most of the reduction by the Budget Bureau was in construction funds?

Mr. MUIRHEAD. Yes, sir. We have tried to maintain support for student aid. Progress has been made in very large measure as a result of your commitment and your leadership.

PROGRAM ASSISTANCE

INSTRUCTION QUALITY

We are requesting a total of $61,450,000, a $5 million increase above the 1968 level, for strengthening the quality of instruction in our institutions of higher education.

DEVELOPING INSTITUTIONS

Our program for strengthening developing institutions, established by Title III of the Higher Education Act of 1965, provides grants for cooperative arrangements between small, developing colleges, and older, established institutions for faculty and student exchange, curriculum improvement, and sharing of facilities. Our request of $35 million will support cooperative programs in about 350 developing institutions, an increase of 50 over 1968, and 1,275 national teaching fellowships, the same number as in 1968.

Senator HILL. No reduction.

Mr. MUIRHEAD. No reduction in that area.

PENDING AUTHORIZATION LEGISLATION: NETWORKS FOR KNOWLEDGE

Although the funds are not included in this appropriation request, I think it is pertinent to mention at this point in my presentation that we have requested an $8 million authorization in 1968 for a new program entitled "Networks for Knowledge." Under this program, colleges and universities would be encouraged to share, through cooperative arrangements, their educational, technical, and administrative resources and facilities. We consider that this new program will be a logical and very valuable extension of the concept of using Federal resources to help strengthen and improve the quality of instruction in our colleges and universities, including but not limited to developing institutions.

Senator HILL. That request is being considered in legislation now pending.

Mr. MUIRHEAD. Yes, sir. By both committees.

### LAND GRANT COLLEGE AND UNIVERSITY ENDOWMENTS

Endowment of colleges of agriculture and mechanic arts is authorized by the Bankhead-Jones Act in conjunction with the permanent appropriation under the second Morrill Act. Our request of $11,950,000 under the annual appropriation will be used to support instruction in these two areas in the 68 land-grant colleges and universities which enroll about 20 percent of the Nation's degree-credit students.

### EQUIPMENT FOR UNDERGRADUATE INSTRUCTION

For title VI of the Higher Education Act, we are requesting $14,500,000 for about 862 projects to aid institutions in improving the quality of undergraduate classroom instruction through the acquisition of educational equipment.

### CONSTRUCTION

For the Higher Education Facilities Act, we are proposing $85,557,000 in appropriated funds, not including $100 million for construction loans which I will discuss in my statement on the "higher education loan fund." This request, along with $150,577,000 in carryover funds from 1968, will result in a total program level of $236,134,000 and will provide a continuing significant effort in reducing the existing construction backlog. In fact, we anticipate that a total of some 1,500 projects will be under construction by the end of 1969 compared to 1,400 at the end of 1968. This relatively high level of activity will be supported by the very large unliquidated balances from previous years. We estimate that these balances will amount to $1,400 million at the end of 1968 and $1,500 million at the end of 1969.

All of that, of course, is because it takes quite a while to build the classrooms.

Senator HILL. It takes time to make the plans and all that.

### PRORATION OF FUNDS

Mr. MUIRHEAD. The estimate incudes $67 million for grants for undergraduate facilities under title I—$34 million for community colleges and technical institutes and $33 million for other undergraduate facilities. However, because of a $133 million carryover resulting from the 1968 cost reduction effort, the actual obligation level for these programs will be $200 million. Of this amount, $67 million will fund 165 projects for public community colleges and technical institutes and $133 million will support 306 projects for other undergraduate facilities. For graduate facilities under title II an $8 million appropriation and $17,577,000 in carryover funds will support some 33 projects to help meet the demands for highly trained manpower and quality graduate schools.

Our request also includes $7 million, the same as the 1968 appropriation, for grants to assist State commissions in administering title I of the Higher Education Facilities Act as well as equipment grants under title VI of the Higher Education Act. This amount will provide $3 million for expense incurred in the evaluation of grant applications and $4 million for the development of comprehensive State

plans for higher education construction. It has become apparent since the funding of the Higher Education Facilities Act that sound planning for statewide needs must be accomplished if Federal funds for construction are to be utilized effectively.

Further related to administration of the construction program is our request of $3,557,000, an increase of $813,000 above the 1968 level, for the engineering and architectural review of projects. The function was transferred to us from the Department of Housing and Urban Development in 1967. The additional funds are needed to provide full funding for the 253 transferred positions, of which only 204 were funded in 1968.

STUDENT AID

At a time of severe budgetary constraint, we have chosen to concentrate our limited resources on our student aid programs. We consider that our most important goal is the removal of all economic barriers to higher education. We can already show considerable progress toward achieving this goal. For example, by the end of fiscal year 1968, about 1.5 million students will have obtained loans under the National Defense Education Act since its enactment in 1958.

Senator HILL. That many?

Mr. MUIRHEAD. That many. I think that is a glorious record, Senator.

And about 765,000 students will have received loans under the more recently enacted insured loan program for a total of 2,265,000 students. We are estimating that an additional 700,000 students will be assisted under the two programs in 1969, reflecting in part the expected acceleration in the insured loan program.

LOAN PAYMENT RATE

Senator HILL. When you speak of the loans, has the rate of repayment been very good?

Mr. MUIRHEAD. The rate of repayment has been very good when we consider the circumstances under which the loans are granted. The repayment rate has improved since the program started.

BUDGET REQUEST AND CARRYOVER FUNDS

Our request of $559,800,000 in appropriated funds for student aid programs, together with an estimated carryover from 1968 of $46,895,000 will provide a total program level of $606,695,000, an increase of $103,395,000 over 1968. Since, for many students, these programs make the difference between obtaining a higher education or being denied this opportunity to develop their full potential, we wish to make a special plea for continued strong support by the Congress.

GRANTS TO AND PART-TIME EMPLOYMENT OF NEEDY STUDENTS

Two very important forms of student aid are provided by the educational apportunity grants and college work-study programs under title IV of the Higher Education Act. As you know, the first provides grants to qualified high school graduates of exceptional financial need, while the second helps colleges to provide part-time employment for needy students.

We are asking for $140,600,000 for the opportunity grants, the same as in 1968, which, when combined with a $9 million carryover from

1968, will enable us to assist 284,000 students as compared with 276,000 in 1968. We are also seeking an increase from $4 million to $8.5 million for contracts to identify disadvantaged youths with college potential and to encourage them to continue their education. This program is of unique importance in that it is the only one of our programs which deals with the problems of motivation and ignorance of educational opportunities among disadvantaged youth. And, as recent studies have shown, these problems form nearly as big an obstacle to the pursuit of a higher education as does the financial barrier, and they are much more difficult to solve.

### Pending Authorization Legislation: Special Services for Disadvantaged Students

At this point I would like to mention another new program which is included in the Higher Education Amendments of 1968, although not in this request——

Senator Hill. It is in the legislation.

Mr. Muirhead. It is, sir, and which might be considered an appropriate sequel to the talent search program. This program, for which we are asking an authorization of $15 million in 1969, would provide support for special services for disadvantaged students to help such students overcome their disadvantaged schooling and to continue on in college rather than being obliged to drop out. These services would include, among others, tutoring, career guidance, and the identification of students with the potential for graduate level education. We consider that this program will be a very valuable addition to our other students assistance programs.

### Work-Study Program

We are asking for $139.9 million for the work-study program, the same as in 1968. When added to the $5.6 million carryover from 1968, these funds will provide for the part-time employment of about 227,000 students compared with 212,000 students in 1968.

### Title II Student Loan Program

For the student loan program under title II of the National Defense Education Act, we are requesting $193,400,000, the same as in 1968. This includes $190 million for contributions to loan funds and $2 million for loans to aid institutions in providing the required matching funds. We anticipate that 408,000 financially needy students in 1,800 institutions will benefit from these loans in 1969.

Senator Hill. That is a pretty good number, is it not?

Mr. Muirhead. I think it is a magnificent number. I think it is a program which has become very well established with the American people as well as the higher education institutions.

### PROPOSED EDUCATIONAL OPPORTUNITY ACT

I think it is appropriate to mention that the proposed Educational Opportunity Act contains a number of amendments to the Opportunity Grants, Work-Study, and Student Loan programs beginning in fiscal year 1970 which we believe will greatly strengthen their effectiveness. I would like to take special note of the proposed amend-

ments replacing present State allotment formulas with a more equitable institutional funding pattern and permitting institutions to transfer up to 20 percent of allotted funds from one program to another in accordance with need. These changes should result in much more effective utilization of Federal funds.

### TITLE IV INSURED LOAN PROGRAM

The insured loan program under title IV of the Higher Education Act is already our largest student assistance program, and we expect it to become much larger. This assistance is aimed toward youths from middle and upper-middle income families who do not qualify for other forms of aid but who are finding it increasingly difficult to cope with spiraling college costs. Our request of $62.9 million, along with $32,295,000 which we expect to carry over from 1968, will be used for interest payments and fees on about 1,700,000 loans—750,000 new loans in 1969 and 950,000 loans made during the 3 preceding years.

### Proposed Federal Reinsurance of State Guaranteed Loans and State Reserve Fund Advances

During fiscal year 1968, the direct Federal insurance program was implemented as many State guarantee agencies exhausted their reserve capacity. As of January 31, the direct Federal program was operating in 16 States. In order to restore the State guarantee program in those States where it has lapsed, to insure its continuation in all States, and to increase the guarantee capacity of the States, we have proposed that the Federal Government be authorized to reinsure loans guaranteed by State and nonprofit private reserve agencies.

We are also requesting an appropriation of $12,500,000 for advances to the State reserve funds. The combination of this additional "seed money," the State matching funds, and the reinsurance provision should provide a guarantee capacity of $1,250 million in new loans.

Senator Hill. That will reach a large number of students, will it not?

Mr. Muirhead. It certainly will. This program is set up to reach a large number of students because it provides for support for young people coming from families earning less than $15,000 and that represents a very large section of the population.

### Payments of Fees to Lenders

In order to make the guaranteed loan program more attractive to lenders and thus to increase their participation in it, we have proposed that the Government be permitted to pay the lenders a fee, not to exceed $35, at the time the loan is made and again when the loan is converted to payout status. However, our budget estimate assumes a $25 level for such fees based on the current treasury rate. It is our hope that these changes, along with some others which we have proposed, will result in many more students being able to obtain loans through this program.

### Computer Services

In order to assure the smooth and efficient operation of this enormous and complex program, we are also asking for $2 million for computer services.

Senator HILL. Did the Bureau of the Budget allow you the $2 million?

Mr. MUIRHEAD. They have allowed us $2 million. It is quite essential, Senator Hill, in order to make a program as complex as this operate, involving as it does so many students and so many lending agencies.

PROGRAM SUPPORT

To cover the costs of evaluation studies, project reviews, and advisory committees, our request includes $1,320,000. We consider that these functions are such an integral part of program operations that they should properly be charged to program appropriations. We are especially concerned that adequate funds be made available to evaluate our higher education programs so that we can determine whether they are in fact achieving the goals set by the Congress and whether there are ways in which we can improve the efficiency of their operation. Of the total amount requested, $1,117,000 is for evaluation, $163,000 is for project review, and $40,000 is for advisory committees.

STUDY OF FEDERAL STUDENT LOAN PROGRAMS

Finally, I should like to report that, as directed by the Congress, we have completed and submitted to this committee a study of Federal student loan programs conducted by the college entrance examination board. I trust that the report fulfills your requirements and that you have found it to be as enlightening as we have. A number of the changes suggested in the report have been incorporated in the proposed Higher Education Amendments of 1968 which are now pending in both Houses.

We shall be happy to respond to any questions you may have.

## HIGHER EDUCATION FACILITIES LOAN FUND

### APPROPRIATION ESTIMATE

*HIGHER EDUCATION FACILITIES LOAN FUND*

*The Secretary is hereby authorized to make such expenditures, within the limits of funds available in the Higher Education Facilities Loan Fund, and in accord with law, and to make such contracts and commitments without regard to fiscal year limitation as provided by section 104 of the Government Corporation Control Act, as amended, as may be necessary in carrying out the programs set forth in the budget for the current fiscal year for such fund: Provided, That the total amount of loans made from this fund in the current fiscal year shall not exceed $150,000,000.*

*For capital for the "Higher education facilities loan fund," for loans for construction of academic facilities under Title III of the Higher Education Facilities Act of 1963, as amended, $100,000,000, to remain available until expended.*

[PARTICIPATION SALES AUTHORIZATIONS]

[The Federal National Mortgage Association, as trustee, is hereby authorized to issue beneficial interests or participations in such assets from loans made by the Commissioner of Education for construction of academic facilities as may be placed in trust with such Association in accordance with section 302(c) of the

Federal National Mortgage Association Charter Act, as amended, in an aggregate principal amount of not to exceed $100,000,000, in addition to amounts heretofore authorized: *Provided*, That the foregoing authorization shall remain available until June 30, 1969.]

PAYMENT OF PARTICIPATION SALES INSUFFICIENCIES

For the payment of such insufficiencies as may be required by the trustee on account of outstanding beneficial interests or participations in assets of the Office of Education authorized by [this Act] *the Department of Health, Education, and Welfare Appropriation Act, 1968*, to be issued pursuant to section 302(c) of the Federal National Mortgage Association Charter Act, as amended, [$925,000] *such sums as may be necessary, to remain available without fiscal year limitation.*

EXPLANATION OF LANGUAGE CHANGES

The Participation Sales Act established a revolving fund to be used for making construction loans to colleges and universities under Title III of the Higher Education Facilities Act. It also provides that appropriations may be deposited into the fund, and that the total of loans made from the fund in any fiscal year shall not exceed limitations specified in Appropriation Acts. The proposed language for the "Higher Education Facilities Loan Fund" would provide an appropriation of $100,000,000 to the revolving fund; and would establish a total lending level of $150,000,000 in fiscal year 1969, to be derived from the $100,000,000 appropriation and a $50,000,000 unobligated balance carried forward from 1968.

Deletion of the language for "Participation Sales Authorizations" is proposed. Since the fiscal year 1969 budget includes an appropriation of $100,000,000 rather than a request for participation sales authority, this language is no longer necessary.

For "Payment of Participation Sales Insufficiencies," two changes are requested—(1) substitution of "the Department of Health, Education, and Welfare Appropriation Act, 1968," for "this Act"; and (2) substitution of "such sums as may be necessary, to remain available without fiscal year limitation" for a specified amount. Section 302(c)(5) of the Federal National Mortgage Association Charter Act, as amended by the Participation Sales Act, authorizes a permanent indefinite appropriation of such sums as may be necessary without fiscal year limitation to cover insufficiencies resulting from the difference between the interest rate required to sell the participations to the private credit market and the interest rates on specific construction loans to colleges and universities.

The participation sales authority has been made available for two fiscal years—1967 and 1968—at a level of $100,000,000 in each year. In 1967 a permanent indefinite appropriation was enacted for insufficiencies on sales made in that fiscal year. The 1968 Appropriation Act provided an annual definite appropriation of $925,000 for insufficiency payments only in 1968 for sales made during that year. In view of the fact that the sales authority will not be utilized in fiscal year 1969, a permanent indefinite appropriation is requested to cover insufficiencies on these 1968 sales.

Although the proposed appropriation language is indefinite, it is effectively limited, since it can be used only in connection with the $100,000,000 in participation sales in the 1968 Appropriation Act. The language is also permanent because it appropriates amounts necessary for meeting insufficiencies on these sales in ensuing fiscal years and will provide consistency with the 1967 appropriation. Loans under Title III are currently set at three percent per annum; therefore, the Federal Government must subsidize the remaining interest costs over this rate. Such payments against the 1968 sales are estimated at $3,275,000 in fiscal year 1969.

## AMOUNTS AVAILABLE FOR OBLIGATION

| | 1968 | 1969 |
|---|---|---|
| Appropriation: | | |
| Current indefinite | | $3,275,000 |
| Current definite | $925,000 | 100,000,000 |
| Permanent indefinite [1] | 1,700,000 | 1,700,000 |
| Authorization to spend agency debt receipts | 100,000,000 | |
| Total adjusted appropriation | 102,625,000 | 104,975,000 |
| Interest payments | 5,475,000 | 7,164,000 |
| Repayment of loans | 288,000 | 1,358,000 |
| Unobligated balance brought forward | 101,230,000 | 50,000,000 |
| Unobligated balance transferred to other accounts | −288,000 | −679,000 |
| Cutback required by H.J. Res. 888: | | |
| Reduction below obligation level in the 1968 President's budget: Unobligated balance carried forward | −49,058,000 | |
| Reduction because of unanticipated carryover balances | −942,000 | |
| Total cutback | −50,000,000 | |
| Total available for obligation | 159,330,000 | 162,818,000 |
| Disposition of cutback: | | |
| Carried forward for obligation in 1969 | 50,000,000 | |
| Total cutback | 50,000,000 | |

## OBLIGATIONS BY ACTIVITY

| | 1968 estimate | 1969 estimate | Increase or decrease |
|---|---|---|---|
| Operating costs: | | | |
| 1. Commission on sales of participation certificates | $200,000 | | −$200,000 |
| 2. Interest expense on participation certificates | [1] 9,130,000 | [1] $12,758,000 | +3,628,000 |
| 3. Administrative expenses | | 60,000 | +60,000 |
| Capital outlay: | | | |
| Higher education construction: Loans to higher education institutions | 150,000,000 | 150,000,000 | |
| Total obligations | 159,330,000 | 162,818,000 | +3,488,000 |

## OBLIGATION BY OBJECT

| | | | |
|---|---|---|---|
| Other services | $200,000 | | −$200,000 |
| Services of other agencies | | $60,000 | +60,000 |
| Investments and loans | 150,000,000 | 150,000,000 | |
| Grants, subsidies, and contributions | [1] 9,130,000 | [1] 12,758,000 | +3,628,000 |
| Total obligations by object | 159,330,000 | 162,818,000 | +3,488,000 |

[1] Includes $1,700,000 under the permanent appropriation "Payment of Participation Sales Insufficiencies" in the Independent Offices Appropriation Act, 1967.

*Summary of changes*

| | |
|---|---|
| 1968 enacted appropriation: | |
| Current definite | $ 925,000 |
| Permanent indefinite | [1] 1,700,000 |
| Authorization to spend agency debt receipts | 100,000,000 |
| 1968 total adjusted appropriation | 102,625,000 |
| Interest payments | 5,475,000 |
| Repayment of loans | 288,800 |
| Unobligated balance brought forward | 101,230,000 |
| Unobligated balance transferred to other accounts | —288,000 |
| Cutback required by H. J. Res. 888 | —50,000,000 |
| 1968 total estimated obligations | 159,330,000 |
| 1969 estimated appropriation: | |
| Current indefinite | 3,275,000 |
| Current definite | 100,000,000 |
| Permanent indefinite | [1] 1,700,000 |
| 1969 total estimated appropriation | 104,975,000 |
| Interest payments | 7,164,000 |
| Repayment of loans | 1,358,000 |
| Unobligated balance brought forward | 50,000,000 |
| Unobligated balance transferred to other accounts | —679,000 |
| 1969 total estimated obligations | 162,818,000 |
| Total change | +3,488,000 |

[1] Included under "Payment of participation sales insufficiencies" in the Independent Offices Appropriation Act, 1967.

| | Base | Changes from base |
|---|---|---|
| INCREASES | | |
| A. Built-in: | | |
| 1. Interest expense on participation certificates | [1] $9,130,000 | $3,628,000 |
| 2. Administrative expenses | | 60,000 |
| Total built-in increases | | 3,688,000 |
| DECREASES | | |
| A. Built-in: 1. Commission on sales of participation certificates | | —200,000 |
| Total net changes requested | | +3,488,000 |

[1] Includes $1,700,000 under the permanent appropriation "Payment of Participation Sales Insufficiencies" in the Independent Offices Appropriation Act, 1967.

## Explanation of Changes

An increase of $3,628,000 will provide a total of $12,758,000 for interest expenses on a total of $200,000,000 in participation certificates which were sold in 1967 and 1968, the proceeds of which were used for construction loans to higher education institutions. These insufficiencies result from the difference between the interest rate which the Federal Government must pay private investors who purchase the participations and the interest rate which higher education institutions pay on these notes. Both the 1968 and 1969 amounts include a permanent indefinite appropriation, estimated at $1,700,000, for insufficiency payments on sales made during 1967. The increase reflects the first full year of such payments on sales which were made in 1968. The $12,758,000 will consist of $7,783,000 from the receipt of loan repayments and interest, and $4,975,000 in appropriated funds.

An amount of $60,000 is estimated for payments to the Federal National Mortgage Association, the trustee for the participation sales, and to the Federal Reserve for their administrative costs in servicing the certificates. This item in 1968 was included in commission costs which were paid in connection with the actual sales and is offset by a $200,000 decrease in that activity. The $60,000 will be obtained from repayment into the fund.

A decrease of $200,000 is included for commission on sales of participation certificates since the 1969 budget is requesting appropriated funds rather than sales authority for construction loans. The source of the $200,000 estimated 1968 obligations will be repayments into the fund.

ADJUSTED APPROPRIATION

| | 1968 estimate | 1969 estimate | Increase or decrease |
|---|---|---|---|
| Operating costs: | | | |
| 1. Commission on sales of participation certificates | | | |
| 2. Interest expense on participation certificates | [1] $2,625,000 | [1] $4,975,000 | +$2,350,000 |
| 3. Administrative expenses | | | |
| Capital outlay: | | | |
| Higher education construction: Loans to higher education institutions | 100,000,000 | 100,000,000 | |
| Total adjusted appropriation | 102,625,000 | 104,975,000 | +2,350,000 |

OBLIGATIONS

| | | | |
|---|---|---|---|
| Operating costs: | | | |
| 1. Commission on sales of participation certificates | $200,000 | | −$200,000 |
| 2. Interest expense on participation certificates | [1] 9,130,000 | [1] $12,758,000 | +3,628,000 |
| 3. Administrative expenses | | 60,000 | +60,000 |
| Capital outlay: | | | |
| Higher education construction: Loans to higher education institutions | 150,000,000 | 150,000,000 | |
| Total obligations | 159,330,000 | 162,818,000 | +3,488,000 |

[1] Includes $1,700,000 under the permanent appropriation "Payment of participation sales insufficiencies" in the Independent Offices Appropriation Act, 1967.

JUSTIFICATION

*Construction loans*

Title III of the Higher Education Facilities Act authorizes loans for construction of academic facilities in higher education institutions. Such loans may be made for up to 75 percent of a project's total development cost and must be repaid within 50 years. Not more than 12½ percent of any year's appropriation may be used in any one State. The Participation Sales Act, Public Law 89–429, approved on May 24, 1966, established a revolving Fund for these loans, and provides that appropriations made available for Title III may be deposited into the Fund. Participations in pools of such loans are sold by the Federal National Mortgage Association, the proceeds of which are deposited into the Fund to be used for new loans to colleges and universities.

These loans are making a significant contribution in reducing the higher education facilities backlog, particularly in the form of combination projects with grants for undergraduate and graduate construction under Titles I and II. In fact, more than 90 percent of these loans are awarded in conjunction with the grants.

Proposed legislation would provide that the interest rate on these loans, which is now set at three percent per annum, be tied to the interest rates on Treasury notes of comparable maturity, adjusted to approximate the current yield of securities of public educational institutions if this should be at a lower rate. This change would have the effect of encouraging publicly supported institutions to borrow in the private market and thus ease the demand for Federal loans. Private institutions are finding it almost impossible to obtain long-term financing, even at the highest commercial interest rates.

In fiscal year 1967, with a lending level of $199,991,000, 211 projects were approved at an average cost of $947,825. This level was funded by $100,000,000 of the $200,000,000 appropriation and $100,000,000 from the sale of participation certificates.

In fiscal year 1968 about 165 loan approvals averaging $909,100 are anticipated. This level of $150,000,000 will be funded by $50,000,000 from the carryover from 1967 of $100,000,000, and $100,000,000 from participation sales. The Federal National Mortgage Association as of January 1968 had sold approximately $55,000,000 in participation certificates and an additional $45,000,000 will be sold by June 1968. Under the cost reduction program, the remaining $50,000,000 in appropriated funds will be carried over for use in 1969.

For fiscal year 1969, it is again estimated that 165 projects will be approved at a total of $150,000,000—$100,000,000 in a requested new appropriation and the $50,000,000 unobligated balance from 1968.

*Operating costs*

The Participation Sales Act specifically authorizes the sale of participations in pools of loans in cases where the total receipts from the loans in the pool, after covering the costs of servicing the loans and administering the participation pool, may be insufficient to provide for timely payment of interest and principal on the participations. Appropriations to pay such insufficiencies are authorized.

In cases where the aggregate receipts may be insufficient to cover the payments as they become due, participations are salable on favorable terms only if buyers are assured that funds will be supplied to cover the insufficiency. The actual amount of the insufficiency is determined primarily by the difference between the interest rate required to sell the participations to the private credit market, and the interest rates paid by higher education institutions on their loans; and this cannot be estimated in advance of the sale. Therefore, Section 302 (c)(5) of the Federal National Mortgage Association Charter Act as amended by the Participation Sales Act authorizes an indefinite appropriation of such sums as may be necessary and without fiscal year limitation to assure the successful sale of the participations. Although the authorization is indefinite, it is effectively limited, since it can be used only in connection with participation sales in amounts specified by the accompanying authorization for sales. It is also permanent because it authorizes amounts necessary for meeting insufficiencies in any fiscal year in which participation sales provided for in accompanying authorizations are still outstanding.

In fiscal year 1967, a permanent indefinite appropriation was included under "Payment of Participation Sales Insufficiencies" in the Independent Offices Appropriation Act. This appropriation is limited to insufficiency payments for the $100,000,000 in participations which were sold in fiscal year 1967. During that year, $485,000 was used against this appropriation, and $1,700,000, on a full-year basis, is estimated for each of 1968 and 1969 under this authority.

For the $100,000,000 in sales during fiscal year 1968, an annual definite appropriation of $925,000 was included in the Department of Health, Education, and Welfare Appropriation Act. This amount is available for insufficiency payments in 1968 only.

Therefore, the budget request includes an estimate of $3,275,000 for 1969 payments against these 1968 sales. It is proposed that a permanent indefinite appropriation be enacted for this item particularly in view of the fact that participation sales are not being requested for 1969. This would result in the insufficiencies for the 1968 sales being handled on a consistent basis with those for the 1967 sales.

Total insufficiency payments in 1969 are estimated at $12,758,000. This amount will be derived from about $7,783,000 in interest collections and loan repayments from colleges and universities, and $4,975,000 from permanent indefinite appropriations including $1,700,000 under the 1967 Appropriation Act.

For other operating costs, an amount of $200,000 is estimated for commission costs to the Federal National Mortgage Association in connnection with the total of $200,000,000 in sales of participation certificates. Since authority for such sales is not requested for 1969, this item is not included in the budget. An amount of $60,000, however, is estimated for administrative costs incurred by the Federal Reserve and the Federal National Mortgage Association in servicing the outstanding certificates. These amounts in each year will be covered by interest and principal collections deposited into the revolving fund.

STUDENT LOAN INSURANCE FUND—AMOUNTS AVAILABLE FOR OBLIGATION

| | 1968 | 1969 |
|---|---|---|
| Appropriation | | |
| Insurance fees | $1,200,000 | |
| Unobligated balance brought forward | 3,750,000 | $3,646,000 |
| Unobligated balance carried forward | −3,646,000 | −1,698,000 |
| Total obligations | 1,304,000 | 1,948,000 |

NEW OBLIGATIONAL AUTHORITY BY ACTIVITY

| | 1968 estimate | 1969 estimate | Increase or decrease |
|---|---|---|---|
| Higher education and vocational student loans (total appropriation) | | | |

OBLIGATIONS BY ACTIVITY

| | | | |
|---|---|---|---|
| Higher education and vocational student loans (total obligations) | $1,304,000 | $1,948,000 | +$644,000 |

OBLIGATIONS BY OBJECT

| | | | |
|---|---|---|---|
| Insurance claims and indemnities (total obligations by object) | $1,304,000 | $1,948,000 | +$644,000 |

*Summary of changes*

| | |
|---|---|
| 1968 enacted appropriation | |
| Insurance fees | +$1,200,000 |
| Unobligated balance brought forward | +3,750,000 |
| Unobligated balance carried forward | −3,646,000 |
| 1968 estimated obligations | 1,948,000 |
| 1969 estimated obligations | 1,948,000 |
| Total change | +644,000 |

| | Base | Changes from base |
|---|---|---|
| Increases: | | |
| Program: | | |
| Higher education and vocational student loans: Loans purchased upon default by student borrowers | $1,304,000 | +$644,000 |
| Total net change requested | | +644,000 |

## Explanation of Changes

Title IV of the Higher Education Act and the National Vocational Student Loan Insurance Act authorize the Federal Government to insure directly loans to students without access to State or nonprofit private reserve agencies. Proposed legislation would authorize the Federal Government to reinsure loans guaranteed by these agencies at 80 percent of defaults by student borrowers: and would extend the direct Federal insurance program for two years for those States which have not yet established such agencies.

It is anticipated that funds appropriated in fiscal years 1966 and 1967 will be sufficient to cover any defaults in fiscal year 1969. Therefore, no appropriation is requested. An increase in obligations of $644,000 will result in a total of $1,948,000, and will cover default payments for about 2,835 loans, an increase of 940 over 1968.

| | 1968 estimate | 1969 estimate | Increase or decrease |
|---|---|---|---|
| Higher education and vocational student loans (appropriation) | | | |
| Higher education and vocational student loans (obligations) | $1,304,000 | $1,948,000 | +$644,000 |

JUSTIFICATION

The Higher Education Act of 1965 provides a three-part program to insure loans for college students: (1) Advances to establish and strengthen State and nonprofit private insurance reserve funds, (2) grants to pay a portion of the interest costs for eligible students, and (3) direct Federal insurance for students without reasonable access to State or nonprofit private insurance programs. The National Vocational Student Loan Insurance Act authorizes an identical program for students attending business or trade schools, technical institutions, and other technical and vocational schools. Funds for advances and interest payments are discussed under "Higher Educational Activities."

The Acts provide that appropriations for the Federal insurance program, which remain available until expended, be placed in a revolving fund to enable the Commissioner of Education to make payments in connection with the default of loans which are insured under this part of the program. An amount of $3,500,000 has been appropriated for higher education student loans—$500,000 in 1966, and $3,000,000 in 1967; and $250,000 has been appropriated for vocational student loans—$50,000 in 1966 and $200,000 in 1967.

Proposed legislation would merge the vocational program into the Higher Education Act insured loan program, and would authorize the Office of Education to reinsure loans guaranteed by State and nonprofit private agencies at 80 percent of defaults by student borrowers. This would increase by five times the amount of loans which these agencies are able to insure. The proposed amendments would also extend the direct Federal loan insurance program for two years to accommodate students in those States which have not yet established State or nonprofit private reserve agencies.

During the first 6 months of 1968 the Federal insurance program has been implemented in 17 States for higher education students and in 7 States for vocational students. This has provided loans totaling $24,685,000 for about 28,000 students—$754,000 for 800 vocational students and $23,931,000 for 27,200 college students. For both the direct Federal insurance program and the proposed reinsurance provision it is anticipated that default payments totaling $1,304,000 will be made in 1968 for 1,895 loans. This is estimated on the basis of one half of one percent of reinsured loans issued in 1966 and 1967 at $860 each. Defaults estimated for 1969 will total $1,948,000 for 2,835 loans, and are estimated at three-fifths of one percent for loans issued in 1966 and 1967 at $860 each and one-tenth of one percent for loans issued in 1968 at $850 each. These defaults are anticipated because of death, permanent disablement, dropout, and other causes. It is expected that the appropriations availble from prior years, together with collections on insurance fees of about $1,200,000, will be sufficient to cover these payments. Therefore, no appropriated funds are requested.

The fund may borrow from the Treasury if at any time the moneys available are insufficient to make payments on defaults of insured loans. It is estimated that the funds available will make it unnecessary to utilize this authority in 1968 or 1969. The fund will take over loans on which it pays insurance claims and seek to collect on them.

BUDGET REQUEST AND CARRYOVER FUNDS

Senator HILL. You have brought us an excellent statement. Now you are going to address yourself to the higher education facilities loan fund?

Mr. MUIRHEAD. Yes, if I may.

Senator HILL. All right.

Mr. MUIRHEAD. This is under the heading of the higher education facilities loan fund.

I am pleased to report to you about the progress being made under title III of the Higher Education Facilities Act. This loan program serves as a very valuable adjunct to our construction grant programs and, in fact, more than 90 percent of all loans are made in conjunction

with grants. In 1968, it is anticipated that about 165 loans will be funded at $150 million. In 1969, we again plan to fund about the same number of loans at $150 million, consisting of $100 million in newly appropriated funds and $50 million from the 1968 unobligated balance.

Senator HILL. You have that much left over, or will have?

FINANCING LOANS WITH RECEIPTS FROM PARTICIPATION SALES

Mr. MUIRHEAD. That is right. This is, of course, as a result of the cost reduction.

The participation sales authority was utilized in 1967 and 1968 as a partial, temporary method of financing these loans with capital from the private credit market. In fact, sales totaling $100 million were made in 1967, and the same amount is anticipated for 1968. Therefore, our budget includes an item for payment of participation sales insufficiencies which represents the difference between the interest paid to private investors and the interest rate charged to higher education institutions.

PROPOSED PERMANENT INDEFINITE APPROPRIATION

We are asking for a permanent indefinite appropriation to cover sales in 1968. We estimate that $3,275,000 will be utilized under this authority in 1969. Although the proposed language is indefinite, it is effectively limited since it can be used only in connection with sales made in 1968. This will also provide consistency with the permanent indefinite appropriation already approved by the Congress for the 1967 participation sales.

PROPOSED LEGISLATION TO INCREASE INTEREST RATE

Finally, I would like to mention that under proposed legislation we are recommending that the interest rates on these loans, which are now set at 3 percent per annum, be tied to the interest rates on Treasury notes of comparable maturity, adjusted to approximate the current yield of securities of public educational institutions if this should be at a lower rate.

This change would have the effect of making the cost of these loans to the borrowers more nearly equal the cost of the money to the Federal Government.

As a result of the rapidly rising interest rates in the private money markets, the present 3 percent rate on these loans no longer provides a reasonable rate of return and makes this program unnecessarily costly to the Government.

Incidentally, the rate increase may make it worthwhile for some of the larger public institutions to borrow in the private market, thus freeing money for loans to the private institutions, many of which are finding it almost impossible to obtain long-term financing in the commercial market.

Senator HILL. They cannot even get the money.

Mr. MUIRHEAD. Many of them cannot even get it even at high interest rates. Again, Senator Hill, I will be happy to answer questions you may have.

Senator HILL. You are asking for a change in legislation?

Mr. MUIRHEAD. Yes, sir.

Senator HILL. You have brought us most informative and comprehensive testimony. It is splendid testimony. We appreciate it very much.

Mr. MUIRHEAD. Thank you, Mr. Chairman.

## Expansion and Improvement of Vocational Education

**STATEMENT OF GRANT VENN, ASSOCIATE COMMISSIONER FOR ADULT, VOCATIONAL, AND LIBRARY PROGRAMS**

**ACCOMPANIED BY:**

**HAROLD HOWE II, COMMISSIONER OF EDUCATION**
**SHERRILL McMILLEN, ACTING DIRECTOR, DIVISION OF VOCATIONAL AND TECHNICAL EDUCATION**
**JAMES B. ROBERTS, EXECUTIVE OFFICER, BUREAU OF ADULT, VOCATIONAL, AND LIBRARY PROGRAMS**
**BERNARD SISCO, ASSISTANT COMMISSIONER FOR ADMINISTRATION**
**LEON SCHWARTZ, DEPUTY ASSISTANT COMMISSIONER FOR ADMINISTRATION**
**JOE G. KEEN, BUDGET OFFICER**
**JAMES B. CARDWELL, DEPUTY ASSISTANT SECRETARY, BUDGET**

### Appropriation Estimate

EXPANSION AND IMPROVEMENT OF VOCATIONAL EDUCATION

For carrying out the provisions of titles I, II, and III of the Vocational Education Act of 1946, as amended (20 U.S.C. 15i-15m, 15o-15q, 15aa-15jj, 15aaa-15ggg), section 1 of the Act of March 3, 1931 (20 U.S.C. 30), the Act of March 18, 1950 (20 U.S.C. 31-33), section 9 of the Act of August 1, 1956 (20 U.S.C. 34), section 2 of the Act of September 25, 1962 (48 U.S.C. 1667), [section 9 of the National Vocational Student Loan Insurance Act of 1965 (74 Stat. 1037, 1041),] and the Vocational Education Act of 1963 (*20 U.S.C. 35-35n*) (except sections 4(c), 13 and 14) (20 U.S.C. 35[C] *c*(c) [, 35(k) and 35(l)] *and 35k*); [$252,900,000] *$249,995,000*, of which $199,309,000 shall be for vocational education programs under section 4(a) and (b) of the Vocational Education Act of 1963 (20 U.S.C. 35[C(a) and (b)), and $3,600,000 to remain available until expended shall be for interest payments on insured loans under the National Vocational Student Loan Insurance Act of 1965; and, in addition, $10,000,000 for work-study programs under section 13 of the Vocational Education Act of 1963 to be derived by transfer from funds available to the Office of Economic Opportunity for fiscal year 1968] (*a and b*): *Provided, That not to exceed $695,000 shall be available for necessary expenses for advisory committees, for services of specialists in reviewing applications for assistance, and for program evaluation.*

### Appropriation Language Changes

The elimination of "section 9 of the National Vocational Student Loan Insurance Act of 1965 (74 Stat. 1037, 1041)," and "$3,600,000 to remain available until expended shall be for interest payments on insured loans under the National Vocational Student Loan Insurance Act of 1965; and, in addition, $10,000,000 for work-study programs under section 13 of the Vocational Education Act of 1963 to be derived by transfer from funds available to the Office of Economic Opportunity for fiscal year 1968" is requested since the pending amendments would merge vocational insured loans with the higher education insured loan program which is carried under "Higher Educational Activities" and the work-study program will be absorbed by the Neighborhood Youth Corps which is included under the Office of Economic Opportunity.

The remaining changes reflect later legal citations, and provide more clarity and consistency in the language.

AMOUNTS AVAILABLE FOR OBLIGATION

| | 1968 | 1969 |
|---|---|---|
| Appropriation | $252,900,000 | $249,995,000 |
| Unobligated balance transferred from "Office of Economic Opportunity" | 10,000,000 | |
| Unobligated balance transferred to "Appalachian Regional Commission" | −7,423 | |
| Unobligated balance brought forward | 2,455,045 | |
| Cutback required by H.J. Res. 888: Reduction because of unanticipated carryover balances | −1,084,000 | |
| Total available for obligation | 264,263,622 | 249,995,000 |
| Disposition of cutback: To be returned to Treasury | 1,084,000 | |

OBLIGATIONS BY ACTIVITY

| | 1968 estimate | 1969 estimate | Increase or decrease |
|---|---|---|---|
| Vocational training under George-Barden Act and Vocational Educational Act of 1963: | | | |
| (a) Grants to States under Vocational Education Act of 1963 | $198,225,000 | $199,309,000 | +$1,084,000 |
| (b) George-Barden Act: | | | |
| (1) Practical nurse training | 5,000,000 | 5,000,000 | |
| (2) Area vocational training | 15,000,000 | 15,000,000 | |
| (3) Other vocational training | 29,636,000 | 29,636,000 | |
| (c) Supplemental acts | 305,000 | 305,000 | |
| (d) Work-study program | 10,000,000 | | −10,000,000 |
| Insured loans | 6,047,622 | | −6,047,622 |
| Program support | | 695,000 | +695,000 |
| Total obligations | 264,263,622 | 249,995,000 | 14,268,622 |

OBLIGATIONS BY OBJECT

| | | | |
|---|---|---|---|
| Full time equivalent of all other positions | | 5 | +5 |
| Average number of all employees | | 5 | +5 |
| Personnel compensation: Positions other than permanent | | $94,900 | +$94,900 |
| Personnel benefits | | 4,100 | +4,100 |
| Travel and transportation of persons | | 97,000 | +97,000 |
| Printing and reproduction | | 9,000 | +9,000 |
| Other services | | 490,000 | +490,000 |
| Investments and loans | $1,577,329 | | −1,577,329 |
| Grants, subsidies, and contributions | 262,686,293 | 249,300,000 | −13,386,293 |
| Total obligations by object | 264,263,622 | 249,995,000 | −14,268,622 |

*Summary of changes*

| | |
|---|---|
| 1968 enacted appropriation | $252,900,000 |
| Unobligated balance transferred from "Office of Economic Opportunity" | 10,000,000 |
| Unobligated balance transferred to "Appalachian Regional Commission" | −7,423 |
| Unobligated balance brought forward | 2,455,045 |
| Cutback from the 1968 President's budget required by H. J. Res. 888 | −1,084,000 |
| 1968 estimated obligations | 264,263,622 |
| 1969 estimated obligations | 249,995,000 |
| Total change | −14,268,622 |

| | Base | Changes from base |
|---|---|---|
| INCREASES | | |
| Program: | | |
| 1. Grants to States under Vocational Education Act of 1963 | $198,225,000 | $1,084,000 |
| 2. Program support | | 695,000 |
| Total program increases | | 1,779,000 |
| DECREASES | | |
| Work-study programs | 10,000,000 | −10,000,000 |
| Insured loans | 6,047,622 | −6,047,622 |
| Total decreases | | −16,047,622 |
| Total net changes requested | | −14,268,622 |

## Explanation of Changes

*Increases*

1. An additional amount of $1,084,000 for grants to States under the Vocational Education Act of 1963 will provide a total of $199,309,000 for the vocational training of 8,555,000 participants and 320 construction projects.

2. A total amount of $695,000 for program support includes $490,000 for the evaluation of vocational education programs; $180,000 for consultant services; and $25,000 for advisory committees on vocational education and health occupations.

*Decreases*

1. A decrease of $10,000,000 is reflected for the work-study programs since the program is funded by the "Office of Economic Opportunity."

2. A $6,047,622 decrease reflects the transfer of vocational student insured loans to the appropriation "Higher educational activities" which have been merged with college student insured loans.

## EXPLANATION OF TRANSFERS

| | 1968 estimate | 1969 estimate | Purpose |
|---|---|---|---|
| Transfer from: "Neighborhood Youth Corps, Office of Economic Opportuntiy". | $10,000,000 | ---------- | Congress added language transferring funds for the work-study program in 1968. |
| Comparative transfer to: "Appalachian Regional Commission" (Unobligated balance). | 7,423 | ---------- | Appalachian Regional Development Act Amendments of 1967, sec. 211 was appropriated to the Appalachian Regional Commission in 1968. In order to provide comparability the unobligated balance is reported as a comparative transfer. |

| | 1968 estimate | 1969 estimate | Increase or decrease |
|---|---|---|---|
| 1. Vocational Education Act of 1963: Vocational training and construction of area vocational education facilities (appropriation) | $199,309,000 | $199,309,000 | ---------- |
| Vocational Education Act of 1963: Vocational training and construction of area vocational education facilities (obligations) | 198,225,000 | 199,309,000 | +$1,084,000 |

## Justification of Estimates

The Vocational Education Act of 1963 authorizes $225,000,000 for fiscal year 1969 and specifies that ten percent of this amount be reserved for research and special project activities and that the remaining ninety percent be used for grants to States for the purpose of maintaining, extending, and improving existing programs and to develop new programs of vocational education. Its objective is to provide throughout the Nation readily accessible programs of vocational and technical education for persons of all ages in all communities at the secondary, post-secondary, and adult levels to enter and advance in the Nation's labor force.

For fiscal year 1969 an amount of $199,309,000 is requested for grants to States to support expansion and improvement of vocational education programs.

Funds are allotted among the States on the basis of population groups and a per capita income factor with no State receiving less than $10,000. Funds may be expanded for State and local vocational education programs without categorical limitation under a broadened definition of vocational education to fit individuals for grainful employment, embracing all occupations, including business and office occupations. States are required to match one dollar for each Federal dollar allotted. In 1969 it is estimated that the States will expend almost 3½ dollars for each Federal dollar allotted as indicated on the following table:

| Fiscal year | Federal expenditures [1] | Total State and local expenditures [1] | Matching ratio |
|---|---|---|---|
| 1965 | $154,136,221 | $447,680,009 | 2.90 |
| 1966 | 213,412,571 | 565,586,739 | 2.65 |
| 1967 (estimate) | 248,085,400 | 707,200,000 | 2.85 |
| 1968 (estimate) | 255,377,000 | 782,900,000 | 3.07 |
| 1969 (estimate) | 256,461,000 | 890,500,000 | 3.47 |

[1] As reported by the States.

ENROLLMENT

The Vocational Education Act of 1963 authorizes States, under certain conditions, to transfer and combine allotments received under the various vocational education acts. Therefore, data are reported in total for activities supported with funds received under the Smith-Hughes Act, the George-Barden Act, and the Vocational Education Act of 1963, rather than separately for each of these Acts.

Growth of the vocational training program is reflected in the following enrollment data on past accomplishment and anticipated progress in fiscal year 1969:

| | 1966 actual | 1967 estimate | 1968 estimate | 1969 estimate |
|---|---|---|---|---|
| High school | $3,048,248 | $3,500,000 | $3,731,000 | $4,035,000 |
| Post-high school | 442,097 | 525,000 | 570,000 | 620,000 |
| Adult | 2,530,712 | 2,700,000 | 3,000,000 | 3,600,000 |
| Special needs | 49,002 | 155,000 | 204,000 | 300,000 |
| Total | 6,070,059 | 6,880,000 | 7,505,000 | 8,555,000 |

*a Vocational training*

*(1) High School Programs.*—Only 25.8 percent of secondary students were enrolled in vocational programs in fiscal year 1966, although nearly 50 percent of high school graduates do not go on to college. By 1969, an estimated 32 percent of the total secondary enrollment in the public school system is expected to be enrolled in vocational education courses. Continuing efforts are being made to make vocational education available for these persons while they are in high school as shown in the following table:

| School year | Secondary enrollments | Vocational secondary enrollments [1] | Percent of secondary enrollments |
|---|---|---|---|
| 1965 | 11,618,000 | 2,844,888 | 24.48 |
| 1966 | 12,000,000 | 3,097,250 | 25.81 |
| 1967 | 12,300,000 | 3,603,300 | 29.29 |
| 1968 | 12,800,000 | 3,867,000 | 30.21 |
| 1969 | 13,200,000 | 4,235,000 | 32.08 |

[1] Includes total special needs enrollments reported in 1965 and 1966 and ⅔ of the projected enrollment in special needs for each year thereafter.

(2) *Post-High School Programs.*—Enrollments in post-high school programs increased from 170,835 in fiscal year 1964, to 442,097 in 1966; or 158.8 percent. Based upon the projected needs for approximately 85,000 technicians each year until 1975, and the rapid expansion of post-high school programs in all occupational areas, enrollments are expected to increase to 620,000 in fiscal year 1969.

(3) *Adult Programs.*—Continued growth in the adult program is anticipated as more workers find it necessary to enroll in occupational training programs to enter and advance in the labor force in their chosen occupations. In fiscal year 1966, 2,530,712 adults were enrolled in occupational training programs. Projected enrollment of 3,600,000 in adult training programs in fiscal year 1969 represents approximately 5 percent of the non-professional work force.

(4) *Special Needs.*—An enrollment of 300,000 is projected for fiscal year 1969 in training programs for the disadvantaged. There are many boys and girls who, because of (1) their native academic limitations; (2) lack of motivation; (3) personal psychological problems, and/or (4) financial restrictions, are not benefitting from the school programs being offered them. There are many adults similarly situated who dropped out of school or completed a course of study but have never benefitted from their education process and have been unemployed or underemployed throughout their adult lives.

Special services must be provided to these persons. This includes (1) basic education and remedial work in language skills, social skills, and the development of reasoning powers; (2) special guidance and counseling and pre-service and in-service training of teachers, counselors, and administrators to orient them to the varied populations involved: (3) specially designed instructional and curriculum materials; and (4) courses in institutions such as those for the mentally handicapped, physically handicapped, and those in correctional institutions.

Specialized staff must be involved in the vocational education process and specially trained persons with new positions employed. Project coordinators, community relation experts, job developers, team teachers, and group counseling are all part of the process.

During the last two years more and more programs are being designed for those with special needs in vocational education. There is a demand for more staff, materials, and facilities at the State and local levels to accommodate the increasing number of applicants who desire to benefit from vocational education.

*b. Construction of area vocational schools*

The appropriations for vocational education do not specify an amount to be used for the construction of area schools. The Act does specify that after fiscal year 1968, at least 25 percent of a State's allotment must be used for vocational education for persons who have completed or left high school and are available for full-time study or for construction of area vocational schools or both. The State has sole discretion as to what portion of this amount will be used for construction. Based on prior years experience, it is expected that an estimated $58,000,000 in Federal funds will be expended for this purpose. This amount will support 320 projects providing approximately 81,700 training stations in relation to an estimated need for 349,166 additional stations in 1969. Although the number of area vocational schools will have increased from 405 in 1964 to an estimated 1,650 in 1969, the deficit of need increases each year. It is estimated that the States will expend 1⅔ dollars for each Federal dollar in 1969 to further decrease the need.

Improvement of vocational and technical training opportunities are dependent upon the availability of facilities and equipment to offer realistic occupational instructional programs. New and innovative programs tied into the industrial and business capabilities of the community will provide for the orientation and related requirements of on-the-job training.

| Area vocational education schools | 1965 actual | 1966 actual | 1967 actual | 1968 estimate | 1969 estimate |
|---|---|---|---|---|---|
| Construction projects: | | | | | |
| (a) New | 144 | 239 | 226 | 220 | 213 |
| (b) Remodeled | 64 | 111 | 109 | 124 | 107 |
| Total | 208 | 350 | 335 | 344 | 320 |

VOCATIONAL EDUCATION TEACHER TRAINING

Maintaining an adequate supply of vocational teachers is a major problem today. With the introduction of new teaching and instructional techniques such as computer-assisted instructional programs, closed-circuit television, and tele-audio installations, teacher training programs have been revised and expanded to permit training in the utilization of these techniques. Teacher training will reach beyond research, experimental, and developmental projects and train thousands of vocational education instructors in the correct utilization of many new machines, materials, and devices that clarify and speed up learning.

Ways are being found to assist those teachers who have daily contact with youth, to update their teaching skills and resources so that our youth will be trained in the most modern and acceptable practices of business and industry. The availability of funds for teacher education make it possible for the States to accomplish the following:

1. Intensify seminar and institute programs that prepare teachers to cope with the problems of big-city youth, the disadvantaged, and those with special needs.
2. Add personnel to provide more adequate teacher training service in the health, technical, and office education fields.
3. Explore ways to attract and retain persons in teacher training through stipends, scholarships, loans or other incentive plans.
4. Link-up with business and industry to perfect ways to provide practical work experience for vocational education teachers through a possible subsidy to the employer to encourage breadth of occupational experience and insure retention of the trainee by the vocational school system.
5. Initiate a plan providing the content for courses for public school administrators who need added insight into the philosophy, legislation, and practical aspects of quality vocational programs that meet the needs of individuals in the community and the business, industry, and other groups needing trained personnel.

ACTUAL AND PROJECTED NUMBER OF TEACHERS OF VOCATIONAL AND TECHNICAL EDUCATION PROGRAMS

| Fiscal year | Number of teachers of vocational classes | Increase over prior year | |
|---|---|---|---|
| | | Number | Percent |
| 1964 | 85,102 | | |
| 1965 | 109,136 | 24,034 | 28.24 |
| 1966 | 124,042 | 14,906 | 13.66 |
| 1967 (estimate) | 146,383 | 22,341 | 18.01 |
| 1968 (estimate) | 163,152 | 16,769 | 11.45 |
| 1969 (estimate) | 188,000 | 24,848 | 15.23 |

ALLOTMENT OF FEDERAL FUNDS TO STATES AND OUTLYING AREAS UNDER THE VOCATIONAL EDUCATION ACT OF 1963

| State and outlying areas | 1967 actual | 1968 estimate [1] | 1969 estimate [2] |
|---|---|---|---|
| Total | $198,189,577 | $198,225,000 | $199,309,000 |
| Alabama | 4,610,512 | 4,589,666 | 4,614,765 |
| Alaska | 245,236 | 243,040 | 244,369 |
| Arizona | 1,805,218 | 1,842,665 | 1,852,742 |
| Arkansas | 2,519,605 | 2,475,963 | 2,489,503 |
| California | 14,665,140 | 14,917,026 | 14,998,600 |
| Colorado | 1,946,059 | 1,992,977 | 2,003,876 |
| Connecticut | 2,171,198 | 2,183,680 | 2,195,622 |
| Delaware | 390,298 | 399,998 | 402,185 |
| District of Columbia | 546,495 | 543,244 | 546,215 |
| Florida | 6,199,468 | 6,196,204 | 6,230,088 |
| Georgia | 5,810,089 | 5,815,882 | 5,847,686 |
| Hawaii | 797,792 | 779,107 | 783,368 |
| Idaho | 890,996 | 858,478 | 863,173 |
| Illinois | 8,216,394 | 8,266,810 | 8,312,017 |
| Indiana | 4,907,895 | 4,781,770 | 4,807,919 |
| Iowa | 2,883,076 | 2,846,311 | 2,861,876 |
| Kansas | 2,391,526 | 2,326,685 | 2,339,409 |
| Kentucky | 4,131,417 | 4,089,596 | 4,111,960 |
| Louisiana | 4,537,243 | 4,585,248 | 4,610,323 |
| Maine | 1,189,505 | 1,173,870 | 1,180,289 |
| Maryland | 3,202,493 | 3,350,943 | 3,369,268 |
| Massachusetts | 4,351,359 | 4,492,554 | 4,517,122 |
| Michigan | 7,856,956 | 7,778,655 | 7,821,193 |
| Minnesota | 3,720,844 | 3,641,294 | 3,661,207 |
| Mississippi | 3,132,779 | 3,137,749 | 3,154,908 |
| Missouri | 4,274,571 | 4,535,632 | 4,560,435 |
| Montana | 796,156 | 802,261 | 806,648 |
| Nebraska | 1,508,981 | 1,474,594 | 1,482,658 |
| Nevada | 337,727 | 326,107 | 327,890 |
| New Hampshire | 722,359 | 697,660 | 701,475 |
| New Jersey | 5,340,073 | 5,330,872 | 5,360,024 |
| New Mexico | 1,302,460 | 1,267,614 | 1,274,546 |
| New York | 13,630,868 | 13,539,820 | 13,613,862 |
| North Carolina | 6,711,898 | 6,647,542 | 6,683,894 |
| North Dakota | 794,770 | 811,763 | 816,202 |
| Ohio | 9,793,732 | 9,903,582 | 9,957,740 |
| Oklahoma | 3,005,524 | 2,969,877 | 2,986,118 |
| Oregon | 1,965,985 | 1,991,915 | 2,002,808 |
| Pennsylvania | 11,185,718 | 11,164,872 | 11,225,927 |
| Rhode Island | 888,672 | 861,074 | 865,783 |
| South Carolina | 3,614,447 | 3,639,695 | 3,659,599 |
| South Dakota | 833,066 | 817,192 | 821,661 |
| Tennessee | 4,954,951 | 4,881,629 | 4,908,324 |
| Texas | 12,595,165 | 12,676,680 | 12,746,002 |
| Utah | 1,200,597 | 1,184,139 | 1,190,615 |
| Vermont | 482,651 | 480,096 | 482,721 |
| Virginia | 5,507,219 | 5,430,470 | 5,460,167 |
| Washington | 2,942,267 | 2,955,581 | 2,971,744 |
| West Virginia | 2,403,411 | 2,369,947 | 2,382,907 |
| Wisconsin | 4,173,147 | 4,136,678 | 4,159,300 |
| Wyoming | 340,700 | 341,187 | 343,053 |
| American Samoa | | 39,656 | 39,873 |
| Guam | 107,156 | 123,489 | 124,164 |
| Puerto Rico | 3,599,103 | 3,444,025 | 3,462,859 |
| Virgin Islands | 56,610 | 69,936 | 70,318 |

[1] Distribution made on the basis of State products of (1) fiscal year 1968 allotment ratios, with limits of 0.60 and 0.40 and (2) July 1, 1966, population age-groups 15–19, 20–24, and 25–65, with a minimum amount of $10,000.

[2] Estimated distribution of funds for fiscal year 1969 on the basis of fiscal year 1968 data.

| | 1968 estimate | 1969 estimate | Increase or decrease |
|---|---|---|---|
| Grants to States: | | | |
| (a) George-Barden Act | $49,636,000 | $49,686,000 | |
| (b) Supplemental acts | 305,000 | 305,000 | |
| Total appropriation and obligations | 49,991,000 | 49,991,000 | |

## Justification of Estimate

The maximum authorization of $49,991,000 is requested for fiscal year 1969 for grants to States under the George-Barden and supplemental acts. This authorization includes $15,000,000 for area vocational education programs, now a permanent authorization under the George-Barden Act; $5,000,000 for practical nurse training, also a permanent authorization; $29,311,000 for vocational education in agriculture, distributive occupations, home economics, and trades and industry; and $375,000 for the fishery trades and industry. Under the supplemental acts the authorization includes $80,000 for Guam, $80,000 for American Samoa, $105,000 for Puerto Rico, and $40,000 for the Virgin Islands.

The occupational areas of training authorized by the George-Barden and supplemental acts have been expanded and added to under authority of the Vocational Education Act of 1963. Under the authority of the Vocational Education Act of 1963 to transfer or combine allotments received under the vocational education acts, 17 States transferred $2,195,242 in fiscal year 1965; 34 States transferred $16,401,492 in fiscal year 1966; and 32 States have transferred $22,236,265 in fiscal year 1967. The accomplishments, by occupation, which follow represent activities carried out under all these vocational education acts.

### Health related vocational and technical training

In fiscal year 1966, under the vocational education acts, more than 83,000 youths and adults were enrolled in training for health occupations. Programs ranged from two-year associate degree curriculums to the shorter four-month training offered in occupational therapy assistants programs. It is expected that enrollments will increase from 135,280 in 1968 to 167,639 in 1969.

A new type of high school program has been developed to introduce youth to the broad spectrum of health careers while at the same time the students learn fundamental principles and develop some basic skills needed for employment in minimal skill jobs in hospitals and other health agencies. This program is expected to serve as an effective recruitment device and provide a continuing supply of beginning level health workers. Associate degree programs in nursing continue to increase at a rapid rate with approximately 10,000 students being admitted to these programs in fiscal year 1968 and a projected enrollment of 12,500 in fiscal year 1969.

Funds allocated to the States under the vocational education acts are used to fund workshops for teachers and other leadership personnel in health occupations training. Workshops funded in 1967 included one, the first of its kind, for medical technologists who are currently, or plan to be, engaged in teaching medical laboratory assistants and technicians. Psychiatric and mental nursing in practical nursing curriculum was the theme of workshops funded both in fiscal year 1967 and 1968. State-wide workshops for teachers in health occupations programs were funded in almost every State.

ACTUAL AND PROJECTED ENROLLMENTS IN HEALTH OCCUPATIONS TRAINING—UNDER VOCATIONAL EDUCATION ACTS FOR 1966, 1967, 1968, AND 1969

| | Enrollments 1966 | Projected enrollments | | |
|---|---|---|---|---|
| | | 1967 | 1968 | 1969 |
| Total | 83,677 | 102,923 | 135,280 | 167,639 |
| Practical nursing | 47,990 | 50,000 | 52,000 | 55,639 |
| A.D. nursing | 4,215 | 8,000 | 10,000 | 12,500 |
| Nurses aides and assistants | 10,122 | 19,000 | 35,000 | 50,000 |
| Surgical technicain | 327 | 600 | 800 | 1,000 |
| Medical laboratory assistant | 976 | 2,000 | 2,500 | 3,000 |
| Dental assistant | 6,304 | 7,423 | 9,500 | 10,500 |
| Medical office assistant | 3,146 | 4,500 | 6,000 | 8,000 |
| All others | 10,597 | 11,400 | 19,480 | 27,000 |

### TECHNICAL EDUCATION

Within the past decade technological change has progressed at an unprecedented rate. During this time technical manpower needs have grown faster than any other group in the work force, and it is estimated that this group will grow at 2½ times the rate of the labor force as a whole. Studies have indicated that 100,000 new technicians in the physical sciences with a similar number in the life sciences will be needed annually for the next ten years. Since the passage of Title VIII of the National Defense Education Act of 1958 (now a permanent part of the Vocational Education Act of 1963), total enrollments have increased from 48,564 in 1959 to an estimated 329,406 in 1968. It is expected that enrollments will reach 400,000 in 1969. Programs to educate technicians include those in the engineering technologies, plant and animal science, medical science, and similar fields of applied science.

### AGRICULTURAL EDUCATION

Redirection of emphasis in agricultural education to train persons for employment in off-farm agricultural occupations has resulted in many new programs. Enrollments in off-farm agriculture programs increased from 55,681 in 1965 to 112,368 in 1966. This constituted 12.4 percent of the total agriculture enrollment. In 1969 about 27 percent of the total estimated enrollment of 1,030,861 will be enrolled in off-farm agriculture occupations. Offerings include training in ornamental horticulture, agricultural mechanics, farm equipment sales and service, forestry, pulpwood production and turf management. Texas established ornamental horticulture in 19 schools and farm machinery repair in 12 schools. South Carolina instituted 60 new programs in secondary schools and 25 additional courses at the post-high school level including courses in field crop technology, livestock technology, truck crop technology and grain, feed and seed technology.

Many of the new type programs are being established in urban schools where many opportunities exist for persons trained in horticulture and landscaping.

Classes in agriculture for persons with special needs are increasing in at least 25 States in both urban and rural areas. Rural areas account for about half of the nationwide needs for improved training and education as measured by low family incomes, underemployed workers, and relatively low educational attainment. Many programs in agriculture are readily tailored to meet the needs of this segment of the society.

### HOME ECONOMICS

The demand for workers in the human service occupations is increasing in great numbers. A majority of the occupations which use knowledge and skills of home economics are in this area, that is, jobs involving services to families in the home and to groups outside the home and services to professional home economists and professions in related fields.

Vocational home economics education programs prepare girls for gainful employment in occupations which utilize knowledge and skills of home economics in addition to preparation for home and family responsibilities. The competent homemaker can make a definite economic contribution to the wealth of the nation as well as being better able to contribute to the physical, mental, and emotional well-being of the family. The homemaker who has learned to manage home responsibilities is more likely to be an efficient and satisfied worker in her job.

Thirty-three percent of all enrollees in the occupational phase of home economics were in the field of food service. The next largest percent of enrollees was in institutional and home management, and child care and guidance services. Occupational fields other than the three mentioned above for which training was provided as a part of home economics education were: clothing services, home furnishings and equipment services, and homemaker-home health services. Enrollments are expected to increase from 1,983,334 in 1968 to 2,016,667 in 1969.

### Distributive Education

The Vocational Education Act of 1963 removed restrictions on enrollments in distributive education. As a result, enrollments are expected to increase from 637,942 in fiscal year 1968 to 786,177 in fiscal year 1969 reflecting a long-range

trend of greater proportions of the population moving into distributive and marketing occupations. Because of the many job opportunities available in the wholesale trades, retail sales, general merchandising and related services areas, additional programs of training are being instituted by the States. These include such courses as airport management, food distribution, petroleum marketing, fashion merchandising industrial sales, and hotel and motel management.

### Trade and Industrial Education

Prior to the Vocational Education Act of 1963, trade and industrial preparatory programs were operated almost exclusively to train individuals in skilled occupations. However, many new programs have been established for pre-employment training for semi-skilled occupations as a result of the amendments to the Smith-Hughes and George-Barden Acts permitting preemployment classes to operate less than 9 months per year and less than 30 hours per week without the requirement that half of the time be given to practical work. Examples of such occupational areas for which training is provided are: custodians, machine tool operators, and gas station attendants.

Trade and industrial programs are serving a much broader range of occupations. While additional programs are being developed for semi-skilled occupations, many of the conventional occupations are requiring a higher degree of skill and technical know-how. It is estimated, for example, that since implementation of the Vocational Education Act of 1963 at least 100 machine trades programs have included instruction in the operation of tape-programmed machine tools. Newer areas of training have been developed in fields of work such as: radiography, fluid power, instrument maintenance, lens grinding and optical mechanics.

There has been a genuine effort among the States to meet the needs of more students. Enrollments are expected to increase from 1,571,535 in fiscal year 1968 to 2,260,767 in fiscal year 1969. In many of the smaller school districts there is a growth in the number of students being placed in industrial cooperative training programs. For example, the Penta County school in Ohio is conducting just such a program with the cooperation of 19 school districts in five counties. The school trains high school students and dropouts, as well as adults, for jobs leading to employment in more than 300 occupations.

### Office Occupations

The office occupations are the second largest employment group in the Nation today. Almost 17 percent of all employed persons are found in this category. More than one out of three employed women are in office work. Better than 17 percent of all white working persons are in the office jobs and one in ten of the non-white work in this area. Clerical jobs are the main source of employment of teenagers in recent years. In 1966 about 2 in 5 new clerical jobs were obtained by teenagers.

It is expected that during the decade 1965–75 there will be a growth of more than 40 percent in office occupations. The present clerical force represents over 12 million persons and will grow to better than 16 million during the next decade.

Business and office occupations were added to the list of occupations which could be supported under the provisions of the Vocational Education Act of 1963. Enrollments have increased from 1,634,869 in fiscal year 1967 to 1,835,779 in fiscal year 1968. Estimated enrollments in fiscal year 1969 will reach 1,892,889.

ESTIMATED ENROLLMENT BY OCCUPATION

| | 1967 | 1968 | 1969 |
|---|---|---|---|
| Agriculture | 992,587 | 1,011,724 | 1,030,861 |
| Distributive | 456,913 | 637,942 | 786,177 |
| Health | 102,923 | 135,280 | 167,639 |
| Home economics | 1,950,000 | 1,983,334 | 2,016,667 |
| Office | 1,634,869 | 1,835,779 | 1,892,889 |
| Technical | 288,627 | 329,406 | 400,000 |
| Trades and industry | 1,454,081 | 1,571,535 | 2,260,767 |
| Total | 6,880,000 | 7,505,000 | 8,555,000 |

ALLOTMENTS TO STATES AND TERRITORIES, GEORGE-BARDEN AND SUPPLEMENTAL ACTS, FISCAL YEAR 1968 AND 1969[1]

| State or territory | Grand total | Title I | | | | | | Title II | Title III |
|---|---|---|---|---|---|---|---|---|---|
| | | Total | Agriculture | Distributive occupations | Home economics | Trades and industry | Fishery trades and industry | Practical nurse training | Technical education |
| (1) | (2) | (3) | (4) | (5) | (6) | (7) | (8) | (9) | (10) |
| Grand total, including supplemental acts | $49,990,823 | | | | | | | | |
| Grand total | 49,685,823 | $29,685,823 | $10,309,997 | $2,602,298 | $8,182,825 | $8,215,703 | $375,000 | $5,000,000 | $15,000,000 |
| Alabama | 1,140,849 | 681,872 | 283,349 | 44,954 | 213,135 | 136,819 | 3,615 | 114,744 | 344,233 |
| Alaska | 259,576 | 157,500 | 40,000 | 15,000 | 40,000 | 40,000 | 22,500 | 25,519 | 76,557 |
| Arizona | 279,450 | 167,549 | 40,000 | 17,919 | 47,907 | 59,848 | 1,875 | 27,975 | 83,926 |
| Arkansas | 797,790 | 476,738 | 233,263 | 24,581 | 147,526 | 69,493 | 1,875 | 80,263 | 240,789 |
| California | 2,549,008 | 1,518,605 | 235,107 | 216,285 | 309,808 | 734,905 | 22,500 | 257,601 | 772,802 |
| Colorado | 434,455 | 260,066 | 89,720 | 24,136 | 66,636 | 77,699 | 1,875 | 43,597 | 130,792 |
| Connecticut | 461,753 | 276,134 | 40,000 | 34,887 | 79,425 | 119,947 | 1,875 | 46,405 | 139,214 |
| Delaware | 232,631 | 138,470 | 40,000 | 15,000 | 40,000 | 40,000 | 3,470 | 23,540 | 70,621 |
| Florida | 967,146 | 582,731 | 74,147 | 68,138 | 186,426 | 231,520 | 22,500 | 96,104 | 288,311 |
| Georgia | 1,291,071 | 772,847 | 286,460 | 54,261 | 254,730 | 168,921 | 8,475 | 129,556 | 388,668 |
| Hawaii | 230,196 | 138,137 | 40,000 | 15,000 | 40,000 | 40,000 | 3,137 | 23,015 | 69,044 |
| Idaho | 335,250 | 200,854 | 93,392 | 15,000 | 50,587 | 40,000 | 1,875 | 33,599 | 100,797 |
| Illinois | 2,130,336 | 1,271,961 | 395,878 | 138,727 | 280,445 | 454,728 | 2,183 | 214,594 | 643,781 |
| Indiana | 1,440,031 | 860,256 | 341,459 | 64,161 | 253,208 | 199,553 | 1,875 | 144,944 | 434,831 |
| Iowa | 1,327,878 | 792,837 | 465,787 | 37,947 | 187,127 | 100,101 | 1,875 | 133,760 | 401,281 |
| Kansas | 784,270 | 468,857 | 225,430 | 29,980 | 122,803 | 88,769 | 1,875 | 78,853 | 236,560 |
| Kentucky | 1,324,728 | 791,436 | 385,312 | 41,808 | 243,468 | 118,973 | 1,875 | 133,323 | 399,969 |
| Louisiana | 912,068 | 548,639 | 163,978 | 44,820 | 172,878 | 144,463 | 22,500 | 90,857 | 272,572 |
| Maine | 310,388 | 189,729 | 40,000 | 15,000 | 68,224 | 44,005 | 22,500 | 30,165 | 90,494 |
| Maryland | 666,815 | 401,578 | 77,479 | 42,669 | 122,368 | 142,870 | 16,192 | 66,309 | 198,928 |
| Massachusetts | 833,089 | 499,852 | 40,000 | 70,850 | 122,251 | 244,251 | 22,500 | 83,309 | 249,928 |
| Michigan | 1,798,634 | 1,073,878 | 310,134 | 107,655 | 301,140 | 352,680 | 2,269 | 181,189 | 543,567 |
| Minnesota | 1,312,235 | 783,718 | 413,253 | 46,978 | 186,588 | 135,024 | 1,875 | 132,129 | 396,388 |
| Mississippi | 1,163,305 | 697,603 | 381,807 | 29,973 | 196,130 | 78,125 | 11,568 | 116,425 | 349,277 |
| Missouri | 1,390,638 | 830,775 | 380,371 | 59,445 | 208,545 | 180,539 | 1,875 | 139,966 | 419,897 |
| Montana | 299,881 | 179,744 | 74,273 | 15,000 | 48,596 | 40,000 | 1,875 | 30,034 | 90,103 |
| Nebraska | 642,728 | 384,376 | 217,166 | 19,421 | 93,240 | 52,674 | 1,875 | 64,588 | 193,764 |
| Nevada | 228,058 | 136,875 | 40,000 | 15,000 | 40,000 | 40,000 | 1,875 | 22,796 | 68,387 |
| New Hampshire | 228,058 | 136,875 | 40,000 | 15,000 | 40,000 | 40,000 | 1,875 | 22,796 | 68,387 |
| New Jersey | 876,457 | 525,922 | 40,000 | 83,485 | 100,051 | 287,381 | 15,005 | 87,634 | 262,901 |

| | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|
| New Mexico | 245,693 | 147,401 | 40,980 | 15,000 | 46,895 | 42,651 | 1,875 | 24,573 | 73,719 |
| New York | 2,700,384 | 1,615,680 | 228,411 | 230,941 | 354,071 | 786,244 | 16,013 | 271,176 | 813,528 |
| North Carolina | 2,032,505 | 1,212,984 | 568,575 | 62,697 | 397,977 | 179,046 | 4,689 | 204,880 | 614,641 |
| North Dakota | 434,085 | 259,845 | 143,764 | 15,000 | 59,206 | 40,000 | 1,875 | 43,560 | 130,680 |
| Ohio | 2,201,568 | 1,315,225 | 365,400 | 133,570 | 373,268 | 438,894 | 4,093 | 221,586 | 664,757 |
| Oklahoma | 735,384 | 439,679 | 182,132 | 32,040 | 124,772 | 98,860 | 1,875 | 73,926 | 221,779 |
| Oregon | 508,946 | 306,707 | 97,276 | 24,339 | 96,605 | 77,890 | 10,597 | 50,560 | 151,679 |
| Pennsylvania | 2,343,066 | 1,400,058 | 250,585 | 155,766 | 464,891 | 523,751 | 5,065 | 235,752 | 707,256 |
| Rhode Island | 231,350 | 138,253 | 40,000 | 15,000 | 40,000 | 40,872 | 2,381 | 23,274 | 69,823 |
| South Carolina | 973,362 | 581,229 | 246,985 | 32,787 | 202,470 | 97,050 | 1,937 | 98,033 | 294,100 |
| South Dakota | 436,475 | 261,271 | 144,671 | 15,000 | 59,725 | 40,000 | 1,875 | 43,801 | 131,403 |
| Tennessee | 1,426,595 | 852,004 | 412,688 | 49,087 | 245,971 | 142,383 | 1,875 | 143,648 | 430,943 |
| Texas | 2,357,417 | 1,412,938 | 488,465 | 131,826 | 345,666 | 424,481 | 22,500 | 236,120 | 708,359 |
| Utah | 228,854 | 137,350 | 40,000 | 15,000 | 40,000 | 40,475 | 1,875 | 22,876 | 68,628 |
| Vermont | 228,058 | 136,875 | 40,000 | 15,000 | 40,000 | 40,000 | 1,875 | 22,796 | 68,387 |
| Virginia | 1,294,292 | 774,600 | 279,355 | 54,589 | 254,608 | 170,542 | 15,506 | 129,923 | 389,769 |
| Washington | 723,517 | 436,578 | 114,817 | 39,263 | 131,487 | 128,511 | 22,500 | 71,735 | 215,204 |
| West Virginia | 604,758 | 361,713 | 85,062 | 25,601 | 166,073 | 83,102 | 1,875 | 60,761 | 182,284 |
| Wisconsin | 1,364,517 | 814,720 | 389,561 | 54,380 | 206,572 | 162,332 | 1,875 | 137,449 | 412,348 |
| Wyoming | 228,058 | 136,875 | 40,000 | 15,000 | 40,000 | 40,000 | 1,875 | 22,796 | 68,387 |
| District of Columbia | 228,058 | 136,875 | 40,000 | 15,000 | 40,000 | 40,000 | 1,875 | 22,796 | 68,387 |
| American Samoa | 1,875 | 1,875 | | | | | 1,875 | | |
| Guam | 55,910 | 1,875 | | | | | 1,875 | 13,509 | 40,526 |
| Puerto Rico | 1,423,432 | 854,924 | 543,505 | 32,332 | 189,326 | 75,331 | 14,430 | 142,127 | 426,381 |
| Virgin Islands | 28,892 | 1,875 | | | | | 1,875 | 6,754 | 20,263 |
| Total, supplemental acts | 305,000 | | | | | | | | |
| American Samoa | 80,000 | | | | | | | | |
| Guam | 80,000 | | | | | | | | |
| Puerto Rico | 105,000 | | | | | | | | |
| Virgin Islands | 40,000 | | | | | | | | |

[1] Based upon U.S. Census of Population, 1960.

| | 1968 estimate | 1969 estimate | Increase or decrease |
|---|---|---|---|
| d. Work-study program (appropriation) | | | |
| Work-study program (obligation) | $10,000,000 | | —$10,000,000 |

## Justification of Estimate

In fiscal year 1966 with an appropriation of $25,000,000, the work-study program provided support for 70,139 needy students. Of this number 25,000 were also enrolled in summer programs. In 1967 with an appropriation of $10,000,000 approximately 35,000 students were enrolled in work-study programs. For fiscal year 1968 the program will be maintained at the 1967 level through $10,000,000 in transfer funds from the Office of Economic Opportunity.

The authorization for this program expires June 30, 1968.

WORK-STUDY PROGRAM UNDER THE VOCATIONAL EDUCATION ACT OF 1963

ACTUAL OBLIGATIONS FOR 1967—FISCAL YEAR 1967 ACTUAL AND 1968 ESTIMATED OBLIGATIONS

| State and outlying area | 1967 actual | 1968 estimate |
|---|---|---|
| Total | $9,986,545 | [1] $10,000,000 |
| Alabama | 200,270 | 197,787 |
| Alaska | 14,983 | 15,881 |
| Arizona | 83,404 | 83,735 |
| Arkansas | 108,875 | 105,390 |
| California | 902,462 | 919,639 |
| Colorado | 100,385 | 101,059 |
| Connecticut | 132,847 | 132,821 |
| Delaware | 24,472 | 25,024 |
| District of Columbia | 30,964 | 31,280 |
| Florida | 273,186 | 272,860 |
| Georgia | 248,714 | 247,836 |
| Hawaii | 42,451 | 43,311 |
| Idaho | 39,455 | 38,980 |
| Illinois | 497,428 | 503,371 |
| Indiana | 246,716 | 246,873 |
| Iowa | 140,339 | 140,039 |
| Kansas | 113,370 | 114,534 |
| Kentucky | 178,295 | 175,651 |
| Louisiana | 196,774 | 198,269 |
| Maine | 52,440 | 51,011 |
| Maryland | 181,791 | 185,275 |
| Massachusetts | 253,209 | 251,686 |
| Michigan | 421,515 | 427,817 |
| Minnesota | 180,792 | 180,944 |
| Mississippi | 138,840 | 137,633 |
| Missouri | 215,252 | 216,555 |
| Montana | 37,956 | 38,018 |
| Nebraska | 72,916 | 71,223 |
| Nevada | 19,977 | 19,249 |
| New Hampshire | 33,462 | 32,724 |
| New Jersey | 318,634 | 320,983 |
| New Mexico | 58,932 | 57,748 |
| New York | 827,049 | 819,542 |
| North Carolina | 287,669 | 283,447 |
| North Dakota | 36,458 | 35,611 |
| Ohio | 510,413 | 516,364 |
| Oklahoma | 127,853 | 126,083 |
| Oregon | 100,884 | 100,578 |
| Pennsylvania | 558,857 | 552,457 |
| Rhode Island | 43,450 | 43,792 |
| South Carolina | 158,318 | 158,326 |
| South Dakota | 25,000 | 36,093 |
| Tennessee | 209,259 | 204,525 |
| Texas | 559,357 | 563,525 |
| Utah | 54,937 | 54,861 |

WORK STUDY PROGRAM UNDER THE VOCATIONAL EDUCATION ACT OF 1963—Continued

ACTUAL OBLIGATIONS FOR 1967—FISCAL YEAR 1967 ACTUAL AND 1968 ESTIMATED OBLIGATIONS

| State and outlying area | 1967 actual | 1968 estimate |
|---|---|---|
| Vermont | 20,976 | 20,693 |
| Virginia | 242,721 | 243,023 |
| Washington | 159,816 | 161,213 |
| West Virginia | 106,378 | 103,465 |
| Wisconsin | 207,761 | 207,893 |
| Wyoming | 17,979 | 17,324 |
| American Samoa | | 1,829 |
| Guam | 4,994 | 5,727 |
| Puerto Rico | 162,813 | 155,439 |
| Virgin Islands | 2,497 | 2,984 |

[1] Distribution of $10,000,000 on basis of estimated 15–20 population, July 1, 1966.

| | 1968 estimate | 1969 estimate | Increase or decrease |
|---|---|---|---|
| 2. Insured loans: | | | |
| Advances for reserve fund | | | |
| Interest payments | $3,600,000 | | —$3,600,000 |
| Total appropriation | 3,600,000 | | —3,600,000 |
| Advances for reserve fund | 1,577,329 | | —1,577,329 |
| Interest payments | 4,470,293 | | —4,470,293 |
| Total obligations | 6,047,622 | | —6,047,622 |

## Justification of Estimate

The insured loan program for vocational students under the National Vocational Studen Loan Insurance Act previously carried under this account has been transferred to "Higher Educational Activities" for 1969 in accordance with a legislative proposal to merge this program with college student insured loans.

| | 1968 estimate | 1969 estimate | Increase or decrease |
|---|---|---|---|
| 3. Program support: | | | |
| (a) Evaluation | | $490,000 | +$490,000 |
| (b) Project review | | 180,000 | +180,000 |
| (c) Advisory committees | | 25,000 | +25,000 |
| Total | | 695,000 | +695,000 |

## Justification of Estimate

Program support funds are needed to strengthen the role of the national advisory committees established by legislation, to implement an immediate and long-range evaluation program, and to enable use of consultants and contractual studies to insure a realistic appraisal of programs of vocational and technical education.

*a. Evaluation—$490,000*

*(1) Cost effectiveness of Fedcrally supported vocational technical education programs.*—In order to determine the benefits resulting from Federal funds invested in vocational education programs, it is urgent that studies be made to determine the cost of vocational education and the benefits to individuals and to society as a whole. This means it is essential to determine the financial returns, but more important is the determination of the benefits to society in the form of citizenship development of the individuals pursuing such programs. Without consideration of the citizenship values of occupational type training, the significant value of such training is not obtained. This would involve a

sample study of approximately 50 schools offering programs of vocational and technical education at the secondary, post-secondary and adult levels.

(2) *Placement and follow-up of those completing occupational training programs.*—In order to obtain some concept of the extent to which persons completing programs obtain employment in the field for which trained and continue in that field, follow-up should be conducted at various intervals of time. For example, upon completion of training and at 2, 5, 10 year intervals following completion of training.

This is the first phase of the long-range follow-up and would include all students completing programs of vocational and technical education in fiscal year 1968. Students in this survey would be followed-up in future surveys at intervals of at least two and five years.

(3) *The effectiveness of curriculum materials developed and distributed under Vocational Education programs.*—Data will be used to—

Direct efforts to better meet the needs, and
Evaluate efforts more effectively and re-direct them where necessary.

Need for data has been shown by necessity for an objective appraisal of effectiveness.

The study will be conducted from a sample of 100 schools at the secondary, post-secondary and adult levels. A general questionnaire will be used to ascertain from all States the numbers of schools that are utilizing the curriculum guides published and distributed on vocational and technical education occupational areas.

(4) *Continuation of study in characteristics, status and manpower needs in Health Occupations areas.*—The training of individuals for health occupations is critical at this time. It is extremely important to obtain current data regarding what training programs are in effect and the number of persons pursuing such programs. This survey is planned to determine potential training facilities and for planning of health occupations training in the States.

b. *Project Review—$180,000*

A national consultative committee of fifteen members, representing the broad national interests in occupational training, education, labor, business, industry, government, and the lay public, will be utilized to review and approve projects submitted to the Division of Vocational and Technical Education. In addition, one representative from each State and territory will be utilized in the reviewing process of projects submitted by the State or territory. On-site visits by a team of consultants may be required in the approval process and in monitoring approved projects as part of the on-going evaluation program of all approved projects. Approximately 1,000 applications will be reviewed.

c. *Advisory Committees—$25,000*

(1) *Advisory Committee on Vocational Education.*—This committee was established under the authority of Section 9(a), Vocational Education Act of 1963 (P.L. 88–210). The purpose of the committee is to advise the Commissioner in the preparation of general regulations, on policy matters, and on policies and procedures governing approval of State plans. It is composed of 12 members and meets "at the call of the chairman but not less often than twice a year."

(2) *National Advisory Committee on Health Occupations.*—This committee was established under the authority of Section 206(a) of P.L. 84–911 as amended by P.L. 88–210, Section 11, and P.L. 79–600. The purpose of the committee is to advise the Commissioner on matters of general policy in connection with the administration of Title II, Vocational Education in Practical Nurse Training. The committee is composed of 12 members and meets twice a year as recommended by the Commissioner of Education. A minimum of two meetings a year is essential to review accomplishments and advise the Commissioner of new approaches and directions in meeting the critical national need for trained personnel in the area of practical nursing and related health occupations.

BIOGRAPHICAL SKETCH

Name: Grant Venn.
Position: Associate Commissioner for Adult, Vocational, and Library Programs.
Birthplace and date: Seattle, Washington, March 1, 1919.
Education:

Washington State University—B.S. and BEd.
Washington State University—M.A. and EdD.
University of Minnesota—Graduate study.

Experience:
Present: Associate Commissioner for Adult, Vocational, and Library Programs.
1964–66: Superintendent of schools in Wood County, West Virginia.
1963: Consultant for the American Council on Education.
1962–63: Director of field training and acting chief of the division of selection for the Peace Corps.
1960–62: President of Western State College in Gunnison, Colorado.
1956–60: Superintendent of schools in Corning, New York.
1952–56: Superintendent of schools in Othello, Washington.
1946–52: Served in various capacities at public schools in Pullman, Yakima, and Bellevue, Washington, and at Washington State University.
1942–45: Served in the United States Navy.
1942: Instructor of vocational agriculture in Sedro Valley, Washington.
Association membership:
American Association of School Administrators.
National Education Association.
Colorado Education Association.
Colorado Association of School Administrators.
Phi Delta Kappa, Psi Chi, Alpha Delta, and Phi Kappa Phi.
Publications:
*The School Executive:*
"Organizing the School System for Guidance" (Co-author M. M. Ohlsen), August 1948.
"Superintendents' Role in Improving Instruction." September 1957.
*Man, Education and Work*, American Council on Education, 1964.

## Budget Request

Senator Hill. All right, Mr. Venn, you are going to tell us about vocational education?

Mr. Venn. Yes, Mr. Chairman.

Senator Hill. We have had that for a good many years, as you know.

Mr. Venn. That is right.

Senator Hill. You may proceed in your own way.

Mr. Venn. Mr. Chairman, we are requesting $249,995,000 for Expansion and Improvement of Vocational Education in 1969, a net decrease of $2,905,000 from the 1968 appropriation. This decrease results primarily from the insured loan program for vocational students under the National Vocational Student Loan Insurance Act which will be merged with the higher education insured loan program under the appropriation "Higher Educational Activities."

### VOCATIONAL TRAINING UNDER GEORGE-BARDEN ACT AND VOCATIONAL EDUCATION ACT OF 1963

Our estimate proposes $249,300,000 for grants to States under the Vocational Education Act of 1963 and George-Barden and Supplemental Acts. These grants for the States call for 50–50 matching at the State level.

Under the impetus of the Vocational Education Act of 1963, enrollments have increased from 4,566,390 in 1964 to an estimated 7,505,000 in 1968. Enrollments in fiscal year 1969 are expected to exceed 8,500,000. Of this number over 4,000,000 will be in high school, over 600,000 in post-secondary programs, about 3,600,000 in adult programs, and approximately 300,000 in special programs for the disadvantaged.

Senator HILL. What was the year we passed the Smith-Hughes Act?

Mr. VENN. In 1917.

Senator HILL. That was the year that we got into the war to end all wars.

Mr. VENN. Yes, sir.

Senator HILL. Go ahead.

Mr. VENN. It is estimated that in fiscal year 1969 the total expenditures for vocational and technical education will exceed $1.1 billion. This amount includes State and local matching funds of approximately $890.5 million—almost 3½ dollars for each Federal dollar expended.

The availability of funds under the Vocational Education Act of 1963 for construction of area vocational schools has stimulated the increase of these schools from 405 in 1964 to an estimated 1,650 by 1969. It is anticipated that of the amount requested, about $58 million will be used in 1969 to help support construction of 320 area vocational school projects which will provide facilities for approximately 224,000 students. These schools, which are readily accessible in both rural and urban communities, are providing occupational training and retraining opportunities for the Nation's labor force.

With the concentration of population in the larger cities and outmigration of the disadvantaged from rural to urban centers, many youths and adults are finding initial employment and advancement quite difficult. Increasingly State vocational agencies are extending the educational programs through the summer months and expanding programs in large metropolitan areas to meet the occupational training needs of this special group.

Funds requested in this estimate will serve to sustain the Federal, State and local vocational training partnership as a powerful instrument for preparing our young people and adults for gainful employment in the labor force of a dynamic technological society.

### INSURED LOANS

The insured loan program for vocational students, authorized by the National Vocational Student Loan Insurance Act, has been merged with the higher education insured loan program; therefore, funds are requested for this activity in 1969 under the appropriation "Higher Educational Activities."

### WORK STUDY PROGRAMS

We are not requesting funds for this activity in 1969 since it has been absorbed by the Neighborhood Youth Corps in-school program for which appropriations are included under the Economic Opportunity Program.

Senator HILL. That has moved out of your hands?

Mr. VENN. Yes, sir. It did last year, although Congress did decide to transfer $10 million to the Office to administer the work-study program.

### PROGRAM SUPPORT

This request includes $695,000 for evaluation studies, project review, and the costs of two advisory committees in connection with

the programs supported under this appropriation. We need to know the effectiveness of programs that are being offered, the kinds of new programs and curriculums that are needed, as well as more about the people these programs are to serve. We have been criticized, and rightly so, for lack of data to show the effectiveness of the program by various congressional committees, the Advisory Council on Vocational Education, the Department, and the Bureau of the Budget, but we have never had the funds for fact finding and evaluation. Some of this information can be obtained through evaluation studies: but we also need the advice and assistance of individuals from the educational community, government, industry, business, and labor, serving as members of advisory committees or on panels of consultants, or as individual consultants.

Senator HILL. In other words, you think this would be most helpful as far as the future is concerned?

Mr. VENN. That is right. It would allow us at the Federal level and in individual school districts and colleges to then focus this money much more directly on the areas of greatest need.

Senator HILL. And we need this data to be able to have the picture, do we not?

Mr. VENN. Yes, sir; we simply have not been able to do the kind of job we need to do to save money.

Senator HILL. We didn't have the data so we couldn't get the picture for planning, is that right?

Mr. VENN. That is right.

I have a second statement, Mr. Chairman, on the Libraries and Community Services Program.

## LIBRARIES AND COMMUNITY SERVICES

**STATEMENT OF GRANT VENN, ASSOCIATE COMMISSIONER FOR ADULT, VOCATIONAL, AND LIBRARY PROGRAMS**

**ACCOMPANIED BY:**

**HAROLD HOWE II, COMMISSIONER OF EDUCATION**
**RAY FRY, DIRECTOR, DIVISION OF LIBRARY SERVICES AND EDUCATIONAL FACILITIES**
**PAUL DELKER, ACTING DIRECTOR, DIVISION OF ADULT EDUCATION PROGRAMS**
**JAMES B. ROBERTS, EXECUTIVE OFFICER, BUREAU OF ADULT, VOCATIONAL, AND LIBRARY PROGRAMS**
**BERNARD SISCO, ASSISTANT COMMISSIONER FOR ADMINISTRATION**
**LEON SCHWARTZ, DEPUTY ASSISTANT COMMISSIONER FOR ADMINISTRATION**
**JOE G. KEEN, BUDGET OFFICER**
**EDMUND L. APPLEBAUM, ASSISTANT DIRECTOR, PROCESSING DEPARTMENT, LIBRARY OF CONGRESS**
**JAMES B. CARDWELL, DEPUTY ASSISTANT SECRETARY, BUDGET**

### APPROPRIATION ESTIMATE

#### LIBRARIES AND COMMUNITY SERVICES

For grants and payments pursuant to the *Library Services and Construction* Act [of June 19, 1956], as amended (20 U.S.C., ch. 16 [, Public Laws 88–269 and

89–511], titles I and II (except section 224(*a*)(*1*)) of the Higher Eduaction Act of 1965, and the Adult Education Act of 1966, [$156,500,000] *$149,199,000*, of which $35,000,000 shall be for grants for public library services under title I of the *Library Services and Construction* Act [of June 19, 1956, $27,185,000] *$9,185,000*, to remain available through June 30, [1969] *1970*, shall be for grants for public library construction under title II of such Act, [$2,375,000] *$2,281,000* shall be for grants for cooperative networks of libraries under title III of such Act, [$2,120,000] *$2,094,000* shall be for grants for State institutional library services under part A of title IV of such Act, [$1,320,000] *$1,334,000* shall be for library services to the physically handicapped under part B of title IV of such Act, $10,000,000 shall be [for grants] for community service and continuing education programs under title I of the Higher Education Act of 1965, [$5,000,000] *$5,500,000* shall be for transfer to the Librarian of Congress for the acquisition and cataloging of library materials under part C of title II of such Act, and [$40,250,000] *$50,000,000* shall be for adult education programs under the Adult Education Act of 1966: *Provided, That not to exceed $555,000 shall be available for necessary expenses of advisory committees, for services of other specialists in reviewing applications submitted for assistance under such programs, and for program evaluation.*

### Appropriation Language Changes

Substitution of "Library Services and Construction" for "of June 19, 1956" and ", Public Laws 88–269 and 89–511" provides more clarity and consistency in the language.

Inclusion of "(a)(1)" is requested for library programs under title II of the Higher Education Act. The pending Higher Education Amendments of 1967 would add a new subsection 224 (a)(2) for grants for library schools which are included in this appropriation account. The proposed change will eliminate from this account only library research which is carried under "Research and Training."

Substitution of "1970" for "1969" will assure that funds for public library construction remain available for two years in accordance with the Library Services and Construction Act Amendments of 1966.

The elimination of "grants for" is proposed since the pending Higher Education Amendments provide for grants or contracts for experimental projects under title I of the Higher Education Act, Community Service and Continuing Education Programs.

The proposed language "not to exceed $555,000 shall be available for necessary expenses for advisory committees, for services of other specialists in reviewing applications submitted for assistance under such programs, and for program evaluation" will make available funds for program support within the appropriation.

### AMOUNTS AVAILABLE FOR OBLIGATION

| | 1968 | 1969 |
|---|---|---|
| Appropriation | $156,500,000 | $149,199,000 |
| Unobligated balance brought forward | 15,417,493 | 9,000,000 |
| Cutback required by H.J. Res. 888: | | |
| Reduction because of unanticipated carryover balances: | | |
| Unobligated balance lapsing | −1,901,000 | |
| Unobligated balance carried forward | −9,000,000 | |
| Total cutback | −10,901,000 | |
| Total available for obligation | 161,016,493 | 158,199,000 |
| Disposition of cutback: | | |
| To be returned to the Treasury | 1,901,000 | |
| To be carried forward for obligation in 1969 | 9,000,000 | |
| Total cutback | 10,901,000 | |

OBLIGATIONS BY ACTIVITY

| | 1968 estimate | 1969 estimate | Increase or decrease |
|---|---|---|---|
| Library services: | | | |
| (a) Grants for public libraries | $35,000,000 | $35,000,000 | |
| (b) Interlibrary cooperation | 2,256,000 | 2,281,000 | +$25,000 |
| (c) State institutional library services | 2,014,000 | 2,094,000 | +80,000 |
| (d) Library services for the physically handicapped | 1,254,000 | 1,334,000 | +80,000 |
| Construction of public libraries | 33,602,493 | 18,185,000 | −15,417,493 |
| College library resources | 24,522,000 | 25,000,000 | +478,000 |
| Acquisition and cataloging by Library of Congress | 5,478,000 | 5,500,000 | +22,000 |
| Librarian training | 8,250,000 | 8,250,000 | |
| University community service programs | 10,000,000 | 10,000,000 | |
| Adult basic education: | | | |
| (a) Grants to States | 30,590,000 | 40,000,000 | +9,410,000 |
| (b) Special projects | 6,550,000 | 8,000,000 | +1,450,000 |
| (c) Teacher training | 1,500,000 | 2,000,000 | +500,000 |
| Program support | | 555,000 | +555,000 |
| Total obligations | 161,016,493 | 158,199,000 | −2,817,493 |
| Full-time equivalent of all other positions | | 6 | +6 |
| Average number of all positions | | 6 | +6 |
| Personnel compensation—positions other than permanent | | $122,200 | +$122,200 |
| Personnel benefits | | 6,300 | +6,300 |
| Travel and transportation of persons | | 71,500 | +71,500 |
| Printing and reproduction | | 2,100 | +2,100 |
| Other services | | 352,900 | +352,900 |
| Services of other agencies | $5,478,000 | 5,500,000 | +22,000 |
| Grants, subsidies, and contributions | 155,538,493 | 152,144,000 | −3,394,493 |
| Total obligations by object | 161,016,493 | 158,199,000 | −2,817,493 |

SUMMARY OF CHANGES

| | |
|---|---|
| 1968 enacted appropriation | $156,500,000 |
| Unobligated balance brought forward | 15,417,493 |
| Cutback required by H.J. Res. 888 resulting from unanticipated carryover | −10,901,000 |
| 1968 estimated obligations | 161,016,493 |
| 1969 requested appropriation | 149,199,000 |
| Unobligated balance brought forward | 9,000,000 |
| 1969 estimated obligations | 158,199,000 |
| Total change | −2,817,493 |

| | Base | Changes from base |
|---|---|---|
| Increases: | | |
| Program: | | |
| 1. Library services: | | |
| (a) Interlibrary cooperation | $2,256,000 | $25,000 |
| (b) State institutional library services | 2,014,000 | 80,000 |
| (c) Library services to the physically handicapped | 1,254,000 | 80,000 |
| 2. College library resources | 24,522,000 | 478,000 |
| 3. Acquisition and cataloging by Library of Congress | 5,478,000 | 22,000 |
| 4. Adult basic education: | | |
| (a) Grants to States | 30,590,000 | 9,410,000 |
| (b) Special projects | 6,550,000 | 1,450,000 |
| (c) Teacher training | 1,500,000 | 500,000 |
| 5. Program support | | 555,000 |
| Total program increases | | 12,600,000 |
| Decreases: Library construction | 33,602,493 | −15,417,493 |
| Total net change requested | | −2,817,493 |

EXPLANATION OF CHANGES

*Increases*

1. An additional amount of $25,000 for interlibrary cooperation will result in a total program level of $2,281,000 for approximately 45 interlibrary centers or networks, involving 904 libraries serving about 8,600,000 people.

For State institutional library services, an additional amount of $80,000 will provide a total of $2,094,000. This will provide library services to 500 State institutions and assist 300,000 inmates and patients.

An increase of $80,000 for library services to the physically handicapped will provide a total program level of $1,334,000 for specialized services to approximately 70,000 physically handicapped persons.

2. From the appropriation of $25,000,000 for college library resources under Title II–A of the Higher Education Act, $478,000 was transferred to the Library of Congress as provided in the Legislative Branch Appropriation Act of 1968 for the Monthly Index of Russian Assessions. This results in an increase of $478,000 for a total program level of $25,000,000 for the resources program in 1969 to provide for 2,089 basic grants, 1,267 supplemental grants, and 132 special purpose grants for strengthening higher education institution libraries—an increase of 72 grants over the 1968 estimate.

3. An increase of $22,000 over the 1968 appropriation of $5,478,000, including $478,000 transferred from the college library resources program, will provide a total funding level of $5,500,000 for the college and research library resources program under the Library of Congress.

4. A total increase of $11,360,000 for adult basic education programs includes $9,410,000 for grants to States, $1,450,000 for special projects, and $500,000 for teacher training. This increase will provide a total program level of $50,000,000—$40,000,000 for grants to States to assist about 411,000 undereducated adults through adult education classes, an increase of 92,000 participants over 1968; $8,000,000 to conduct 47 experimental demonstration projects compared to 31 projects in 1968; and $2,000,000 for 23 training institutes assisting 1,600 trainees, an increase of 3 institutes and 300 trainees over the 1968 estimate.

5. A total amount of $555,000 for program support includes $255,300 for the evaluation of library and adult education programs; $64,600 for project review; and $235,100 for advisory committees on adult basic education, university community service programs, college library resources, and a National Advisory Commission on Libraries.

*Decreases*

A decrease of $15,417,493 is reflected for construction of public libraries leaving a total of $18,185,000 including $9,000,000 carryover for 204 projects, a decrease of 176 below the 1968 estimate.

| | 1968 estimate | 1969 estimate | Increase or decrease |
|---|---|---|---|
| **APPROPRIATION** | | | |
| 1. Library services: | | | |
| (a) Grants for public libraries | $35,000,000 | $35,000,000 | |
| (b) Interlibrary cooperation | 2,375,000 | 2,281,000 | −$94,000 |
| (c) State institutional library services | 2,120,000 | 2,094,000 | −26,000 |
| (d) Library services for the physically handicapped | 1,320,000 | 1,334,000 | +14,000 |
| Total appropriation | 40,815,000 | 40,709,000 | −106,000 |
| **OBLIGATIONS** | | | |
| Library services: | | | |
| (a) Grants for public libraries | 35,000,000 | 35,000,000 | |
| (b) Interlibrary cooperation | 2,256,000 | 2,281,000 | +25,000 |
| (c) State institutional library services | 2,014,000 | 2,094,000 | +80,000 |
| (d) Library services for the physically handicapped | 1,254,000 | 1,334,000 | +80,000 |
| Total obligations | 40,524,000 | 40,709,000 | +185,000 |

**JUSTIFICATION OF ESTIMATE**

The Library Services and Construction Act authorizes grants to States to promote the further extension of public library services to areas without such services or with inadequate services, to construct public library facilities, to promote interlibrary cooperation, to improve State institutional library services, and to improve library services to the physically handicapped.

*(a) Grants for public libraries*

Title I of the Act authorizes grants to States for the further extension of public library services to areas without such services, or with inadequate services.

While in fiscal year 1968, 85,000,000 people will receive new or improved library service, only 23,000,000 people or 11 percent of the total population will have adequate library services.

The use of public libraries has increased at a phenomenal rate. Although population has increased 17 percent from 1956 to 1966, public library registration has gone up 81 percent and circulation has jumped over 100 percent. Public libraries are cognizant of the need for a wider range of resources to meet the intensified use by individuals. Students, specialists, educated adults and undereducated adults are all participants in an increasingly complex society. Each has his own informational need and the public library must have greater financial support to broaden its base and develop outreach to all the people. It must reach people who do not automatically seek libraries. It requires an agency with the financial resources to develop service patterns for individuals—advantaged and disadvantaged, young and old, urban and rural.

The authorization for public library services is $55,000,000 for fiscal year 1969. The amount requested to continue this program in fiscal 1969 is $35,000,000, a minimal amount to help maintain the status quo of public library service throughout the country.

In fiscal year 1969 new or improved library services will be made available to approximately 85,000,000 people under this program. About 1,000 professional and 2,000 non-professional libraries will be employed and approximately 8,000,000 books will be purchased as a result of this program.

Long-range development plans for public library growth and improvement continue to increase in most States. In order to meet rising operating costs, appropriations from State and local governments have increased as indicated in the following table:

PUBLIC LIBRARY SERVICES, OBLIGATIONS

| | Federal | State and local | Total |
|---|---|---|---|
| Year: | | | |
| 1965 | $25,000,000 | $80,230,571 | $105,230,571 |
| 1966 | 25,000,000 | 111,000,000 | 136,000,000 |
| 1967 | 34,934,538 | [1] 125,000,000 | 159,934,538 |
| 1968 | [1] 35,000,000 | [1] 127,000,000 | 162,000,000 |
| 1969 | [1] 35,000,000 | [1] 129,000,000 | 164,000,000 |

[1] Estimated.

PROGRAM DATA, GRANTS FOR PUBLIC LIBRARIES

| | 1968 | 1969 |
|---|---|---|
| 1. Federal grants | $35,000,000 | $35,000,000 |
| 2. Number of population in areas served by LSCA projects | 85,000,000 | 85,000,000 |
| 3. Number of population receiving minimum standard service [1] | 23,000,000 | 25,000,000 |
| 4. Percentage of population receiving minimum standard service [1] | 11 | 12 |
| 5. Number of books and related materials purchased | 8,000,000 | 8,000,000 |
| 6. Number of personnel hired | 3,000 | 3,000 |

[1] Population data are for total universe and not only those served by Library Services and Construction Act Projects.

*(b) Interlibrary cooperation—Title III*

Title III of the Act authorizes grants to States for establishing and maintaining local, regional, State and/or interstate cooperative networks of libraries. The purpose of such networks or systems is to provide a systematic and effective coordination of resources of school, public, academic, and special libraries and information centers to improve services of a supplementary nature to the special clientele served by each type of library.

Funds available in fiscal year 1967 were used by 48 States, the District of Columbia, Guam, the Virgin Islands, and the Trust Territory of the Pacific

Islands for planning networks and other cooperative services among the various types of libraries. Plans submitted by the States cover a wide range of cooperative programs. In South Dakota, for example, plans have been developed for a statewide reference service from the State agency and regional reference centers, a union catalog of the major library holdings of the State, a rapid communication system among the State agency and key resource libraries. In Idaho, plans include participation in Pacific Northwest Bibliographic Center plus other cooperative services carried out under the Interstate Library Compact.

In 1968, an amount of $2,256,000 was used to put into operation approximately 45 cooperative networks or systems, involving 904 libraries. These networks or centers will serve about 8,600,000 people.

The 1969 authorization is $10,000,000 and the request for $2,281,000 will enable this program to be maintained at the 1968 level as follows:

| | 1968 estimate | 1969 estimate |
|---|---|---|
| 1. Federal grants | $2,256,000 | $2,281,000 |
| 2. Number of interlibrary centers or networks | 45 | 45 |
| 3. Number of libraries involved | 904 | 904 |
| 4. Number of persons served by interlibrary centers or networks | 8,600,000 | 8,600,000 |
| 5. Percentage of population served by interlibrary centers or networks | 5 | 5 |

*(c) State institutional library services*

Title IV, Part A of the Act authorizes grants to States to establish and improve State institutional library services. Activities supported under State plans include providing books, other library materials, and services to inmates, patients, or residents of penal institutions, reformatories, residential training schools, and other similar State institutions, and to students in State residential schools for the handicapped.

In fiscal year 1968, an amount of $2.014,000 will provide the States with funds to help initiate plans developed with the planning grant available in fiscal year 1967.

Bibliotherapy is of growing significance in institutional services. The therapeutic value of reading is recognized for the mentally ill as well as for others hospitalized in State institutions. Further, libraries in prisons and correctional institutions are vital to the rehabilitation of inmates, who along with the hospitalized, are returning to society in greater numbers each succeeding year.

Programs under State plans include: statewide supervision of the institutional library services, books and other library materials for inmates, inservice training of library personnel, organization and classification of all available library resources in the institutions. In one State, the major public libraries have been enlisted and are serving as backup resources for the institutional library programs under the supervision of the State library agency. In another State, the interlibrary cooperation idea is carried out in the further coordination of all institutional library resources. Programs being developed under this Title are providing the first library services for many eligible institutions.

Under the Act, $10,000,000 is authorized for State institutional library service in fiscal year 1969. The $2,094,000 requested for fiscal year 1969 will enable the States to continue service programs begun in 1968, providing 300,000 inmates and patients assistance under the program. This represents 12 percent of the 2,650,000 who need improved library service. Summary information follows:

| | 1968 estimate | 1969 estimate |
|---|---|---|
| 1. Federal grants | $2,014,000 | $2,094,000 |
| 2. Number of State institutions receiving library services under program | 500 | 500 |
| 3. Total number of State institutions | 1,600 | 1,600 |
| 4. Total number of patients or inmates receiving services under program | 300,000 | 300,000 |
| 5. Total number of patients in State institutions | 2,600,000 | 2,650,000 |

*(d) Library services to the physically handicapped*

Title IV, Part B of the Act authorizes grants to States to establish and improve library services to the physically handicapped. State plans will include library services (through public or other nonprofit libraries, agencies, or organizations) to physically handicapped persons who are unable to read or to use conventional printed materials.

In 1968, $1,254,000 was used for the implementation of State plans developed with 1967 fiscal year planning money. Forty-eight States, the District of Columbia, the Virgin Islands, and the Trust Territory of the Pacific Islands used planning funds. State plans include many cooperative programs to reach the handicapped. Further use of the Interstate Library Compact is being used as States in a region join forces to provide these specialized services. Contracts are being made with qualified agencies and organizations to help identify and extend appropriate services to the handicapped.

The Act authorizes $5,000,000 for fiscal year 1969. The request of $1,334,000 for fiscal year 1969 will provide specialized services to approximately 70,000 physically handicapped persons. Included in the services will be talking books, large-print books, other special format library materials and the specialized equipment required for use of the materials. Summary information follows:

| | 1968 estimate | 1969 estimate |
|---|---|---|
| 1. Federal grants | $1,254,000 | $1,334,000 |
| 2. Total number of physically handicapped persons | 2,193,000 | 2,214,000 |
| 3. Number of physically handicapped served under programs | 70,000 | 70,000 |
| 4. Number of special books and other non-conventional materials purchased | 22,000 | 22,000 |

TITLE I—GRANTS FOR LIBRARY SERVICES

FISCAL YEAR 1967 ACTUAL, AND 1968 AND 1969 ESTIMATED FEDERAL ALLOTMENTS AND MATCHING STATE AND LOCAL EXPENDITURES

| State and outlying area | 1967 actual | 1968 estimate | | 1969 estimate | |
|---|---|---|---|---|---|
| | | Federal allotment | State and local matching | Federal allotment [1] | State and local matching |
| Totals | $34,934,538 | $35,000,000 | $36,244,179 | $35,000,000 | $36,244,179 |
| Alabama | 633,492 | 633,492 | 333,376 | 633,492 | 333,376 |
| Alaska | 113,400 | 136,935 | 194,627 | 136,935 | 194,627 |
| Arizona | 312,656 | 312,656 | 246,657 | 312,656 | 246,657 |
| Arkansas | 391,716 | 391,716 | 201,793 | 391,716 | 201,793 |
| California | 2,666,778 | 2,666,778 | 4,057,322 | 2,666,778 | 4,057,322 |
| Colorado | 386,437 | 386,437 | 383,818 | 386,437 | 383,818 |
| Connecticut | 514,029 | 514,029 | 863,696 | 514,029 | 863,696 |
| Delaware | 172,884 | 172,884 | 272,923 | 172,884 | 272,923 |
| District of Columbia | 224,762 | 224,762 | 456,335 | 224,762 | 456,335 |
| Florida | 908,640 | 908,640 | 715,091 | 908,640 | 715,091 |
| Georgia | 743,951 | 743,951 | 472,451 | 743,951 | 472,451 |
| Hawaii | 203,338 | 203,338 | 232,635 | 203,338 | 232,635 |
| Idaho | 208,959 | 208,959 | 152,875 | 208,959 | 152,875 |
| Illinois | 1,746,355 | 1,746,355 | 2,558,193 | 1,746,355 | 2,558,193 |
| Indiana | 861,433 | 861,433 | 892,656 | 861,433 | 892,656 |
| Iowa | 550,334 | 550,334 | 495,531 | 550,334 | 495,531 |
| Kansas | 455,789 | 455,789 | 426,838 | 455,789 | 426,838 |
| Kentucky | 596,161 | 596,161 | 351,329 | 596,161 | 351,329 |
| Louisiana | 631,904 | 631,904 | 380,438 | 631,904 | 380,438 |
| Maine | 258,291 | 258,291 | 178,601 | 258,291 | 178,601 |
| Maryland | 606,374 | 606,374 | 731,314 | 606,374 | 731,314 |
| Massachusetts | 940,815 | 940,815 | 1,195,459 | 940,815 | 1,195,459 |
| Michigan | 1,377,606 | 1,377,606 | 1,604,225 | 1,377,606 | 1,604,225 |
| Minnesota | 657,518 | 657,518 | 608,644 | 657,518 | 608,644 |
| Mississippi | 455,712 | 455,712 | 234,761 | 455,712 | 234,761 |
| Missouri | 805,469 | 805,469 | 745,598 | 805,469 | 745,598 |
| Montana | 210,196 | 210,196 | 170,043 | 210,196 | 170,043 |
| Nebraska | 330,484 | 330,484 | 291,428 | 330,484 | 291,428 |
| Nevada | 146,589 | 146,589 | 248,530 | 146,589 | 248,530 |
| New Hampshire | 199,116 | 199,116 | 177,072 | 199,116 | 177,072 |
| New Jersey | 1,090,767 | 1,090,767 | 1,607,815 | 1,090,767 | 1,607,815 |
| New Mexico | 255,312 | 255,312 | 175,449 | 255,312 | 175,449 |
| New York | 2,840,719 | 2,840,719 | 4,318,351 | 2,840,719 | 4,318,351 |
| North Carolina | 844,066 | 844,066 | 496,572 | 844,066 | 496,572 |
| North Dakota | 189,633 | 203,285 | 137,340 | 203,285 | 137,340 |
| Ohio | 1,685,152 | 1,685,152 | 1,774,409 | 1,685,152 | 1,774,409 |
| Oklahoma | 480,232 | 480,232 | 334,964 | 480,232 | 334,964 |
| Oregon | 388,844 | 388,844 | 394,326 | 388,844 | 394,326 |
| Pennsylvania | 1,948,566 | 1,948,566 | 1,947,008 | 1,948,566 | 1,947,008 |
| Rhode Island | 240,363 | 240,363 | 253,297 | 240,363 | 253,297 |
| South Carolina | 489,102 | 489,102 | 251,961 | 489,102 | 251,961 |
| South Dakota | 211,135 | 211,135 | 132,453 | 211,135 | 132,453 |
| Tennessee | 682,542 | 682,542 | 390,806 | 682,542 | 390,806 |
| Texas | 1,664,458 | 1,664,458 | 1,242,892 | 1,664,458 | 1,242,892 |
| Utah | 245,448 | 245,448 | 192,461 | 245,448 | 192,461 |
| Vermont | 163,671 | 163,671 | 116,108 | 163,671 | 116,108 |
| Virginia | 747,843 | 747,843 | 577,180 | 747,843 | 577,180 |
| Washington | 565,959 | 565,959 | 637,441 | 565,959 | 637,441 |
| West Virginia | 403,825 | 403,825 | 233,525 | 403,825 | 233,525 |
| Wisconsin | 745,365 | 745,365 | 717,856 | 745,365 | 717,856 |
| Wyoming | 153,903 | 153,903 | 139,861 | 153,903 | 139,861 |
| American Samoa | | 28,275 | 14,566 | 28,275 | 14,566 |
| Guam | 35,949 | 35,949 | 18,519 | 35,949 | 18,519 |
| Puerto Rico | 483,704 | 483,704 | 249,181 | 483,704 | 249,181 |
| Virgin Islands | 30,242 | 30,242 | 15,579 | 30,242 | 15,579 |
| Trust Territory | 36,550 | 36,550 | | 36,550 | |

[1] Distribution: Basic allotment of $100,000 to the 50 States, District of Columbia, and Puerto Rico, and $25,000 to the other outlying areas; the remainder distributed on the basis of total population, April 1, 1960 (except Trust Territory, 1958).

## TITLE III—INTERLIBRARY COOPERATION

### FISCAL YEAR 1967 ACTUAL, AND 1968 AND 1969 ESTIMATED FEDERAL ALLOTMENTS AND MATCHING STATE AND LOCAL EXPENDITURES

| State and outlying area | 1967 actual | 1968 estimate | 1969 estimate | |
|---|---|---|---|---|
| | | Federal allotment [1] | Federal allotment [1] | State and local matching |
| Total | $352,000 | $2,256,000 | $2,281,000 | $2,270,937 |
| Alabama | 7,075 | 42,443 | 42,892 | 42,892 |
| Alaska | 7,075 | 40,169 | 40,200 | 40,200 |
| Arizona | 7,075 | 40,974 | 41,153 | 41,153 |
| Arkansas | 7,075 | 41,336 | 41,581 | 41,581 |
| California | 7,075 | 51,753 | 53,915 | 53,915 |
| Colorado | 7,075 | 41,311 | 41,553 | 41,553 |
| Connecticut | 7,075 | 41,896 | 42,244 | 42,244 |
| Delaware | 7,075 | 40,334 | 40,395 | 40,395 |
| District of Columbia | 7,075 | 40,571 | 40,676 | 40,676 |
| Florida | 7,075 | 43,703 | 44,384 | 44,384 |
| Georgia | 7,075 | 42,949 | 43,491 | 43,491 |
| Hawaii | 7,075 | 40,473 | 40,560 | 40,560 |
| Idaho | 7,075 | 40,499 | 40,591 | 40,591 |
| Illinois | 7,075 | 47,539 | 48,925 | 48,925 |
| Indiana | | 43,487 | 44,128 | 44,128 |
| Iowa | 7,075 | 42,062 | 42,441 | 42,441 |
| Kansas | 7,075 | 41,629 | 41,929 | 41,929 |
| Kentucky | 7,075 | 42,272 | 42,690 | 42,690 |
| Louisiana | 7,075 | 42,436 | 42,883 | 42,883 |
| Maine | 7,075 | 40,725 | 40,858 | 40,858 |
| Maryland | 7,075 | 42,319 | 42,745 | 42,745 |
| Massachusetts | 7,075 | 43,850 | 44,558 | 44,558 |
| Michigan | 7,075 | 45,850 | 46,926 | 46,926 |
| Minnesota | 7,075 | 42,553 | 43,022 | 43,022 |
| Mississippi | 7,075 | 41,629 | 41,928 | 41,928 |
| Missouri | | 43,230 | 43,824 | 43,824 |
| Montana | 7,075 | 40,505 | 40,597 | 40,597 |
| Nebraska | 7,075 | 41,055 | 41,249 | 41,249 |
| Nevada | 7,075 | 40,213 | 40,253 | 40,253 |
| New Hampshire | 7,075 | 40,454 | 40,537 | 40,537 |
| New Jersey | 7,075 | 44,537 | 45,371 | 45,371 |
| New Mexico | 7,075 | 40,711 | 40,842 | 40,842 |
| New York | 7,075 | 52,549 | 54,858 | 54,858 |
| North Carolina | 7,075 | 43,407 | 44,033 | 44,033 |
| North Dakota | 7,075 | 40,473 | 40,560 | 40,560 |
| Ohio | 7,075 | 47,259 | 48,593 | 48,593 |
| Oklahoma | 7,075 | 41,741 | 42,061 | 42,061 |
| Oregon | 7,075 | 41,323 | 41,566 | 41,566 |
| Pennsylvania | 7,075 | 48,465 | 50,021 | 50,021 |
| Rhode Island | 7,075 | 40,643 | 40,761 | 40,761 |
| South Carolina | 7,075 | 41,782 | 42,109 | 42,109 |
| South Dakota | 7,075 | 40,509 | 40,602 | 40,602 |
| Tennessee | 7,075 | 42,668 | 43,158 | 43,158 |
| Texas | 7,075 | 47,164 | 48,481 | 48,481 |
| Utah | 7,075 | 40,666 | 40,788 | 40,788 |
| Vermont | 7,075 | 40,292 | 40,345 | 40,345 |
| Virginia | 7,075 | 42,966 | 43,512 | 43,512 |
| Washington | 7,075 | 42,134 | 42,526 | 42,526 |
| West Virginia | 7,075 | 41,391 | 41,647 | 41,647 |
| Wisconsin | 7,075 | 42,955 | 43,498 | 43,498 |
| Wyoming | 7,075 | 40,247 | 40,292 | 40,292 |
| American Samoa | | 10,015 | 10,018 | 10,018 |
| Guam | 1,775 | 10,050 | 10,059 | 10,059 |
| Puerto Rico | | 41,757 | 42,080 | 42,080 |
| Virgin Islands | 1,775 | 10,024 | 10,028 | 10,028 |
| Trust Territory | 1,775 | 10,053 | 10,063 | |

[1] Distribution: Basic amount of $40,000 to the 50 States, District of Columbia, and Puerto Rico, $10,000 to American Samoa, Guam, Trust Territory, and Virgin Islands; balance distributed on the basis of total population, Apr. 1, 1960, except Trust Territory, 1958. "Federal share" for Trust Territory is 100 percent; all others, 50 percent.

TITLE IV-A—STATE INSTITUTIONAL SERVICES

FISCAL YEAR 1967 ACTUAL, AND 1968 AND 1969 ESTIMATED FEDERAL ALLOTMENTS AND MATCHING STATE AND LOCAL EXPENDITURES

| State and outlying area | 1967 actual | 1968 Estimate | 1969 Estimate | |
|---|---|---|---|---|
| | | Federal allotment [1] | Federal allotment [3] | State and Local matching [2] |
| Total | $344,925 | $2,014,000 | $2,094,000 | $1,968,551 |
| Alabama | 7,075 | 38,000 | 39,509 | 20,792 |
| Alaska | 7,075 | 38,000 | 39,509 | 56,154 |
| Arizona | 7,075 | 38,000 | 39,509 | 31,169 |
| Arkansas | 7,075 | 38,000 | 39,509 | 20,353 |
| California | 7,075 | 38,000 | 39,509 | 60,110 |
| Colorado | 7,075 | 38,000 | 39,509 | 39,241 |
| Connecticut | 7,075 | 38,000 | 39,509 | 66,385 |
| Delaware | 7,075 | 38,000 | 39,509 | 62,371 |
| Florida | 7,075 | 38,000 | 39,509 | 31,093 |
| Georgia | 7,075 | 38,000 | 39,509 | 25,090 |
| Hawaii | 7,075 | 38,000 | 39,509 | 45,202 |
| Idaho | 7,075 | 38,000 | 39,509 | 28,905 |
| Illinois | 7,075 | 38,000 | 39,509 | 57,876 |
| Indiana | | 38,000 | 39,509 | 40,941 |
| Iowa | 7,075 | 38,000 | 39,509 | 35,575 |
| Kansas | 7,075 | 38,000 | 39,509 | 37,000 |
| Kentucky | 7,075 | 38,000 | 39,509 | 23,283 |
| Louisiana | 7,075 | 38,000 | 39,509 | 23,786 |
| Maine | 7,075 | 38,000 | 39,509 | 27,319 |
| Maryland | 7,075 | 38,000 | 39,509 | 47,650 |
| Massachusetts | 7,075 | 38,000 | 39,509 | 50,203 |
| Michigan | 7,075 | 38,000 | 39,509 | 46,008 |
| Minnesota | 7,075 | 38,000 | 39,509 | 36,572 |
| Mississippi | 7,075 | 38,000 | 39,509 | 20,353 |
| Missouri | | 38,000 | 39,509 | 36,572 |
| Montana | 7,075 | 38,000 | 39,509 | 31,962 |
| Nebraska | 7,075 | 38,000 | 39,509 | 34,840 |
| Nevada | 7,075 | 38,000 | 39,509 | 66,984 |
| New Hampshire | 7,075 | 38,000 | 39,509 | 35,135 |
| New Jersey | 7,075 | 38,000 | 39,509 | 58,237 |
| New Mexico | 7,075 | 38,000 | 39,509 | 27,150 |
| New York | 7,075 | 38,000 | 39,509 | 60,060 |
| North Carolina | 7,075 | 38,000 | 39,509 | 23,244 |
| North Dakota | | 38,000 | 39,509 | 26,692 |
| Ohio | 7,075 | 38,000 | 39,509 | 41,602 |
| Oklahoma | 7,075 | 38,000 | 39,509 | 27,558 |
| Oregon | 7,075 | 38,000 | 39,509 | 40,066 |
| Pennsylvania | 7,075 | 38,000 | 39,509 | 39,477 |
| Rhode Island | 7,075 | 38,000 | 39,509 | 41,635 |
| South Carolina | 7,075 | 38,000 | 39,509 | 20,353 |
| South Dakota | 7,075 | 38,000 | 39,509 | 24,786 |
| Tennessee | 7,075 | 38,000 | 39,509 | 22,622 |
| Texas | 7,075 | 38,000 | 39,509 | 29,502 |
| Utah | 7,075 | 38,000 | 39,509 | 30,980 |
| Vermont | 7,075 | 38,000 | 39,509 | 28,028 |
| Virginia | 7,075 | 38,000 | 39,509 | 30,493 |
| Washington | 7,075 | 38,000 | 39,509 | 44,499 |
| West Virginia | 7,075 | 38,000 | 39,509 | 22,847 |
| Wisconsin | 7,075 | 38,000 | 39,509 | 38,051 |
| Wyoming | 7,075 | 38,000 | 39,509 | 35,904 |
| District of Columbia | 7,075 | 38,000 | 39,509 | 80,215 |
| American Samoa | | 9,500 | 9,883 | 5,091 |
| Gaum | 1,775 | 9,500 | 9,883 | 5,091 |
| Puerto Rico | | 38,000 | 39,509 | 20,353 |
| Virgin Islands | 1,775 | 9,500 | 9,883 | 5,091 |
| Trust Territory | 1,775 | 9,500 | 9,883 | |

[1] Distribution: Basic amount only of $38,000 to each of the 50 States, District of Columbia, and Puerto Rico; $9,500 each to American Samoa, Guam, Trust Territory, and Virgin Islands as adjusted to fiscal year 1968 budget revision.

[2] Total expenditures from State and local sources computed on basis of fiscal year 1968–69 "Federal share" percentage.

[3] Estimated distribution of $2,094,000 (Federal funds) with the basic amount to the 50 States, District of Columbia, and the outlying areas ratably reduced to the proposed fiscal year 1969 amount.

TITLE IV-B—SERVICES FOR PHYSICALLY HANDICAPPED

FISCAL YEAR 1967 ACTUAL, AND 1968 AND 1969 ESTIMATED FEDERAL ALLOTMENTS AND MATCHING STATE AND LOCAL EXPENDITURES

| State and outlying area | 1967 actual | 1968 Estimate | 1969 Estimate | |
|---|---|---|---|---|
| | | Federal allotment [1] | Federal allotment [2] | State and Local matching [3] |
| Total | $233,905 | $1,254,000 | $1,334,000 | $1,258,436 |
| Alabama | 4,735 | 23,750 | 25,251 | 13,288 |
| Alaska | 4,735 | 23,750 | 25,017 | 35,556 |
| Arizona | 4,735 | 23,750 | 25,100 | 19,801 |
| Arkansas | 4,735 | 23,750 | 25,138 | 12,950 |
| California | 4,735 | 23,750 | 26,210 | 39,877 |
| Colorado | 4,735 | 23,750 | 25,135 | 24,965 |
| Connecticut | 4,735 | 23,750 | 25,195 | 42,334 |
| Delaware | 4,735 | 23,750 | 25,034 | 39,520 |
| District of Columbia | 4,735 | 23,750 | 25,059 | 50,878 |
| Florida | 4,735 | 23,750 | 25,381 | 19,975 |
| Georgia | 4,735 | 23,750 | 25,304 | 16,069 |
| Hawaii | 4,735 | 23,750 | 25,049 | 28,658 |
| Idaho | 4,735 | 23,750 | 25,051 | 18,327 |
| Illinois | 4,735 | 23,750 | 25,776 | 37,759 |
| Indiana | | 23,750 | 25,359 | 26,278 |
| Iowa | 4,735 | 23,750 | 25,212 | 22,702 |
| Kansas | 4,735 | 23,750 | 25,168 | 23,569 |
| Kentucky | 4,735 | 23,750 | 25,234 | 14,871 |
| Louisiana | 4,735 | 23,750 | 25,251 | 15,202 |
| Maine | 4,735 | 23,750 | 25,075 | 17,339 |
| Maryland | 4,735 | 23,750 | 25,239 | 30,439 |
| Massachusetts | 4,735 | 23,750 | 25,396 | 32,273 |
| Michigan | 4,735 | 23,750 | 25,602 | 29,810 |
| Minnesota | 4,735 | 23,750 | 25,263 | 23,384 |
| Mississippi | 4,735 | 23,750 | 25,168 | 12,966 |
| Missouri | | 23,750 | 25,333 | 23,456 |
| Montana | 4,735 | 23,750 | 25,052 | 20,266 |
| Nebraska | 4,735 | 23,750 | 25,109 | 22,146 |
| Nevada | 4,735 | 23,750 | 25,022 | 42,422 |
| New Hampshire | 4,735 | 23,750 | 25,047 | 22,273 |
| New Jersey | 4,735 | 23,750 | 25,467 | 37,539 |
| New Mexico | 4,735 | 23,750 | 25,073 | 17,230 |
| New York | 4,735 | 23,750 | 26,292 | 39,968 |
| North Carolina | 4,735 | 32,750 | 25,351 | 14,914 |
| North Dakota | 4,735 | 23,750 | 25,049 | 16,923 |
| Ohio | 4,735 | 23,750 | 25,747 | 27,111 |
| Oklahoma | 4,735 | 23,750 | 25,179 | 17,563 |
| Oregon | 4,735 | 23,750 | 25,136 | 25,490 |
| Pennsylvania | 4,735 | 23,750 | 25,872 | 25,851 |
| Rhode Island | 4,735 | 23,750 | 25,066 | 26,415 |
| South Carolina | 4,735 | 23,750 | 25,183 | 12,973 |
| South Dakota | 4,735 | 23,750 | 25,052 | 15,717 |
| Tennessee | 4,735 | 23,750 | 25,275 | 14,471 |
| Texas | 4,735 | 23,750 | 25,737 | 19,218 |
| Utah | 4,735 | 25,750 | 25,069 | 19,657 |
| Vermont | 4,735 | 23,750 | 25,030 | 17,756 |
| Virginia | 4,735 | 23,750 | 25,305 | 19,530 |
| Washington | 4,735 | 23,750 | 25,220 | 28,406 |
| West Virginia | 4,735 | 23,750 | 25,143 | 14,540 |
| Wisconsin | 4,735 | 23,750 | 25,304 | 24,371 |
| Wyoming | 4,735 | 23,750 | 25,025 | 22,742 |
| American Samoa | | 4,750 | 5,002 | 2,577 |
| Guam | | 4,750 | 5,005 | 2,579 |
| Puerto Rico | | 23,750 | 25,181 | 12,972 |
| Virgin Islands | 945 | 4,750 | 5,002 | 2,577 |
| Trust Territory | 945 | 4,750 | 5,005 | |

[1] Basic amount of $23,750 to 50 States, District of Columbia, and Puerto Rico; $4,750 each to American Samoa, Guam, Trust Territory, and Virgin Islands as adjusted to 1968 budget revision.

[2] Distribution: Basic amount of $25,000 to the 50 States, District of Columbia, and Puerto Rico; $5,000 to American Samoa, Guam, Trust Territory, and Virgin Islands; balance distributed on the basis of total population, Apr. 1, 1960 (except Trust Territory, 1958).

[3] Matching amounts computed on basis of fiscal year 1968–69 "Federal share" percentages.

| | 1968 estimate | 1969 estimate | Increase or decrease |
|---|---|---|---|
| 2. Construction of public libraries (appropriation) | $27,185,000 | $9,185,000 | −$18,000,000 |
| Construction of public libraries (obligations) | 33,602,493 | 18,185,000 | −15,417,493 |

JUSTIFICATION OF ESTIMATE

Title II of the Library Services and Construction Act authorizes $60,000,000 in 1969 for grants to States to support the construction of public libraries. Funds may be used for the construction of new buildings, for additions to existing buildings, and for renovation or alteration of existing buildings.

*Program for fiscal year 1968*

Of the $40,000,000 appropriated for fiscal year 1967, $24,582,507 was obligated for 278 construction projects approved by the States, leaving a $15,417,493 carryover to fiscal year 1968. Of the $27,185,000 appropriated for fiscal year 1968, $18,185,000 is planned for obligation. This added to the $15,417,493 carryover will provide a total 1968 obligation of $33,602,493, to be used for 380 library construction projects.

*Plans for fiscal year 1969*

The request for $9,185,000 added to the $9,000,000 carryover from fiscal year 1968 will make a total obligation availability of $18,185,000 for fiscal year 1969. These funds will be used for 204 new library construction, alteration or expansion projects.

Priority will be placed on making new and improved library facilities available to more people, particularly in areas with inadequate or nonexistent library facilities. Public libraries will be built where they have never existed before in rural areas or in new or expanding urban areas. Public libraries will be enlarged where populations have increased. Dilapidated and inefficient libraries will be replaced in areas where library demand and usage warrant the investment.

Currently Federal funds for construction are being matched by local and State funds at the rate of 2:1 for each Federal dollar as follows:

PUBLIC LIBRARY CONSTRUCTION—OBLIGATIONS

| | Federal | State and local | Total |
|---|---|---|---|
| Year: | | | |
| 1965 | $29,863,755 | $62,851,000 | $92,714,755 |
| 1966 | 29,778,368 | 62,483,019 | 92,261,387 |
| 1967 | 24,582,507 | [1] 52,107,000 | 76,689,607 |
| 1968 | [1] 33,602,493 | [1] 70,565,000 | 104,167,493 |
| 1969 | [1] 18,185,000 | [1] 38,188,000 | 56,373,000 |

[1] Estimate.

PROGRAM DATA

| | 1967 actual [1] | 1968 estimate [2] | 1969 estimate [3] |
|---|---|---|---|
| 1. Federal grants | $24,582,507 | $33,602,493 | $18,185,000 |
| 2. Number of construction projects | 278 | 380 | 204 |
| 3. Number of square feet floor area to be added or improved (in millions) | 2.6 | 3.6 | 1.9 |
| 4. Number of square feet of new or remodeled construction needed [4] | 39,400,000 | 37,800,000 | 36,400,000 |

[1] Data are for approved projects.
[2] Includes estimated $15,417,493 carryover from fiscal year 1967 appropriation.
[3] Includes estimated $9,000,000 carryover from fiscal year 1968 appropriation.
[4] Data are based on extrapolations and projections of local library estimates as reported for the Office of Education's "Survey of Public Library Building Facilities, 1963–64."

TITLE II—CONSTRUCTION OF PUBLIC LIBRARIES

FISCAL YEAR 1967 ACTUAL, AND 1968 AND 1969 ESTIMATED FEDERAL ALLOTMENTS AND MATCHING STATE AND LOCAL EXPENDITURES

| State and outlying area | 1967 actual | 1968 estimate | | 1969 estimate | |
|---|---|---|---|---|---|
| | | Federal allotment [1] | State and local matching [2] | Federal allotment [1] | State and local matching [2] |
| Total | $24,582,507 | $18,185,000 | $18,664,263 | $9,185,000 | $9,191,031 |
| Alabama | 396,060 | 330,490 | 173,921 | 168,825 | 88,844 |
| Alaska | 79,362 | 97,342 | 138,353 | 86,150 | 122,446 |
| Arizona | 336,046 | 179,848 | 141,884 | 115,407 | 91,046 |
| Arkansas | 119,951 | 216,969 | 111,772 | 128,570 | 66,233 |
| California | 1,747,144 | 1,285,175 | 1,955,307 | 507,365 | 771,922 |
| Colorado | 392,346 | 214,491 | 213,038 | 127,691 | 126,826 |
| Connecticut | 562,750 | 274,399 | 461,058 | 148,935 | 250,248 |
| Delaware | | 114,221 | 180,315 | 92,135 | 145,449 |
| District of Columbia | | 138,579 | 281,357 | 100,773 | 204,599 |
| Florida | 121,027 | 459,680 | 361,764 | 214,637 | 168,917 |
| Georgia | 201,063 | 382,353 | 242,815 | 187,217 | 118,893 |
| Hawaii | | 128,520 | 147,038 | 97,206 | 111,212 |
| Idaho | 94,564 | 131,159 | 95,956 | 98,141 | 71,800 |
| Illinois | 1,437,555 | 853,010 | 1,249,553 | 354,115 | 518,734 |
| Indiana | 889,000 | 437,515 | 453,373 | 206,777 | 214,272 |
| Iowa | 430,782 | 291,444 | 262,421 | 154,980 | 139,546 |
| Kansas | 508,384 | 247,053 | 231,361 | 139,238 | 130,394 |
| Kentucky | 677,398 | 312,962 | 184,435 | 162,610 | 95,830 |
| Louisiana | 306,240 | 329,745 | 198,523 | 168,561 | 101,482 |
| Maine | 185,636 | 154,322 | 106,710 | 106,355 | 73,542 |
| Maryland | 650,060 | 317,757 | 383,230 | 164,310 | 198,166 |
| Massachusetts | 988,250 | 474,787 | 603,294 | 219,994 | 279,538 |
| Michigan | 1,607,349 | 679,873 | 791,713 | 292,719 | 340,872 |
| Minnesota | 746,368 | 341,771 | 316,367 | 172,826 | 159,980 |
| Mississippi | 508,292 | 247,017 | 127,251 | 139,226 | 71,722 |
| Missouri | 276,668 | 411,238 | 380,671 | 197,459 | 182,782 |
| Montana | 32,125 | 131,740 | 106,574 | 98,347 | 79,560 |
| Nebraska | 237,513 | 188,219 | 165,976 | 118,375 | 104,386 |
| Nevada | 82,706 | 101,875 | 172,720 | 87,757 | 148,784 |
| New Hampshire | 199,340 | 126,538 | 112,529 | 96,503 | 85,819 |
| New Jersey | 1,206,383 | 545,194 | 803,629 | 244,961 | 361,078 |
| New Mexico | 37,950 | 152,923 | 105,088 | 105,859 | 72,746 |
| New York | 2,979,953 | 1,366,846 | 2,077,826 | 536,326 | 815,302 |
| North Carolina | 362,754 | 429,360 | 252,597 | 203,886 | 119,948 |
| North Dakota | 35,000 | 128,495 | 86,811 | 97,197 | 65,666 |
| Ohio | 1,059,432 | 824,274 | 867,933 | 343,925 | 362,141 |
| Oklahoma | | 258,530 | 180,326 | 143,308 | 99,958 |
| Oregon | 253,896 | 215,621 | 218,661 | 128,092 | 129,898 |
| Pennsylvania | 1,913,139 | 947,954 | 947,196 | 387,784 | 387,474 |
| Rhode Island | 153,232 | 145,905 | 153,756 | 103,370 | 108,933 |
| South Carolina | 200,000 | 262,694 | 135,327 | 144,785 | 74,586 |
| South Dakota | 134,685 | 132,181 | 82,922 | 98,504 | 61,795 |
| Tennessee | 470,500 | 353,520 | 202,417 | 176,992 | 101,341 |
| Texas | 581,028 | 814,557 | 608,250 | 340,480 | 254,245 |
| Utah | | 148,292 | 116,279 | 104,217 | 81,719 |
| Vermont | 137,462 | 109,896 | 77,960 | 90,601 | 64,272 |
| Virginia | 377,545 | 384,181 | 296,508 | 187,865 | 144,992 |
| Washington | 48,192 | 298,781 | 336,518 | 157,581 | 177,484 |
| West Virginia | 274,401 | 222,655 | 128,758 | 130,586 | 75,516 |
| Wisconsin | 470,671 | 383,017 | 368,882 | 187,452 | 180,534 |
| Wyoming | 72,305 | 105,309 | 95,701 | 88,975 | 80,857 |
| American Samoa | | 21,538 | 11,095 | 20,545 | 10,584 |
| Guam | | 25,141 | 12,951 | 21,823 | 11,242 |
| Puerto Rico | | 260,160 | 134,022 | 143,886 | 74,123 |
| Virgin Islands | | 22,461 | 11,571 | 20,873 | 10,753 |
| Trust Territory | | 25,423 | | 21,923 | |

[1] Distribution: Basic amount of $80,000 to the 50 States, District of Columbia, and Puerto Rico; $20,000 to American Samoa, Guam, Trust Territory, and Virgin Islands; balance distributed on the basis of total population, Apr. 1, 1960 (except Trust Territory, 1958).

[2] Matching expenditures computed on the basis of fiscal year 1968–69 "Federal share" percentages.

| | 1968 estimate | 1969 estimate | Increase or decrease |
|---|---|---|---|
| 3. College library resources (appropriation and obligations) | $24,522,000 | $25,000,000 | +$478,000 |

JUSTIFICATION OF ESTIMATE

Title II, Part A, of the Higher Education Act of 1965 authorizes grants to institutions of higher education to assist and encourage them in the acquisition of library materials—books, periodicals, documents, magnetic tapes, phonograph records, audiovisual materials, and other related library materials (including necessary bindings). Title II–A of the Act provides for such sums as the Congress may authorize for fiscal year 1969. The estimate of $25,000,000 is based on the assumption that Congress will provide the specific authorization.

The College Library Resources program assists in the Development of Advanced Academic and Professional Skills. Only 580 institutions have library collections which meet minimum standards.

Three types of grants are authorized for eligible institutions which maintain library expenditures at the level of a specified base period as follows:

(*a*) *Basic grants.*—Up to 75 percent of the sums appropriated may be used for basic grants. Each eligible institution and/or branch may be awarded up to $5,000. Recipients are required to match Federal funds dollar for dollar.

(*b*) *Special purposes grants.*—Up to 15 percent of the sums appropriated may be used for special purpose grants.

There are three categories of special purpose grants: (1) to strengthen the library resources of individual institutions to support quality educational (instructional and research) programs; (2) to help institutions meet special national or regional needs in the library and information sciences; and (3) to establish and strengthen the joint use of library facilities. Recipients are required to match with one-third the amount of the grant.

(*c*) *Supplemental grants.*—Up to 10 percent of the sums appropriated plus any unused sums from basic and special purpose grants may be used for supplemental grants. No matching is required. A supplemental grant in an amount not to exceed $10 for each student enrolled in an institution, including its branches, may be made to any eligible institution or as a member of a combination of such institutions. Priority on any unused sums will be given to those institutions in greatest need for financial assistance for library resources.

*Program for fiscal year 1968*

Although the Nation contains some of the finest university libraries, the number of inadequate college and university libraries is overwhelming. If an institution of higher learning desires to have an up-to-date library collection, junior colleges enrolling up to 1,000 full-time students should have 20,000 volumes, this figure to be increased by 5,000 volumes for each additional 500 full-time students enrolled; colleges enrolling 600 full-time students—50,000 volumes, this figure to be increased by 10,000 volumes for each additional 200 full-time students enrolled; and universities (defined as institutions offering a Ph. D. or its equivalent), irrespective of enrollment—300,000 volumes. The 1968 obligations of $24,522,000 will help meet these inadequacies and update college and university library resources.

The number of applications expected to be received and approved for the three types of grants is shown in the following table:

| Type | Estimated number of applications | Estimated number of applications approved | Amount |
|---|---|---|---|
| Basic grants | 2,179 | 2,039 | $9,850,000 |
| Supplemental grants | 1,442 | 1,247 | 11,151,000 |
| Special purpose grants | 1,128 | 130 | 3,521,000 |
| Total | 4,749 | 3,416 | 24,522,000 |

*Plans for fiscal year 1969*

Enrollments are expected to be nearly one million greater in fiscal year 1969 than in fiscal year 1967. College library collections are becoming more and more outdated, and with costs of materials rising the country's higher education libraries are losing rather than gaining ground. The request of $25,000,000 will provide grants to help approximately 55 institutions meet minimum standards during fiscal year 1969. Approximately 4,049,000 books and related materials will be purchased with fiscal year 1969 funds.

The number of applications expected to be received and approved for the three types of grants is shown in the following table:

| Type | Estimated number of applications | Estimated number of applications approved | Amount |
|---|---|---|---|
| Basic grants | 2,229 | 2,089 | $10,100,000 |
| Supplemental grants | 1,478 | 1,267 | 11,330,000 |
| Special purpose grants | 1,154 | 132 | 3,570,000 |
| Total | 4,861 | 3,488 | 25,000,000 |

| | 1968 estimate | 1969 estimate | Increase or decrease |
|---|---|---|---|
| 4. Acquisition and cataloging by Library of Congress (appropriation and obligations) | $5,478,000 | $5,500,000 | +$22,000 |

JUSTIFICATION OF ESTIMATE

Title II–C of the Higher Education Act of 1965 authorizes funds which are to be transferred to the Librarian of Congress for the purpose of establishing and maintaining a central source of up-to-date bibliographic information on all materials of value to scholarship throughout the world. Title II–C of the Act provides for such sums as the Congress may authorize for fiscal year 1969. The estimate of $5,500,000 is based on the assumption that Congress will provide the specific authorization.

*Program for fiscal year 1968*

By the end of fiscal year 1967, shared cataloging offices were operating in London, England; Vienna, Austria; Wiesbaden, Germany; Oslo, Norway; Paris, France; Belgrade, Yugoslavia; and the Hague, Netherlands. Regional acquisitions offices were operating in Rio de Janeiro, Brazil and Nairobi, Kenya. Arrangements had been made with the national bibliographies of Canada, South Africa, Australia, and New Zealand for pre-publication bibliographic data. Ninety-two American libraries were participating in the program. During fiscal year 1968, efforts will be made to extend the program to Spain, Portugal, Italy, Poland, and Japan.

*Plans for fiscal year 1969*

With the $5,500,000 requested for fiscal year 1969 the completion of shared cataloging coverage of Western Europe is planned. A similar program for Eastern Europe will be pursued to the fullest extent possible. The establishment of one additional regional acquisition office in Africa, South America and South Asia will be investigated and implemented if possible. Wherever feasible, existing Library of Congress P.L. 480 offices overseas will have their responsibilities expanded to include regional acquisitions work. Such offices are now operating in the U.A.R., Israel, Indonesia, India, Pakistan, Ceylon and Nepal. A further intensive increase in the hiring and training of catalogers at the Library of Congress will be required and carried out.

| | 1968 estimate | 1969 estimate | Increase or decrease |
|---|---|---|---|
| 5. Librarian training (appropriation and obligations) | $8,250,000 | $8,250,000 | ---------- |

JUSTIFICATION OF ESTIMATE

Title II, Part B of the Higher Education Act of 1965 authorizes grants to institutions of higher education to assist them in training persons in library and information science. Such grants may be made for fellowships, traineeships or institutes for library personnel. Title II-B of the Act provides for such sums as the Congress may authorize for fiscal year 1969. The estimate of $8,250,000 is based on the assumption that Congress will provide the specific authorization.

Prior to fiscal year 1968, institutes for school librarians were conducted under Title XI of the National Defense Education Act. Under the authority of Title II, Part B, of the Higher Education Act of 1965, institutes are conducted for academic and public librarians as well as school librarians, beginning in fiscal year 1968.

Of the 100,000 librarians needed to staff school, public, research and academic libraries, only 3,000 new professionals graduate annually. The objective of the Library Training Program is to increase the number and competence of librarians by training and upgrading.

*Program for fiscal year 1968*

The fiscal year 1968 appropriation of $8,250,000 will support approximately 60 grants and about 503 fellowships. It will also support 3,488 participants in short-term intensive training institutes.

As these individuals complete their training, their numbers will begin to constitute a noticeable and highly qualified addition to the Nation's library and information science personnel resources.

*Request for fiscal year 1969*

During fiscal year 1969, the training of 3,488 librarians in the institutes and the award of 503 fellowships will make a noticeable and highly qualified addition to the Nation's library and information science personnel resources. The new methods, materials and technology developed for use in the library have great potential for improving services, but thousands of librarians now in the job full-time or part-time in schools, colleges and public libraries know little about them. The Nation still faces a growing critical shortage of personnel in this profession. In a real sense this program is making an impact on the training of library personnel that is much more substantial than the mere addition of people to the library labor force. It is helping to strengthen the Nation's library education programs by providing many more faculty members than have been available for appointment as full-time faculty in any previous year. The request for $8,250,000 will maintain the program at the 1968 level. A detailed breakdown of use of funds follows:

FISCAL YEAR 1968–69 ESTIMATE

| Type of support | Number of participants | Average cost per participant | Amount |
|---|---|---|---|
| Doctoral fellowships | 117 | $9,460 | $1,106,820 |
| Post-master's fellowships | 59 | 9,460 | 558,140 |
| Master's fellowships | 327 | 6,375 | 2,084,625 |
| Institute participants | 3,488 | 1,290 | 4,499,520 |
| Total | 3,991 | | [1] 8,250,000 |

[1] Rounded.

| | 1968 estimate | 1969 estimate | Increase or decrease |
|---|---|---|---|
| 6. University community service programs | $10,000,000 | $10,000,000 | |

JUSTIFICATION OF ESTIMATE

Title I of the Higher Education Act of 1965, P.L. 89–329 provides for such funds as the Congress may authorize for fiscal year 1969. The estimate of $10,000,000 is based on the assumption that Congress will provide the specific authorization for grants to the States for the purpose of assisting the people of the United States in the solution of community problems such as housing,

poverty, government, recreation, employment, youth opportunities, transportation, health and land use. The Act emphasizes the solution of urban and suburban problems and specifies that institutions of higher education, both public and private, enlarge and extend their extension and continuing education programs to bring such programs within the economic and geographical reach of persons who can take effective action to improve their communities.

The Act provides a basic Federal allotment of $25,000 each to Guam, American Samoa, the Commonwealth of Puerto Rico and the Virgin Islands and $100,000 to each of the other States, the remainder of the allocation to be allotted to the States on the basis of population ratios.

In fiscal year 1968, $10,000,000 was allocated to 53 states and territories. 341 institutions of higher education applied their resources to community service programs that will be increasingly accessible, economically and geographically, to persons who are in a position to improve their communities. Approximately 433,000 adults whose education has been completed or interrupted participate in an estimated 623 community service projects. These projects developed by state agencies in cooperation with public and private agencies and the professional community range from formal classes, lectures, seminars and workshops to counseling, radio, television and innovative demonstration programs.

Programs are directed toward the solution of problems in such areas as government, poverty, health, youth opportunities, and land use as well as broader areas of concern: community development, economic development, human relations, and personal development. Specific activities include the improvement of government operations and services, guidance to improve the self-image of disadvantaged minorities, the abatement of air and water pollution, the alleviation of crime and juvenile delinquency, and long-range planning for managed metropolitan development.

In fiscal year 1969, the Community Service and Continuing Education program will serve 54 states and territories. The quality of community life, particularly in urban areas, will be improved by concentrating on the development of human resources. Programs to increase the knowledge and skills of 200,000 state, county, and local government employees will: 1) improve the quality of decision making and administrative action in relation to alternative land use patterns for housing, recreation and commercial development; 2) increase the supervisory skills of city and county foremen; 3) develop new approaches to traffic engineering and control; 4) improve understanding of intergroup tensions and other social ills of urban areas; and 5) organize cooperative efforts for the development of viable urban service centers.

The training and utilization of 233,000 volunteers, private social agency personnel and members of the business community will: 1) speed the development of more responsive educational systems; 2) stimulate the development of service programs for older adults; 3) change the consumer practices of low-income families; 4) provide volunteer assistance in programs for enrichment of youth opportunities in the urban ghetto; and 5) enhance the management skills of the neighborhood business enterprise.

More extensive coordination will be established between other Federal legislation dealing with continuing education. The Community Service and Continuing Education program will also coordinate its activities with those of the Model Cities program, the Economic Development program, and the Appalachian Regional Development program to provide needed university based adult education.

| | 1968 estimate | 1969 estimate |
|---|---|---|
| Number of States and territories served | 53 | 54 |
| Number of communities served | 1,878 | 1,878 |
| Percent urban | 60 | 61 |
| Percent urban-suburban | 15 | 14 |
| Percent rural | 8 | 6 |
| Percent comprehensive | 17 | 19 |
| Number of institutions | 341 | 341 |
| Percent public | 72 | 74 |
| Percent private | 28 | 26 |
| Number of projects | 623 | 623 |
| Number of participants | 433,000 | 433,000 |
| Percent government | 46 | 46 |
| Percent nongovernment | 54 | 54 |

TITLE I OF THE HIGHER EDUCATION ACT OF 1965

UNIVERSITY COMMUNITY SERVICE PROGRAMS

| State and outlying area | 1967 actual | 1968 estimate [1] | 1969 estimate [1] |
|---|---|---|---|
| Total | $9,755,002 | $10,000,000 | $10,000,000 |
| Alabama | 185,126 | 185,126 | 185,126 |
| Alaska | 106,520 | 106,520 | 106,520 |
| Arizona | 138,461 | 138,461 | 138,461 |
| Arkansas | 147,398 | 147,398 | 147,398 |
| California | 549,393 | 549,393 | 549,393 |
| Colorado | 147,594 | 147,594 | 147,594 |
| Connecticut | 169,107 | 169,107 | 169,107 |
| Delaware | 112,283 | 112,283 | 112,283 |
| District of Columbia | 119,584 | 119,584 | 119,584 |
| Florida | 241,536 | 241,536 | 241,536 |
| Georgia | 207,226 | 207,226 | 207,226 |
| Hawaii | 117,338 | 117,338 | 117,338 |
| Idaho | 116,923 | 116,923 | 116,923 |
| Illinois | 359,848 | 359,848 | 359,848 |
| Indiana | | 219,485 | 219,485 |
| Iowa | 167,349 | 167,349 | 167,349 |
| Kansas | 154,895 | 154,895 | 154,895 |
| Kentucky | 177,483 | 177,483 | 177,483 |
| Louisiana | 186,934 | 186,934 | 186,934 |
| Maine | 124,078 | 124,078 | 124,078 |
| Maryland | 186,299 | 186,299 | 186,299 |
| Massachusetts | 230,913 | 230,913 | 230,913 |
| Michigan | 303,097 | 303,097 | 303,097 |
| Minnesota | 186,982 | 186,982 | 186,982 |
| Mississippi | 156,385 | 156,385 | 156,385 |
| Missouri | 209,693 | 209,693 | 209,693 |
| Montana | 117,167 | 117,167 | 117,167 |
| Nebraska | 135,628 | 135,628 | 135,628 |
| Nevada | 110,598 | 110,598 | 110,598 |
| New Hampshire | 116,434 | 116,434 | 116,434 |
| New Jersey | 265,589 | 265,589 | 265,589 |
| New Mexico | 124,761 | 124,761 | 124,761 |
| New York | 542,140 | 542,140 | 542,140 |
| North Carolina | 220,510 | 220,510 | 220,510 |
| North Dakota | 115,922 | 115,922 | 115,922 |
| Ohio | 350,080 | 350,080 | 350,080 |
| Oklahoma | 159,779 | 159,779 | 159,779 |
| Oregon | 147,325 | 147,325 | 147,325 |
| Pennsylvania | 382,852 | 382,852 | 382,852 |
| Rhode Island | 121,758 | 121,758 | 121,758 |
| South Carolina | 162,270 | 162,270 | 162,270 |
| South Dakota | 116,752 | 116,752 | 116,752 |
| Tennessee | 194,015 | 194,015 | 194,015 |
| Texas | 358,627 | 358,627 | 358,627 |
| Utah | 124,273 | 124,273 | 124,273 |
| Vermont | 109,865 | 109,865 | 109,865 |
| Virginia | 207,934 | 207,934 | 207,934 |
| Washington | 172,599 | 172,599 | 172,599 |
| West Virginia | 144,321 | 144,321 | 144,321 |
| Wisconsin | 201,097 | 201,097 | 201,097 |
| Wyoming | 108,058 | 108,058 | 108,058 |
| American Samoa | | 25,513 | 25,513 |
| Canal Zone | | | |
| Guam | 26,856 | 26,856 | 26,856 |
| Puerto Rico | 89,297 | 89,297 | 89,297 |
| Virgin Islands | 26,050 | 26,050 | 26,050 |

[1] Distribution of $10,000,000 with a basic amount of $100,000 to the 50 States and District of Columbia; $25,000 to American Samoa, Guam, Puerto Rico and the Virgin Islands. The balance distributed on basis of total resident population, July 1, 1965.

APPROPRIATION

| | 1968 estimate | 1969 estimate | Increase or decrease |
|---|---|---|---|
| 7. Adult basic education: | | | |
| (a) Grants to States | $32,200,000 | $40,000,000 | +$7,800,000 |
| (b) Special projects | 6,550,000 | 8,000,000 | +1,450,000 |
| (c) Teacher training | 1,500,000 | 2,000,000 | +500,000 |
| Total appropriation | 40,250,000 | 50,000,000 | +9,750,000 |

OBLIGATIONS

| | | | |
|---|---|---|---|
| Adult basic education: | | | |
| (a) Grants to States | $30,590,000 | $40,000,000 | +$9,410,000 |
| (b) Special projects | 6,550,000 | 8,000,000 | +1,450,000 |
| (c) Teacher training | 1,500,000 | 2,0000000 | +500,000 |
| Total obligations | 38,640,000 | 50,000,000 | +11,360,000 |

JUSTIFICATION OF ESTIMATE

The purpose of the Adult Education Act of 1966 is to encourage and expand basic education programs for adults. Programs are designed to help adults overcome English language limitations, improve their basic education in preparation for occupational training and more profitable employment, and to become more productive and responsible citizens. This Act permits the continuation of the program started under the Economic Opportunity Act by focusing on priorities in the current target population of approximately 20,604,000 adults of 18 years and older with less than 8 years of formal schooling.

The Adult Education Act of 1966 as amended authorizes $60,000,000 for fiscal year 1968, $70,000,000 for fiscal year 1969 and $80,000,000 for fiscal year 1970. From the sums appropriated not less than 10 nor more than 20 percent shall be for Special Demonstration Projects and Teacher Training, 2 percent reserved for the outlying territories and a basic allotment of $100,000 to each State and the District of Columbia. The remainder shall be allocated to the States based on a ratio of adults who have not more than a fifth grade or equivalent level of education in each State compared to the total number of such adults in all States. The matching requirement for State grant programs is 10 percent State and 90 percent Federal funds except in the Trust Territories of the Pacific Islands which shall be 100 percent Federal funds. For Special Projects a non-Federal contribution of at least 10 percent is required whenever feasible and not inconsistent with the purpose of the program. No matching is required for teacher training programs.

*State Grant Programs*

In fiscal year 1968, Adult Basic Education programs will be conducted in 50 States, the District of Columbia, and three Territories. Approximately 319,000 under-educated adults will participate in the program. Classes will be held in non-school facilities such as churches, hospitals, store fronts, and Union halls, as well as public school buildings. Educational programs will also be conducted in penal institutions in an effort to prepare the hard-core unemployed for the world of work.

In fiscal year 1969, the program will be directed toward improvement of the work attitudes and basic skills of the disadvantaged including the functional illiterates so that they may be more competitive occupationally, more useful socially and more capable of individual growth and achievement. Approximately 411,000 under-educated adults will participate in the program.

Large scale counseling programs which provide counseling services to all Adult Basic Education enrollees will be initiated during fiscal year 1969. It is anticipated that the dropout rate will be reduced and that follow-through job placement technique will result in a more effective overall program. As a part of expanded supportive services provided participants, contact will be made with potential employers through local, State, and national governmental agencies as well as the private sector.

SUMMARY

| | 1968 estimate | 1969 estimate | Increase or decrease |
|---|---|---|---|
| Grants to States | $30,599,000 | $40,000,000 | +$9,410,000 |
| Number States and territories served | 54 | 54 | |
| Number counties with local programs | 1,850 | 2,130 | +280 |
| Number enrollees: | | | |
| Level 1–3 | 111,000 | 175,000 | [1] +64,000 |
| Level 4–6 | 124,000 | 100,000 | −24,000 |
| Level 7–8 | 84,000 | 136,000 | +52,000 |
| Total enrollees | 319,000 | 411,000 | +92,000 |
| Number graduates | 55,000 | 67,000 | +12,000 |
| Percent program funds expended in: | | | |
| Urban counties | 85 | 87 | +2 |
| Rural counties | 15 | 13 | −2 |
| Percent program funds expended on: | | | |
| Nonwhites (Spanish-American, Negroes, Puerto Ricans, and others) | 82 | 90 | +8 |
| Whites | 18 | 10 | −8 |

[1] During fiscal year 1969 greater emphasis will be placed on the recruitment of the hard-core unemployed located in cities. It is anticipated that extensive coordination with other manpower and education programs having similar goals, especially the model cities program, will result in increasing enrollees from minority groups living in the Nation's inner cities.

Experience indicates that the great majority of disadvantaged inner-city enrollees function at the beginning level. Therefore, at least 175,000 of the participants in FY '69 will enroll in grades 1–3. The change in program emphasis is also reflected in the percent of funds expended in urban areas and the kinds of enrollees according to ethnic background as indicated below.

*Special projects*

An estimated thirty-one experimental demonstration projects will be conducted in FY 1968 by public and private adult education agencies. The purpose of the experimental demonstration projects is to develop curriculum innovations in adult education with a view toward maximizing learning in less time than required by traditional learning methods. Projects utilizing programmed instruction, individualized learning techniques and educational technology will be used with different groups of the educationally disadvantaged population.

The new knowledge gained from fiscal year 1968 experimental projects will be extended to all programs this year. Newly developed instructional materials, technology and curriculums will be incorporated within the regular and expanded State grant program. Special projects will be initiated to meet the unique educational needs of disadvantaged minority groups in ghetto areas. Curriculum materials will be developed for undereducated adults who have reached the eight grade level in this and other programs.

Special Projects will focus on the following content areas: Counseling techniques will follow-through job-placement services; development of curriculum "software" for learning systems; development of screening and testing devices to more accurately place new enrollees; indepth case study analysis to ascertain the psychology of the undereducated adult with respect to the Adult Basic Education curriculum and methodology; further exploration studies of educational technology.

SUMMARY

| | Fiscal year 1968 estimate | Fiscal year 1969 estimate | Increase or decrease |
|---|---|---|---|
| Federal funds granted | $6,550,000 | $8,000,000 | +$1,450,000 |
| Number projects | 31 | 47 | +16 |
| Number participants | 43,333 | 54,666 | +11,333 |

*Teacher training*

In-service training institutes for 800 teacher trainees and 500 administrative trainees were conducted in 1968 with the objective of training the participants in the most advanced developments in the teaching of adult basic skills and in the most efficient methods for organizing and administering in-service training programs.

During fiscal year 1969, 23 adult basic education institutes will be administered by the U.S. Office of Education. Institutes will consist of the following types: (1) Teacher-training, (2) Administrative, (3) Counselor, (4) Educational media. It is expected that 1,600 people will receive training.

The number of University resource specialists will be increased from 18 to 27. Specialists will be assigned to universities that have previously conducted adult basic education institutes. Program directors of special projects will be utilized as resource persons at the training institutes. Their presence will ensure that the trainees receive the latest research findings based on the experimental demonstration projects.

SUMMARY

| | 1968 estimate | 1969 estimate | Increase or decrease |
|---|---|---|---|
| Teacher training | $650,000 | $775,000 | +$125,000 |
| Administrative | 200,000 | 275,000 | +75,000 |
| Counselors | 225,000 | 350,000 | +125,000 |
| Education media specialists | 425,000 | 600,000 | +175,000 |
| Total | 1,500,000 | 2,000,000 | +500,000 |
| Number of contracts | 20 | 23 | +3 |
| Number of participating institutions | 20 | 23 | +3 |
| Number of States and territories | 54 | 54 | |
| Number of institutes: | | | |
| Teacher training | 8 | 9 | +1 |
| Administrative | 6 | 6 | |
| Counselors | 3 | 4 | +1 |
| Education media specialists | 3 | 4 | +1 |
| Total | 20 | 23 | +3 |
| Number trainees: | | | |
| Teacher training | 650 | 775 | +125 |
| Administrative | 250 | 350 | +100 |
| Counselors | 200 | 250 | +50 |
| Education media specialists | 200 | 225 | +25 |
| Total | 1,300 | 1,600 | +300 |

ADULT EDUCATION ACT OF 1966

FISCAL YEAR 1967 ACTUAL AND 1968 AND 1969 ESTIMATED OBLIGATIONS

| State and outlying area | 1967 actual | 1968 estimate [1] | 1969 estimate [2] |
|---|---|---|---|
| Total | $26,209,324 | $30,590,000 | $40,000,000 |
| Alabama | 825,067 | 901,330 | 1,198,365 |
| Alaska | 50,000 | 126,288 | 136,033 |
| Arizona | 208,952 | 302,940 | 378,165 |
| Arkansas | 451,385 | 538,398 | 700,903 |
| California | 1,534,703 | 1,590,550 | 2,143,064 |
| Colorado | 132,314 | 228,507 | 276,142 |
| Connecticut | 303,712 | 394,974 | 504,314 |
| Delaware | 50,000 | 146,034 | 163,098 |
| District of Columbia | 99,040 | 196,191 | 231,847 |
| Florida | 797,859 | 874,905 | 1,162,145 |
| Georgia | 1,062,932 | 1,132,351 | 1,515,021 |
| Hawaii | 114,819 | 211,515 | 252,852 |
| Idaho | 50,000 | 138,479 | 152,743 |
| Illinois | 1,154,714 | 1,221,492 | 1,637,205 |
| Indiana | 397,849 | 486,403 | 629,634 |
| Iowa | 156,454 | 251,953 | 308,278 |
| Kansas | 136,324 | 232,402 | 281,481 |
| Kentucky | 687,872 | 768,082 | 1,015,725 |
| Louisiana | 989,954 | 1,061,473 | 1,417,870 |
| Maine | 78,167 | 175,918 | 204,059 |
| Maryland | 437,678 | 525,086 | 682,656 |
| Massachusetts | 551,771 | 635,897 | 834,542 |
| Michigan | 756,943 | 835,165 | 1,107,675 |
| Minnesota | 220,930 | 314,574 | 394,112 |
| Mississippi | 620,835 | 702,974 | 926,483 |
| Missouri | 545,372 | 629,682 | 826,023 |
| Montana | 24,524 | 146,759 | 164,091 |
| Nebraska | 91,590 | 188,955 | 221,928 |
| Nevada | 50,000 | 117,374 | 123,814 |
| New Hampshire | 50,000 | 143,716 | 159,921 |
| New Jersey | 812,280 | 888,911 | 1,181,343 |
| New Mexico | 160,565 | 255,945 | 313,750 |
| New York | 2,415,744 | 2,446,242 | 3,315,943 |
| North Carolina | 1,184,757 | 1,250,671 | 1,677,200 |
| North Dakota | 58,354 | 156,675 | 177,683 |
| Ohio | 940,582 | 1,013,522 | 1,352,144 |
| Oklahoma | 324,969 | 415,620 | 532,613 |
| Oregon | 106,636 | 203,568 | 241,958 |
| Pennsylvania | 1,407,531 | 1,467,036 | 1,973,766 |
| Rhode Island | 108,793 | 205,663 | 244,830 |
| South Carolina | 711,266 | 790,803 | 1,046,869 |
| South Dakota | 50,000 | 147,591 | 165,232 |
| Tennessee | 858,743 | 934,037 | 1,243,196 |
| Texas | 2,041,667 | 2,082,928 | 2,817,955 |
| Utah | 50,000 | 138,059 | 152,166 |
| Vermont | 50,000 | 125,774 | 135,328 |
| Virginia | 876,732 | 951,508 | 1,267,143 |
| Washington | 174,829 | 269,799 | 332,740 |
| West Virginia | 337,593 | 427,880 | 549,418 |
| Wisconsin | 376,123 | 465,302 | 600,711 |
| Wyoming | 50,000 | 120,299 | 127,823 |
| American Samoa | 22,600 | 611,800 | 800,000 |
| Guam | 435,200 | | |
| Puerto Rico | 22,600 | | |
| Virgin Islands | | | |

[1] Distribution of $30,590,000 with 2 percent ($611,800) reserved for outlying areas, and the balance distributed with a basic allotment of $100,000 to each State and District of Columbia and the remainder distributed on the basis of population aged 18 and over with less than 6 grades of school completed, Apr. 1, 1960.

[2] Estimated distribution of $40,000,000 with 2 percent ($800,000) reserved for the outlying areas and the balance distributed with a basic amount of $100,000 to each State and District of Columbia and the remainder distributed on the basis of the population aged 18 and over with less than 6 grades of school completed, Apr. 1, 1960.

| | 1968 estimate | 1969 estimate | Increase or decrease |
|---|---|---|---|
| 8. Program support: | | | |
| (a) Evaluation | | $255,300 | +$255,300 |
| (b) Project review | | 64,600 | +64,600 |
| (c) Advisory committees | | 235,100 | +235,100 |
| Total appropriation and obligations | | 555,000 | +555,000 |

JUSTIFICATION OF ESTIMATE

Since 1965 when Federal aid to education mushroomed as a result of the passage of new and expanded legislation, the Office of Education has been so involved in getting these new programs underway and administering them, that there has been neither the time nor the funds to evaluate or analyze the impact of this legislation on the Nation's educational community. Now is the time to begin evaluation to assure that the educational needs of the Nation are being met at the State and local levels as was the intent of Congress.

To constantly and consistently improve the administration of our programs, it is necessary to bring in the Nation's top educators to advise and consult with Office of Education staff.

We are requesting $555,000 for fiscal year 1969 to accomplish these needs and carry out the requirements of the following laws: Library Services and Construction Act, Titles I and II of the Higher Education Act of 1965, and the Adult Education Act of 1966.

(*a*) *Evaluation*

(1) In order to effectively evaluate the impact of Federal aid on library programs, and the Nation's overall future library needs it is imperative that some in-depth studies be made. The amount of $255,300 is requested to support the following studies:

(*a*) *Evaluation of Library Services and Construction Program.*—An in-depth analysis and evaluation of program operations under the Library Services and Construction Act in selected States with emphasis on Title I, to include target populations served; disadvantaged, general population, urban, central city, suburban, rural; and the impact of the program. How effective is State agency administration? What people are being reached, not reached? What Federal, State, and local resources are required to assure achievement of LSCA objectives? What are program costs/outputs?

(*b*) *Evaluating the Adequacy of the Academic Book Collection.*— A compilation and interpretation of summaries of the varied methods of evaluating the quality and adequacy of academic book collections. This would be a very useful publication in evaluating the impact of Federal aid under Title II–A of the Higher Education Act. Problems in connection with the Administration of the College Library Resources program indicate a very significant need for effective methods of measuring the worth of college libraries. This study would be done on a selective basis.

(*c*) *Survey and Analysis of Library Services to Children and Young Adults.*—The emphasis would be on library services to the disadvantaged and educationally deprived. Both public and school library services would be examined. What is the availability, nature, type, and distinguishing features of library services for children and young adults? What outreach services and activities are conducted and attempted? Both quantitatively and qualitatively, what is the picture of library services for children and young adults? This study would also be done on a selective basis.

(2) *Evaluation of Education and Training Programs for State and Local Government Employees.*—Phase I of this continuing study has identified the role of the Federal government in such training activities. What is now required is to evaluate the educational resources and programs to more adequately meet the National need. The essential involvement of local government in all of our society's affairs requires a comprehensive and coordinated educational endeavor. Thus, Phase II should assist in more explicit delineation of levels of responsibility and related resources.

(3) *Continuing Survey of Enrollees in Adult Basic Education Programs.*—A follow-up of persons enrolled in the ABE program to obtain employment and earnings information. This study would be a pilot effort utilizing Social Security

Numbers and other data supplied in the continuing survey of enrollees in Adult Basic Education programs.

(*b*) *Project review*

An amount of $64,600 is requested for consultants to review and evaluate applications and proposals under Titles II–A and B of the Higher Education Act, and Section 309 of the Adult Education Act of 1966 as follows:

(1) Twelve consultants for 48 man days to review and evaluate 1200 Special Purpose Grants (each reading 3) under Title II–A of the Higher Education Act.

(2) Nine consultants for 36 man days to review and evaluate 70 Fellowship proposals (3 readings) under Title II–B of the Higher Education Act.

(3) Thirty consultants for 120 man days to review and evaluate 300 Institute proposals (3 readings) under the Higher Education Act, Title II–B.

(4) Four consultants for 160 man days to review and evaluate 300 Special Experimental Demonstration proposals (3 readings each) under Section 309 of the Adult Education Act of 1966.

(5) Four consultants for 160 man days to review and evaluate 300 Teacher Training proposals (3 readings each) under Section 309 of the Adult Education Act of 1966.

(*c*) *Advisory committees*

(1) *Advisory Council on College Library Resources.*—Title II–A of the Higher Education Act authorizes an advisory council on college library resources to advise the Commissioner of Education with respect to establishing criteria for the making of supplemental grants and special purpose grants. This committee consists of eight members and plans one meeting in fiscal year 1969. A sum of $3,700 is requested for this purpose.

(2) *National Advisory Commission on Libraries.*—Under Executive Order signed by the President on September 2, 1966, a National Advisory Commission on Libraries was created for the purpose of appraising the role and adequacy of the Nation's libraries now and in the future and to recommend action which might be taken by public and private groups to insure an effective, efficient library system for the Nation. The Commission consists of twenty members who meet on call of the Chairman.

Under terms of the Executive Order, the Commission will terminate 90 days after the final report is submitted to the President's Committee on Libraries. This request is based on the assumption that a permanent Commission will be authorized as recommended by the Commission.

To assist the Commission in carrying out its duties to make a comprehensive study of the role of libraries for scholarly pursuits, as centers for the dissemination of knowledge, and as components of the evolving national information systems; to appraise the policies, programs and practices of public agencies and private institutions, together with other factors which have a bearing on the role and effective utilization of libraries, a contract with one of the Nation's outstanding universities will be let.

An amount of $150,000 is requested to carry out the Executive Order.

(3) *National Advisory Council on Extension and Continuing Education.*—Title I of the Higher Education Act of 1965 authorizes a National Advisory Council on Extension and Continuing Education. The council shall meet at the call of the chairman but not less often than twice a year. There are twelve members of this council to review the administration and effectiveness of all federally supported extension and continuing education programs. This council plans four meetings in fiscal year 1969.

In order to carry out the requirements of the legislation authorizing the community services and continuing education programs, a full-time staff to provide technical assistance to the National Advisory Council is planned for fiscal year 1969. This staff will consist of one executive secretary, one secretary, and one clerk.

An amount of $62,700 is requested.

(4) *Advisory Committee on Adult Basic Education.*—The Adult Education Act of 1966 authorized an Advisory Committee on Adult Basic Education consisting of the Commissioner and seven other members. The Committee will review the administration and effectiveness of the adult basic education program and

other federally supported adult education programs as they relate to adult basic education. This Committee shall meet at the call of the chairman but not less often than twice a year. Four meetings are planned for fiscal year 1969 at a total cost of $18,700.

BUDGET REQUEST AND APPROPRIATION COMPONENTS

Senator HILL. You may proceed, sir.

Mr. VENN. Mr. Chairman, we are requesting $149,199,000 for libraries and community service programs. This account includes the Library Services and Construction Act, the adult basic education program, the programs of community services and college libraries under the Higher Education Act, and program support. Our 1969 request represents a decrease of $7,301,000 under the 1968 appropriation of $156,500,000 and a decrease of $4,718,493 under the 1968 obligations.

Senator HILL. What is your justification for this decrease?

Mr. VENN. The major portion of this decrease comes in a reduction for request for construction funds in the area of library construction.

LIBRARY SERVICES

The estimate of $40,709,000 for Library services represents a decrease of $106,000 under the 1968 appropriation for Titles I, II, and IV of the Library Services and Construction Act but represents an increase of $185,000 over the 1968 obligations.

Since the inception of the public library services program, title I has made a most significant contribution toward meeting the educational and cultural needs of our citizens of all ages. However, the rising costs of books, as well as our spiraling population, are placing increasing demands on our public libraries. The 1969 request of $35 million will help make these services available to about 85 million persons and will provide approximately 8 million additional books and other materials. Continued emphasis will be given to hard-core problems which challenge our society, such as the disadvantaged in urban slums, in the Appalachian region, and in other rural areas.

The estimate of $2,281,000 for title III will assist States in establishing and maintaining library networks at the local, regional, State, and interstate levels, and will provide better library services to about 8.6 million persons.

It will also help to assure that the various forms of Federal support for libraries are invested most efficiently and effectively. Under title IV–A, the request for $2,094,000 will provide books and other services to 300,000 persons in about 500 hospitals, prisons, and other State institutions who, because of their confinement, are unable to use regular community services. We are seeking $1,334,000 for title IV–B to provide special services for some 70,000 physically handicapped individuals who cannot use conventionally printed books, magazines, and newspapers due to impaired vision or other physical factors.

CONSTRUCTION OF PUBLIC LIBRARIES

If we are to accommodate the increases in materials and services, we must provide the necessary space. Moreover, many of our existing libraries are insufficient and obsolete.

For the construction of public libraries under title II of the Library Services and Construction Act, we are requesting $9,185,000 which is $18 million less than was appropriated in 1968. These funds added to an estimated carryover of $9 million from fiscal year 1968, will help support about 204 projects for added library buildings necessary to serve new areas and for alteration and expansion of existing facilities.

Senator HILL. If you didn't have that carryover that would be quite a reduction, would it not?

Mr. VENN. Yes, sir. It is still quite a reduction.

### COLLEGE LIBRARY RESOURCES

A quality college education is dependent on the availability of adequate library resources to both students and teachers. Part A of title II of the Higher Education Act provides grants to institutions of higher education for the acquisition of library materials such as books, periodicals, documents, magnetic tapes, phonograph records and audio-visual materials.

Our request of $25 million will support about 2,089 basic grants, that is, up to $5,000 to each college—1,267 supplemental grants, and these go to the colleges of greatest need, and 132 special purpose grants which are made to individual colleges for special programs serving themselves or a national purpose.

Senator HILL. For instance?

Mr. VENN. For example, it might go to the consortium of universities which are pooling special materials which are then made available from one source by a teletype method or some other method of this kind rather than putting them in each library.

### ACQUISITION AND CATALOGING BY LIBRARY OF CONGRESS

The request includes $5.5 million for transfer to the Library of Congress under title II–C of the Higher Education Act, for the acquisition and cataloging of library materials published throughout the world. This assistance benefits hundreds of libraries throughout the country by eliminating duplicate efforts costing millions of dollars.

### LIBRARIAN TRAINING

There exists a critical shortage of professionally trained librarians in school, public, and college libraries. About 100,000 librarians are needed to meet this shortage, but only about 3,000 new librarians graduate annually.

Our request involves $8,250,000 for grants to institutions of higher education for training in librarianship under title II, part B, of the Higher Education Act. These funds will support about 503 fellowships and provide institute training for about 3,488 persons for school, public academic, and special libraries.

### COMMUNITY SERVICE PROGRAMS

We are requesting $10 million for grants to States for community service and continuing education programs under title I of the Higher Education Act. The purpose of this program is to help people solve problems at the community level. Projects are carried out at the local

community level by the extension service of higher education institutions through conferences, special classes, radio and ETV courses, consultation and counseling programs. Major emphasis has been given to the problems of local government. About 24 percent of the Federal funds have been used to support projects in this area.

I may say this is a case of providing money so that the education specialist can come to the area.

Other problem areas in order of support are: Community development, land use, poverty, health, youth opportunities, human relations, recreation, economic development, personal development, employment, transportation, and housing. The estimate for fiscal year 1969 will support about 623 projects, involving about 341 institutions of higher education.

Senator HILL. How does that compare with this year?

Mr. VENN. That will be at almost the same level. The amount of money will be almost exactly the same amount.

### ADULT BASIC EDUCATION

For adult basic education programs authorized by the Adult Education Act of 1966, we are requesting $50 million, an increase of $9,750,000 over the 1968 appropriation and $11,360,000 over the 1968 obligations. These funds will help support training programs for about 411,000 adult illiterates in order to improve their opportunities for gainful employment, an increase of 92,000 over 1968.

In addition, training will be provided for about 1,600 teachers, administrators, and specialists in this area; and about 64,666 adults will participate in special projects designed to promote a comprehensive approach to the problems of the educationally disadvantaged.

We hope to tie the literacy training to the manpower training program.

### PROGRAM SUPPORT

The request includes $555,000 for evaluation studies, project review, and the costs of four advisory committees in connection with the program supported under this appropriation.

Senator HILL. You need this, don't you?

Mr. VENN. Yes, sir. Again this would make all of our expenditures much more efficient if we had the dollars to gather the data we need.

Senator HILL. To get the picture.

Mr. VENN. Yes, sir. We will be happy to answer any questions you may have.

Senator HILL. Thank you. You have brought us another good statement. We appreciate it very much.

Mr. VENN. Thank you, Mr. Chairman.

## Education Improvement for the Handicapped

**STATEMENT OF JAMES J. GALLAGHER, ASSOCIATE COMMISSIONER FOR EDUCATION FOR THE HANDICAPPED**

**ACCOMPANIED BY:**

**HAROLD HOWE II, COMMISSIONER OF EDUCATION**
**EDWIN W. MARTIN, DEPUTY ASSOCIATE COMMISSIONER, BUREAU OF EDUCATION FOR THE HANDICAPPED**
**JAMES W. MOSS, DIRECTOR, DIVISION OF RESEARCH**
**LEONARD J. LUCITO, DIRECTOR, DIVISION OF TRAINING PROGRAMS**
**BERTRAM I. WEINER, EXECUTIVE OFFICER, BUREAU OF EDUCATION FOR THE HANDICAPPED**
**BERNARD SISCO, ASSISTANT COMMISSIONER FOR ADMINISTRATION**
**LEON SCHWARTZ, DEPUTY ASSISTANT COMMISSIONER FOR ADMINISTRATION**
**JOE G. KEEN, BUDGET OFFICER**
**PAUL R. BROCKMAN, BUDGET ANALYST**
**JAMES B. CARDWELL, DEPUTY ASSISTANT SECRETARY, BUDGET**

### Appropriation Estimate

EDUCATIONAL IMPROVEMENT FOR THE HANDICAPPED

For grants for training and *for necessary expenses for* research and demonstrations with respect to handicapped children pursuant to the Act of September 6, 1958, as amended (20 U.S.C. 611–617), and section 302 of the Mental Retardation Facilities and Community Mental Health Centers Construction Act of 1963, as amended (20 U.S.C. 618); for expenses necessary to carry out the Act of September 2, 1958, as amended (42 U.S.C. 2491–2494); for grants [to States] *and contracts* under title VI of the Elementary and Secondary Education Act of 1965, as amended (20 U.S.C. 871–880), [$53,400,000] *$85,225,000*: *Provided, That not to exceed $575,000 shall be available for necessary expenses of advisory committees, for services of specialists in reviewing applications for assistance, and for program evaluation.*

### *Appropriation Language Changes*

Proposed changes for Title VI of the Elementary and Secondary Education Act are deletion of "to States" and inclusion of "and contracts." The Elementary and Secondary Education Amendments authorize three new programs under Title VI—regional resource centers under Part B, recruitment of personnel and information dissemination under Part C, and centers for the deaf-blind under Part D. The requested changes will provide for appropriation of funds for these new activities.

The Elementary and Secondary Education Amendments also authorize the inclusion of "for grants and contracts for" for research and authorize "related activities" such as intramural research, dissemination, and training of junior professionals in an apprentice capacity.

AMOUNTS AVAILABLE FOR OBLIGATION

| | 1968 | 1969 |
|---|---|---|
| Appropriation | $53,400,000 | $85,225,000 |
| Cutback from 1968 President's budget required by H. J. Res. 888 | −750,000 | |
| Total available for obligation | 52,650,000 | 85,225,000 |
| Disposition of cutback: To be returned to the Treasury | 750,000 | |
| Total cutback | 750,000 | |

OBLIGATIONS BY ACTIVITY

| | 1968 estimate | 1969 estimate | Increase or decrease |
|---|---|---|---|
| Preschool and school programs | $14,250,000 | $32,000,000 | +$17,750,000 |
| Teacher education and recruitment: | | | |
| (a) Teacher education | 24,500,000 | 30,000,000 | +5,500,000 |
| (b) Personnel recruitment and information | | 1,000,000 | +1,000,000 |
| Research and innovative programs: | | | |
| (a) Research and demonstration | 11,100,000 | 13,900,000 | +2,800,000 |
| (b) Regional resource centers | | 2,000,000 | +2,000,000 |
| (c) Innovative programs | | 1,000,000 | +1,000,000 |
| Captioned films for the deaf and media services | 2,800,000 | 4,750,000 | +1,950,000 |
| Program support | | 575,000 | +575,000 |
| Total obligations | 52,650,000 | 85,225,000 | +32,575,000 |

OBLIGATIONS BY OBJECT

| | | | |
|---|---|---|---|
| Full-time equivalent of all other positions | | 15 | +15 |
| Average number of all employees | | 15 | +15 |
| Personnel compensation—positions other than permanent | | $285,000 | +$285,000 |
| Personnel benefits | | 13,000 | +13,000 |
| Travel and transportation of persons | | 82,000 | +82,000 |
| Printing and reproduction | | 10,000 | +10,000 |
| Other services | $2,800,000 | 5,435,000 | +2,635,000 |
| Grants, subsidies, and contributions | 49,850,000 | 79,400,000 | +29,550,000 |
| Total obligations by object | 52,650,000 | 85,225,000 | +32,575,000 |

*Summary of Changes*

| | |
|---|---|
| 1968 enacted appropriation | $53,400,000 |
| Cutback required by H.J. Res. 888 | −750,000 |
| 1968 estimated obligations | 52,650,000 |
| 1969 estimated obligations | 85,225,000 |
| Total change | +32,575,000 |

PROGRAM INCREASES

| | Base | Change from base |
|---|---|---|
| 1. Preschool and school programs | $14,250,000 | $17,750,000 |
| 2. Teacher education and recruitment: | | |
| (a) Teacher education | 24,500,000 | 5,500,000 |
| (b) Personnel recruitment and information | | 1,000,000 |
| 3. Research and innovative programs: | | |
| (a) Research and demonstration | 11,100,000 | 2,800,000 |
| (b) Regional resource centers | | 2,000,000 |
| (c) Innovative programs | | 1,000,000 |
| 4. Captioned films for the deaf and media services | 2,800,000 | 1,950,000 |
| 5. Program support | | 575,000 |
| Total program increases | | 32,575,000 |
| Total net change requested | | 32,575,000 |

*Explanation of Changes*

*Increases*

1. An increase of $17,750,000 will be used to expand the number of children reached by State grants out of a target group of 3,000,000 handicapped children who still receive no aid from any source.

2. An increase of $5,500,000 will provide a total of $30,000,000 for grants to train teachers and other personnel for work with the handicapped. In fiscal year 1969 an increase of 646 individuals will be supported for a full academic year and 1,795 for summer and institute programs. An increase of 16 grants will be awarded to strengthen institutional training programs.

3. In fiscal year 1969 an increase of $1,000,000 is requested to develop a program of intensive personnel recruitment and for dissemination of information.

4. An increase of $2,800,000 for research and demonstration allows continuation of projects and their expansion as well as new starts.

5. Establishment of the first four regional resource centers will be funded in fiscal year 1969 with the request of $2,000,000.

6. An increase of $1,000,000 will initiate the activity, "innovative programs" by expanding previously existing but limited facilities and by planning four new centers for the deaf blind in geographic areas where services are most needed.

7. The Captioned Films for the Deaf program will be strengthened and expanded to develop media for all handicapped persons with a $1,950,000 increase in fiscal year 1969.

8. Program support will allow the Bureau for Educational Improvement for the Handicapped to fund its own advisory committees, consultants, field readers and evaluation activities with in increase of $575,000.

| | 1968 estimate | 1969 estimate | Increase or decrease |
|---|---|---|---|
| APPROPRIATION | | | |
| Preschool and school programs | $15,000,000 | $32,000,000 | +$17,000,000 |
| OBLIGATIONS | | | |
| Preschool and school programs | 14,250,000 | 32,000,000 | +17,750,000 |

*Justification of Estimate*

The Elementary and Secondary Education Amendments of 1967 (P.L. 90–247) authorizes $167,375,000 for fiscal year 1969. This amount is composed of $162,500,000 for States plus three percent of that amount, or $4,875,000 for outlying areas. Under Title VI the amount provides for grants to States to assist them in the initiation, expansion, and improvement of programs and projects (including acquisition of equipment and construction of necessary school facilities) for the education of handicapped children at the preschool, elementary, and secondary levels.

For fiscal year 1969 $32,000,000 is requested, an increase of $17,000,000 over the 1968 request to help continue the gradual development of State and local resources to meet the educational and related needs of handicapped children. As the first year of program funds were not appropriated prior to the beginning of the academic year, the 1968 funds cover program activity for the second semester and the summer months of the academic year, ending August 31, 1968.

Funds are distributed to the States on the basis of the 3 to 21 year old population with a 1967 amendment providing a minimum of $100,000 for each State. Allotments are authorized also for the Bureau of Indian Affairs, Department of Defense schools, Puerto Rico, Guam, Virgin Islands, American Samoa, and the Trust Territories. Part of the annual allotment to each State may be used for administration of the State Plan.

Plans being received for the first six months of program operation show some States reporting that less than 15% of their handicapped children are receiving services. Most States offer no local school educational services for very seriously handicapped children, nor for those children with multiple handicaps such as the blind/retarded child.

Since Title VI is in the first year of its operation and some States have not filed completed State plans, the numbers of children who will participate in the programs supported by fiscal year 1968 funds are not yet complete. State plans received and approved show that almost all States will use all of their funds to support projects which will improve or begin services affecting large numbers of children. Teachers with little special training will receive special instruction. Special materials for teaching handicapped children will be distributed. New teachers and supervisory personnel will be added, and programs will be started in rural areas and inner cities. Considerable emphasis will be given to pre-school programs.

An estimated 10% of school age children are handicapped and require special educational services. Indications are that only about 2,000,000 of over 5,000,000 children are receiving some degree of special help. The President's Committee on Mental Retardation reports that less than one-half the Nation' school districts have special classes for handicapped children. The $32,000,000 requested for

Title VI–A in fiscal year 1969 could provide the full supplemental cost of special education above that for regular schooling (approximately $600) for only 55,000 children. This support must instead provide the States with an average grant of about $10 per child for the 3,000,000 children presently receiving no services. While actual expenditures per child, and numbers of children participating will vary widely from State to State, in every instance funds and the program concept have been received as a stimulus to new planning and have added a vitality to efforts to extend educational opportunity to handicapped children.

GRANTS TO STATES FOR PRESCHOOL AND SCHOOL PROGRAMS—FISCAL YEAR 1967 ACTUAL AND 1968 AND 1969 ESTIMATED ALLOTMENTS [1]

| State and outlying areas | 1967 actual | 1968 estimate | 1969 estimate |
|---|---|---|---|
| Total | $2,425,000 | $14,250,000 | $32,000,000 |
| Alabama | 43,642 | 263,547 | 625,835 |
| Alaska | 20,000 | 100,000 | 100,000 |
| Arizona | 20,000 | 103,733 | 246,330 |
| Arkansas | 22,763 | 137,460 | 326,422 |
| California | 183,244 | 1,106,581 | 2,627,751 |
| Colorado | 21,802 | 131,656 | 312,637 |
| Connecticut | 28,237 | 170,519 | 404,924 |
| Delaware | 20,000 | 100,000 | 100,000 |
| Florida | 56,269 | 339,800 | 806,910 |
| Georgia | 52,158 | 314,971 | 747,948 |
| Hawaii | 20,000 | 100,000 | 123,871 |
| Idaho | 20,000 | 100,000 | 128,210 |
| Illinois | 113,791 | 687,167 | 1,631,788 |
| Indiana | 56,955 | 343,940 | 816,741 |
| Iowa | 33,084 | 199,790 | 474,433 |
| Kansas | 25,884 | 156,308 | 371,178 |
| Kentucky | 38,976 | 235,368 | 558,919 |
| Louisiana | 43,627 | 263,453 | 625,611 |
| Maine | 20,000 | 100,000 | 168,745 |
| Maryland | 37,745 | 227,938 | 541,276 |
| Massachusetts | 57,380 | 346,508 | 822,839 |
| Michigan | 93,953 | 585,544 | 1,390,468 |
| Minnesota | 42,236 | 255,057 | 605,674 |
| Mississippi | 30,547 | 184,471 | 438,055 |
| Missouri | 49,051 | 296,211 | 703,400 |
| Montana | 20,000 | 100,000 | 123,074 |
| Nebraska | 20,000 | 100,364 | 238,330 |
| Nevada | 20,000 | 100,000 | 100,000 |
| New Hampshire | 20,000 | 100,000 | 101,861 |
| New Jersey | 66,249 | 400,066 | 950,020 |
| New Mexico | 20,000 | 100,000 | 192,764 |
| New York | 173,177 | 1,075,982 | 2,555,090 |
| North Carolina | 61,539 | 371,623 | 882,477 |
| North Dakota | 20,000 | 100,000 | 119,627 |
| Ohio | 116,164 | 701,492 | 1,665,804 |
| Oklahoma | 28,043 | 169,344 | 402,134 |
| Oregon | 21,328 | 128,794 | 305,842 |
| Pennsylvania | 127,793 | 771,722 | 1,832,576 |
| Rhode Island | 20,000 | 100,000 | 139,952 |
| South Carolina | 34,302 | 207,146 | 491,900 |
| South Dakota | 20,000 | 100,000 | 124,478 |
| Tennessee | 45,287 | 273,483 | 649,428 |
| Texas | 122,201 | 737,950 | 1,752,381 |
| Utah | 20,000 | 100,000 | 181,509 |
| Vermont | 20,000 | 100,000 | 100,000 |
| Virginia | 50,464 | 304,744 | 723,664 |
| Washington | 34,544 | 208,605 | 495,366 |
| West Virginia | 24,004 | 144,955 | 344,219 |
| Wisconsin | 47,801 | 288,659 | 685,467 |
| Wyoming | 20,000 | 100,000 | 100,000 |
| District of Columbia | 20,000 | 100,000 | 110,033 |
| Outlying areas | 72,750 | 415,049 | 932,039 |

[1] Distribution to the 50 States and the District of Columbia on the basis of population 3–21 (Apr. 1, 1960) with a minimum of $100,000. 3 percent of the 50 States and the District of Columbia amount is reserved for the outlying areas.

APPROPRIATION AND OBLIGATIONS

| | 1968 estimate | 1969 estimate | Increase or decrease |
|---|---|---|---|
| Teacher education and recruitment: | | | |
| (a) Teacher education | $24,500,000 | $30,000,000 | +$5,500,000 |
| (b) Personnel recruitment and information | | 1,000,000 | +1,000,000 |
| Total appropriation and obligations | 24,500,000 | 31,000,000 | +6,500,000 |

*Justification of Estimate*

(*a*) *Teacher education*

An amount of $37,500,000 is authorized for fiscal year 1969 under Public Law 85-926 to provide grants to State education agencies and institutions of higher education for training of personnel in the education of the handicapped.

The purpose of the program is to train personnel for the special educational needs of the more than 5,000,000 American children who are mentally retarded, hard of hearing, deaf, speech impaired, visually handicapped, seriously emotionally disturbed, crippled, or otherwise health impaired. An increase of $5,500,000 over the 1968 appropriation for a total of $30,000,000 is requested for 1969 to decrease the critical shortage in teachers for the handicapped.

The education of handicapped children is a field where professionals must have special knowledges, equipment, techniques, approaches, and attitudes. Specific training is required to qualify teachers and other professional and subprofessional personnel such as child care workers, teachers' aides, media technicians, if the children afflicted with these handicapping conditions are to be provided with the suitable educational opportunities to which they are entitled. The estimated total need for professional and subprofessional personnel is 350,000; less than one-third of this number are currently engaged in this field. Of the current number it is estimated that up to 60% are only partially trained and require some form of in-service preparation. With the support of this program since it began in 1960, 31,444 training awards have been made. The need for intensifying this activity, so that many more qualified people can be brought into this challenging occupation, is clear.

Not only is there a need to prepare more and more professionals to enter the schools within the traditional grade level structure, there is also a critical need to broaden the scope of this training to include pre-school teaching of the handicapped and teaching of the multiply-handicapped. Both of these areas have lagged in the past for lack of financial support but they are now widely recognized as requiring serious attention. Promising new training models, such as preparing master teachers to lead teams of professionals and subprofessionals, and other models being developed from educational technology and research activities, need to be implemented. The increased funding requested will enable the program to make some beginnings in these areas, as well as to put more teachers into service.

The training program in fiscal year 1968 made 4,660 awards for the full academic year while in fiscal year 1969 it is planned that only 4,006 will be awarded. In 1969, more attention will be directed to providing short session traineeships to help eliminate the large percentage of partially trained persons who require in-service preparation. The table, summary of awards, therefore indicates an increase of 1,795 awards in 1969 for summer and institute traineeships.

An increase of 16 program development grants is planned in 1969 to help strengthen existing programs at colleges and universities or to help institutions establish new training programs.

There will also be a large increase in the number of special project grants in 1969. The primary purpose of the grant is to provide funds for conceptualizing new models of training programs, and to gain experience with prototypes of these models before committing large sums of money through the regular portion of the award program. One example of a special project grant could be an award for a working conference to prepare recommendations for establishing an internship program to train administrators.

(*b*) *Personnel recruitment and information*

An amount of $1,000,000 is authorized and requested for fiscal year 1969 for Title VI, Part D, Recruitment of Personnel and Information on Education of the Handicapped. There are two separate but related parts on this new authority.

*Recruitment*

The Elementary and Secondary Education Amendments of 1967 authorize grants or contracts to be made to institutions or public or nonprofit private agencies to encourage students and professional personnel to work in various fields of education of the handicapped. The major emphasis of the program will be to provide prospective personnel with a satisfactory experience working with handicapped children, aimed at influencing them to do further work in the education of the handicapped. Funds could be used to organize students' clubs to provide a service for their community, such as baby-sitting, with an orientation program on the care of handicapped children. Mass media might also be used to make people aware of career opportunities in special education. Guidance counselors will be informed of the availability of training programs and financial aid, speakers will appear at schools, and information will be supplied to employment offices. In fiscal year 1969, approximately 8 grants or contracts will be made totaling $500,000 to begin developing and distributing materials and publicizing career opportunities.

*Information*

The other part of this new authority allows for grants and contracts to be used to disseminate information about the programs, services and resources available to teachers, parents and their handicapped children. Since parents usually are aware of their children's handicaps long before they reach school age, materials should be distributed to doctors, public health and social workers, and other family service agencies that have pre-school contact with the family. Information must be made available at the local level where it will be most effective. About eight grants totaling $500,000 will be made in fiscal year 1969 to establish model or prototype information programs.

APPROPRIATION AND OBLIGATIONS

| | 1968 estimate | 1969 estimate | Increase or decrease |
|---|---|---|---|
| Research and innovative programs: | | | |
| (a) Research and demonstration | $11,100,000 | $13,900,000 | +$2,800,000 |
| (b) Regional resource centers | | 2,000,000 | +2,000,000 |
| (c) Innovative programs | | 1,000,000 | +1,000,000 |
| Total appropriation and obligations | 11,100,000 | 16,900,000 | +5,800,000 |

*Justification of Estimate*

(*a*) *Research and demonstration*

Section 302 of Public Law 88–164, authorizes $14,000,000 for fiscal year 1969 to provide funds to aid in the acquisition of new knowledge and dissemination of research information relative to the education of handicapped children. The program encourages rapid implementation of sound educational practices through a variety of methods. The request of $13,900,000 for fiscal year 1969 represents an increase of $2,800,000 over fiscal year 1968.

Because of continuation costs associated with projects started in fiscal year 1968, an amount of $5,900,000 will be available for new projects in fiscal year 1969.

The activities of FY 1969 will be devoted to a consolidation of existing research efforts and the development of new programs mainly as a result of the Elementary and Secondary Education Amendments of 1967.

*Consolidation.*—1. A greater emphasis on large scale programmatic grants will be made. There seems to be greater payoff in having a series of related or sequential studies conducted in the same institution as opposed to isolated or discrete grants for individual projects.

2. In 1967 a research and demonstration center addressing the problems of the education of the handicapped was established at Teacher's College Columbia University with support from the Office of Education. This pattern of support is to be extended during the present fiscal year. Centers will be expected to include the training of research specialists as well as the conduct of appropriate research and development activities. These centers may approach the educational problems of the handicapped from a categorical viewpoint or may focus on critical areas which cross categorical lines. They will draw together teams of researchers,

focusing on a specific problem area and providing continuity and sustained interest on key issues. Grants for such centers will be awarded only to research oriented institutions which show ability to look broadly and deeply into the educational problem identified for study.

3. The system of fourteen Instructional Materials Centers, a massive effort to provide better materials to special teachers, will be moving from the developmental to the demonstration phase of their evolution. The purpose of this program is to provide for broad dissemination of tested instructional materials to teachers and other professionals dealing with the education of the handicapped. In this context, the IMC network will coordinate available information about instructional materials, evaluate the efficacy of materials, and engage in development of materials specifically appropriate to the needs of the handicapped. The major focus of this program to date has been the establishment of an effective communication among Instructional Materials Center's and between the IMC and the consumer. The coming years will emphasize the demonstration of the effectiveness of the Instruction Materials Center's network as a significant agent for change in the field of special education.

*New Development.*—1. P.L. 90–247 has made possible the development and training of educational researchers to work with programs for handicapped children. This year will see a number of research training grants made to institutions of higher learning for this purpose.

2. An organized effort will be made to stimulate the research capabilities of institutions of higher learning where little or no research is now visible. To combat the trend for more and more research funds going to a few major institutions, we will award research development grants to smaller, less research active institutions. This will free a research oriented faculty member to develop either his personal abilities or the departmental research capability.

3. New contract authority in P.L. 90–247 will allow us to seek out the newest developments in technology to improve the educational opportunities of the handicapped or to help adapt technology to the special needs of the handicapped.

The ability to communicate with others has always been one of the most serious problems of many different kinds of handicapped persons. Some of this new technology would allow handicapped children who do not have full use of their hands to use the typewriter by means of a new coding system and advanced electronic technology. The contract authority permits us to seek out such developments or to encourage experts in these technical areas to pursue the special problems of the handicapped.

4. Finally, new authority permits the development of an intramural research program for the advancement of programs for the handicaped. Among other activities, such a program can provide for regular study of the Bureau's own programs or to field test promising activities developed through the other research projects. Many of these important confirmation experiments are of little interest to active researchers but of importance to the confidence with which findings can be disseminated or recommendations can be made for educational change.

(*b*) *Regional resource centers*

The 1967 amendments to the Elementary and Secondary Education Act authorize $7,750,000 for fiscal year 1969 for the establishment of Regional Resource Centers for handicapped children (Title VI, Part B). $2,000,000 is requested for fiscal year 1969 for the initiation of this program.

These Centers are needed to help teachers develop and implement educational programs for those handicapped children who are failing to learn under present practices. In spite of special training and experience, teachers of the handicapped still cannot cope with almost 10% of the children in their classes. The special learning problems of some handicapped children require intense study and the development of specialized instructional techniques and materials. Even the best of teachers has but 24 hours in a day. Even the best of teachers can not also be an expert diagnostician, media specialist, curriculum developer, educational researcher, and programmer. She needs help.

The Regional Resource Centers will provide this help. They will furnish the expert educational evaluations which form the basis for any educational program, and will have experimental classrooms where difficult children can be observed under a variety of teaching procedures and where new teaching techniques can be explored. They will develop individualized programs of instruction, with appropriate teaching and learning materials, for each child studied. Consultants from the Center will help the child's teacher to use the new programs and materials. Periodic follow-up and study will assure that the child continues to learn at the expected rate in his own classroom.

These Regional Resource Centers represent an innovation in education. For more than 50 years educators have focused upon the problems of children. The problems of identification and diagnosis caught the academic attention of researchers in education and psychology. For half a century teachers have floundered in a maze of diagnostic categories which had little if any implications for teaching. The Regional Resource Centers will focus upon the *problems* of *teaching*, and through this will come solutions to problems of children. Through the efforts of these centers will come new educational procedures which will ultimately benefit all children as well as the handicapped who receive immediate benefits.

The fiscal year 1969 funds will permit the establishment of four Regional Resource Centers; one to serve a predominantly rural area, one to serve a densely populated area, and two to serve regions of moderate density.

(c) *Innovative programs*

The 1967 amendments to Title VI of the Elementary and Secondary Education Act authorizes $3.000,000 for fiscal year 1969 under Title VI, Part C to provide a limited number of model centers for deaf-blind children. The funds requested for the initiation of this program are $1,000,000 for fiscal year 1969.

Grants or contracts may be made with public or nonprofit private agencies, organizations, or institutions to pay all or part of the cost of establishment (including when necessary construction) or operation of such centers.

The rubella epidemic of 1964–65 affected the children born to about 20,000 women. Estimates of the increase in deaf-blind children resulting from this epidemic indicate a 3–4 fold increase in deaf-blind children throughout the country. Care and education is extremely expensive for children with this multiple handicap. Current exemplarary programs show an approximate per capita cost of $11,000. The salvaging of the particular children involved is only a part of the problem. Having a deaf-blind child is such a traumatic experience for the family that help is needed to enable the family to understand and work with the child and to keep the family unit from disintegrating. Every day that passes for these children without the pre-school and school training they need makes their chances for maximum growth in learning more slim.

With fiscal year 1969 funds, six centers with limited facilities will be expanded and improved. Planning will be supported for four centers where services do not exist and, where feasible, pilot programs of diagnostic services, parent counseling and basic education will be started. Three facilities for training teachers and related specialists will be encouraged to develop further, and research in educational procedures for deaf-blind children will be expanded.

BUREAU OF EDUCATION FOR THE HANDICAPPED—DIVISION OF RESEARCH

1968 (ESTIMATE) RESEARCH AND DEMONSTRATION AWARDS BY AREA OF HANDICAP

| Area | New Grants | | Continuations | | Total | |
|---|---|---|---|---|---|---|
| | Number | Amount | Number | Amount | Number | Amount |
| Crippled and other health impaired | 5 | $373,248 | 5 | $203,942 | 10 | $577,190 |
| Emotionally disturbed | 9 | 598,156 | 5 | 354,352 | 14 | 952,508 |
| Hearing impaired | 8 | 301,792 | 13 | 549,900 | 21 | 851,692 |
| Mentally retarded | 10 | 579,975 | 7 | 329,909 | 17 | 909,884 |
| Speech and hearing | 7 | 423,564 | 8 | 1,171,087 | 15 | 1,594,651 |
| Visually handicapped | 8 | 972,785 | 3 | 50,448 | 11 | 1,023,233 |
| Multiple | 13 | 421,750 | 11 | 954,603 | 24 | 1,376,353 |
| IMC | 0 | | 15 | 2,744,949 | 15 | 2,744,949 |
| R. & D | 3 | 600,000 | 1 | 469,540 | 4 | 1,069,540 |
| Total | 63 | 4,271,270 | 68 | 6,828,730 | 131 | 11,100,000 |

1969 (ESTIMATED) RESEARCH AND DEMONSTRATION AWARDS BY AREA OF HANDICAP

| | | | | | | |
|---|---|---|---|---|---|---|
| Crippled and other health impaired | 5 | $500,000 | 14 | $200,000 | 9 | $700,000 |
| Emotionally disturbed | 8 | 650,000 | 5 | 400,000 | 13 | 1,050,000 |
| Hearing impaired | 10 | 800,000 | 10 | 500,000 | 20 | 1,300,000 |
| Mentally retarded | 10 | 800,000 | 7 | 400,000 | 17 | 1,200,000 |
| Speech and hearing | 8 | 650,000 | 10 | 500,000 | 13 | 1,150,000 |
| Visually handicapped | 6 | 500,000 | 4 | 500,000 | 10 | 1,000,000 |
| Multiple | 10 | 1,000,000 | 10 | 1,000,000 | 20 | 2,000,000 |
| IMC | 0 | | 15 | 3,000,000 | 15 | 3,000,000 |
| R. & D | 5 | 1,000,000 | 4 | 1,500,000 | 9 | 2,500,000 |
| Total | 62 | 5,900,000 | 69 | 8,000,000 | 131 | 13,900,000 |

APPROPRIATIONS AND OBLIGATIONS

| | 1968 estimate | 1969 estimate | Increase or decrease |
|---|---|---|---|
| Captioned films for the deaf and media services | $2,800,000 | $4,750,000 | +$1,950,000 |

*Justification of Estimate*

The Elementary and Secondary Education Amendments of 1967 (P.L. 90–247) authorize $8,000,000 for fiscal year 1969 for the expansion of instructional media programs to include all handicapped children. It expands the successful captioned films program so that educational media services formerly provided for the deaf only are now made available to all handicapped children.

The extension of the authority from the single area of services for the deaf to all areas of handicapped children presents many striking opportunities and perplexing problems. With the fiscal year 1969 request of $4,750,000, we expect to engage in the following activities:

*Existing Services.*—We will provide continued and slightly increased support for the programs already successfully developed under the Captioned Films for the Deaf program. Such a program has included:

1. A loan service for captioned general interest films to schools, civil and social groups and religious organizations for the deaf.
2. Support for four regional media centers for the deaf that have provided among other things effective short range training programs to help teachers learn effective use of news media, and are involved in materials production and consultation in the area of media.
3. The support of a network of 65 film libraries and depositories that provide for circulation and dissemination of media materials.

*New Activities for Media Expansion.*—1. The development of conferences to explore the special problems of the development and use of media for the special handicapped groups.

2. The development of selected surveys of particular needs and the matching of existing media to those needs for particular types of handicapped children.
3. The funding of some pilot research on the development of new materials or software to meet the specialized needs of differing handicapped children.
4. The acquisition of material that can be utilized by the handicapped. Combining the resources of the Instructional Materials Centers, operated out of the Bureau's Division of Research is now possible to facilitate this activity.
5. Short term training programs and workshops for teachers of other types of handicapped children will begin.

Since the number of children covered by the authorization change has moved from less than 500,000 to over 5,000,000 while the funds are less than twice last year's appropriation it will be possible to operate most of the new activities in a pilot or experimental form during the coming year.

APPROPRIATIONS AND OBLIGATIONS

| | 1968 estimate | 1969 estimate | Increase or decrease |
|---|---|---|---|
| Program support | | $575,000 | +$575,000 |

*Justification of Estimate*

A total of $575,000 is requested for fiscal year 1969 for program support activities for the Bureau of Educational Improvement for the Handicapped. These funds are requested for the following activities:

1. $175,000 for the advisory committees to meet and provide counsel on overall program and policy directions. Professional representation on these committees enables the Bureau to meet the changing needs of the field and receive advice from different geographical areas and from the specialists in all the areas of education of the handicapped.
2. $215,000 is requested for program consultants to give advice and counsel on the activities to be undertaken as a result of the new authorities provided for in the Elementary and Secondary Education Amendments of 1967. The consultants will review proposals for all programs included in the appropriation

for Educational Improvement for the Handicapped. In addition, they will evaluate proposals, make site-visits to monitor active grants and gather additional information for review of applications so that program money will be utilized to its best advantage.

3. Included in the total program support request is $35,000 so that at least two field readers may read and evaluate each proposal submitted to the Bureau. These funds allow for about 700 proposals to be sent for field reading.

4. $150,000 will be used to fund evaluations and studies to determine needs of the country that are not being filled at the present time, the effectiveness of our present programs and policies, and to conduct comprehensive surveys of the impact our programs have had on special education.

BIOGRAPHICAL SKETCH

Name: James J. Gallagher.
Position: Associate Commissioner, Education for the Handicapped.
Birthplace and date: Pittsburgh, Pennsylvania, June 11, 1926.
Education:
University of Pittsburgh, 1946 to 1948, Bachelor of Science.
Pennsylvania State University, 1948 to 1950, Master of Science.
Pennsylvania State University, 1950 to 1951, Doctor of Education.
Experience:
Present: Associate Commissioner, Bureau of Education for the Handicapped.
1959–67: Professor, University of Illinois, Urbana, Illinois.
1963–67: Associate Director, Institute for Research on Exceptional Children, University of Illinois, Urbana, Illinois.
1966–67: Visiting Adjunct Professor, Education Improvement Program, Duke University, Durham, North Carolina.
1957–59: Associate Professor, Institute for Research on Exceptional Children, University of Illinois, Urbana, Illinois.
1954–57: Assistant Professor, Institute for Research on Exceptional Children, University of Illinois, Urbana, Illinois.
1952–54 Assistant Director, Psychological Clinic, Michigan State University, East Lansing, Michigan.
1951–52: Director of Psychological Services, Dayton Hospital for Disturbed Children, Dayton, Ohio.
Association memberships:
Council for Exceptional Children.
American Educational Research Association.
American Psychological Association.
Publications:
Child Development Monographs. 1957, No. 2.
The tutoring of Brain Injured Mentally Retarded Children: An Experimental Study. Charles C. Thomas, Springfield, Ill. 1960.
*Teaching the Gifted Child*. Alyn and Bacon, Boston Mass. 1964.
Teaching Gifted Students (edited). Alyn and Bacon, Boston, 1965.
The productive Thinking of Gifted Children in Classroom Interaction. CEC Monographs, Washington, D.C. 1967.

BUDGET REQUEST

Senator HILL. All right, Mr. Gallagher, we welcome you back.

Mr. GALLAGHER. It is my privilege to testify for the first time representing the Bureau of Education for the Handicapped.

Senator HILL. You have appeared with the Department before.

Mr. GALLAGHER. Yes, sir, I have testified before on Public Law 88–164.

Mr. Chairman, the increased request for educational improvement for the handicapped, supports the concern of the Congress and the President for providing handicapped children with an opportunity to learn and to fulfill their capacity for an independent life.

The $85,225,000 budgeted is an increase of $31,825,000 over the 1968 appropriation.

NEW LEGISLATION

In 1966 and 1967 the Congress authorized new and expanded programs designed to provide a full range of educational activities including research and development, training of professional personnel, provision of direct services to handicapped children in schools and institutions, and special training and research programs in physical education and recreation for the handicapped.

NATIONAL ADVISORY COMMITTEE ON HANDICAPPED CHILDREN

In addition, the Congress authorized a National Advisory Committee on Handicapped Children which has recently submitted its first report, and also authorized the establishment of the Bureau of Education for the Handicapped within the U.S. Office of Education which is charged with providing leadership and coordination for these programs. We propose to implement all of these programs within the 1969 appropriation.

PRESCHOOL AND SCHOOL PROGRAMS

Thirty-two million dollars is requested for the program of grants to the States, authorized by title VI, part A, of the Elementary and Secondary Education Act. This program became operational in the last half of fiscal year 1968. States have received grants for the initiation, expansion and improvement of preschool and school programs from the $14,250,000 obligated for this program in fiscal year 1968. Ten percent of the Nation's schoolage children, over 5 million children, have handicapping conditions. Of these 5 million children, less than half now receive special assistance. For example, in its State plan, Alabama lists fewer than 9,000 children receiving special education, 175,000 needing additional service——

Senator HILL. You mean service that they are not now getting?

Mr. GALLAGHER. Yes, sir.

California lists 240,000 children receiving services, 250,000 needing additional services; and Wisconsin lists 42,000 receiving services, 64,000 needing additional services. Title VI–A is the only Federal-grant program specifically designed to assist the States in providing basic classroom instruction for handicapped children.

The longer a person lives with an upcompensated handicap, the more costly his training and care becomes. The cost of training adults or of institutionalization is many times that which might be spent in preschool or elementary programs which can markedly increase the chances of a child becoming a working, productive adult.

TEACHER EDUCATION AND RECRUITMENT

The single most important factor in increasing the amount and quality of educational opportunity for handicapped children will be the availability of trained personnel. Thirty million dollars for teacher education—an increase of $5,500,000—will make possible the awarding of grants for 14,416 trainees and fellows, an increase of about 2,500. It will also allow us to experiment with new teacher training models to provide training for all members of the professional

team that the future programs for the handicapped would seem to require.

This training program has been the backbone of the growth in the special education area. Over 100 major training institutions have teaching faculty members who were supported by the Public Law 85–926 program. Over 40,000 individual awards have been made, and preliminary surveys indicate that a very high percentage of these trainees take and stay in jobs in the special education field.

### Recruitment and Information Dissemination

The new recruitment and information dissemination program for which $1 million is requested will be an integral part in the efforts to provide more teachers for handicapped children and to help put parents in touch with educational resources. We proposed to support the efforts of professional organizations, lay groups, State, and local agencies in developing mass information and recruitment campaigns. Many parents today have trouble getting basic information about programs for their handicapped children. We frequently get requests for information from across the country, and have examples of parents turning to newspaper columns, such as Ann Landers, for help in getting basic information which should be available within each State.

### Budget Bureau Reduction

Senator Hill. Let me ask you this question: I notice the Budget Bureau cut the request by some $25,350,000.

Mr. Gallagher. Yes, sir, actually from $110 million to $85 million for the total handicapped program.

Senator Hill. How much is that going to handicap your work in the Department?

Mr. Gallagher. We will still be able to make a very substantial start, beginning programs particularly in the States. The States have been planning over a number of years and have had planning funds from us to begin their programing since fiscal year 1967. We will, with an increase from $14,250,000 to $32 million in the title VI–A program, allow them to get a start on their priorities.

As we have said, since there are more than half of the handicapped children who are not receiving any special services now throughout the country, this will just begin to make a dent in the major problem.

Senator Hill. It will make a small start, really, won't it?

Mr. Gallagher. Yes, sir.

### RESEARCH AND INNOVATIVE PROGRAMS

An increase of $5,800,000 in this area will provide $2,800,000 for additional research and demonstration programs, $2,000,000 to establish a new program of regional resource centers, and $1,000,000 for grants to provide services and centers for deaf-blind children.

To move out of a crafts and guild approach to the transmission of knowledge from one generation to another, we need a strong research program to discover new knowledge and to organize that knowledge in such a way as to be of maximum help to teachers and other specialists.

In our supplemental statements we mention a number of the interesting research activities being supported. Of particular significance

is a national network of 19 instructional materials and media centers which are making new materials more available to the classroom teacher, and providing assistance in the development and evaluation of these materials.

We are also supporting the first comprehensive Research and Demonstration Center for handicapped children, located at the Teachers College, Columbia University in New York City. Construction of the Center is in the planning stage, but there is already underway a program of research with seven separate studies being undertaken on educational problems on a variety of handicapped children.

Too often we have sent a lone special education teacher to do what a platoon of specialists should do. Regional resource centers will provide additional assistance in helping the teacher overcome the difficult education problems she faces. We have had frequent reports of elaborate diagnostic information going to waste because it is not meaningful to the classroom teacher. Reports tell her what is wrong, but not what to do. Resource centers will attempt to develop bridges across this gap.

Senator HILL. That is most important, that is vital, is it not, to build that bridge?

Mr. GALLAGHER. Yes, sir. For teachers of the handicapped, there probably is nothing more needed than to have support personnel to help them deal with the most difficult children that they have.

The resource center personnel will develop educational evaluations to supplement medical diagnosis and will work with teachers to design programs and strategies for teaching the children.

Occasionally, an unhappy accident can produce a sharp increase in certain kinds of handicapped children. Such an accident was the rubella epidemics of 1963 and 1964 which affected many pregnant women and caused thousands of babies to be born with multiple handicaps. These children, now approaching school age, present an educational crisis which must be met quickly.

One million dollars is requested to support centers for deaf-blind children which will attempt to provide comprehensive diagnostic, evaluative and educational services for these children and others like them who represent a supreme challenge to the many professional specialists involved.

### CAPTIONED FILMS AND MEDIA SERVICES

The captioned films for the deaf program, like most of these programs for educating handicapped children, received initial impetus through the interest of this committee. The increase of $1,950,000 will allow for expansion of the media program for deaf children and also support beginning projects in developing instructional materials for the mentally retarded, emotionally disturbed, physically handicapped and other children requiring special education.

### PROGRAM SUPPORT

The Bureau of Education for the Handicapped was born out of a recognition by this committee and the Congress as a whole that the programs for handicapped children needed a central point for effective administration and educational policymaking.

By drawing together programs of research, training and services into one unit, we now have a visible central point to which all concerns for education of the handicapped may be directed. The $575,000 requested for program support will provide the mechanism for carrying out our mandate. It will support the activities of the statutory National Advisory Committee on Handicapped Children. It will provide professional consultation in the development and operation of each of the programs in the Bureau, so that basic decisions on policy and on specific programs are made with the active participation of responsible representatives of the field of special education. We feel this partnership is an essential element in any Federal program.

Program support funds will also be used to help evaluate the effectiveness of the Bureau's programs. We need to know more about whether the money you appropriate is getting the results that you expect. Progress in education for handicapped children must be based on adequate evaluation procedures.

Senator HILL. Don't you think this is most important?

Mr. GALLAGHER. Yes, sir.

Senator HILL. The thing is that we have been a little too slow getting started.

Mr. GALLAGHER. That is right. We are starting from a long way back.

Senator HILL. You spoke about children handicapped on account of their mothers having had rubella.

Mr. GALLAGHER. Yes, sir.

Senator HILL. I think we are pretty close to getting a vaccine for that.

Mr. GALLAGHER. That is what I understand.

Senator HILL. Even if we do get it today we can't go back and make them normal children. We have to do something for them. Isn't that right?

Mr. GALLAGHER. Yes, sir.

BUREAU OF EDUCATION FOR THE HANDICAPPED PERSONNEL

Senator HILL. They are already handicapped.

Incidentally, I note the request for 56 additional personnel for the new Bureau of Education for the Handicapped. Are your personnel needs critical today?

Mr. GALLAGHER. Yes, sir. We certainly think they are. As you noted, there are now four new programs that need to get started including the one on the deaf-blind. We feel it is crucial to get these programs started in fiscal year 1969. Time lost now in serving these children cannot be entirely recovered later on. It will be necessary to have that level of personnel in order to get these programs into operation.

In addition there is the strengthening of the training research and service programs that are already present in the Bureau in an undermanned situation. We think that in order to do the job that the Congress expects us to do, these personnel for existing and new programs are essential.

Senator HILL. How much more money do you need then that allowed by the Budget Bureau? It takes money to get these personnel, does it not?

BUDGET BUREAU REDUCTION

Mr. GALLAGHER. Yes, sir, and the salaries and expenses request will cover these 56 positions that we are requesting. The Bureau of the Budget cut $25,350,000 in program funds, but recognized our staff needs by allowing our request for the 56 positions.

Senator HILL. They slashed you $25,350,000?

Mr. GALLAGHER. Yes, sir, they did. If we are able to obtain the request that we are making to this committee we expect to make a sizeable first step in the direction of serving the handicapped.

Senator HILL. You mean even with this $25,350,000 slashed?

Mr. GALLAGHER. Well, we would naturally be happier if we were able to have that but we will be able to move along with what we do have.

Senator HILL. You say move along. How well can you move along?

Mr. GALLAGHER. What this will result in will be that the States have had set up their own priorities for what should be done for handicapped children. Some States want to start preschool programs for the handicapped which we consider very essential. Some of them want to train teachers who have not received effective special training in this area. Some want to start work study programs so that all the education that has been provided for the handicapped does not go to waste because you have not gone that last step in providing an effective working situation for the handicapped adolescent to move into. So this cut, in effect, forces the States to choose between these priorities which they think are quite important. They must make the decision as to which of these they are willing to forego, because of this cut.

Senator HILL. You have made us another good witness.

Mr. GALLAGHER. Thank you, sir.

## RESEARCH AND TRAINING

**STATEMENT OF R. LOUIS BRIGHT, ASSOCIATE COMMISSIONER FOR RESEARCH**

**ACCOMPANIED BY:**

**HAROLD HOWE II, COMMISSIONER OF EDUCATION**
**JOHN D. COLBY, EXECUTIVE OFFICER, BUREAU OF RESEARCH**
**BERNARD SISCO, ASSISTANT COMMISSIONER FOR ADMINISTRATION**
**LEON SCHWARTZ, DEPUTY ASSISTANT COMMISSIONER FOR ADMINISTRATION**
**JOE G. KEEN, BUDGET OFFICER**
**PAUL BROCKMAN, BUDGET ANALYST**
**JAMES B. CARDWELL, DEPUTY ASSISTANT SECRETARY, BUDGET**

APPROPRIATION ESTIMATE

RESEARCH AND TRAINING

For research, surveys, training, dissemination of information, and demonstrations in education and in librarianship as authorized by the *Cooperative Research* Act [of July 26, 1954], *as amended* (20 U.S.C. 331–[332 (b)] *332b*) [, as amended by title IV of the Elementary and Secondary Education Act of 1965, and the Elementary and Secondary Education Amendments of 1966]; section 4(c) of the Vocational Education Act of 1963 (20 U.S.C. 35[C]*c*(c)); 224(*a*)(*1*) of the Higher Education Act of 1965 [(Public Law 89–329)]; and section 602 and title VII of the National Defense Education Act of 1958 [as amended (20 U.S.C. ch.

17; Public Law 88-665), $90,967,600], *as amended (20 U.S.C. 1034(a)) $142,300,000* of which [$1,250,000] *$6,000,000* shall be available for program evaluation without regard to the provision in subsection 2(a) (2) of said *Cooperative Research* Act [of July 26, 1954], as amended, and [$13,550,000] *$15,700,000* shall be available for research [and special project activities], *experimental, developmental, and pilot projects* under section 4(c) of said Vocational Education Act of 1963*: Provided, That not to exceed $500,000 shall be available for necessary expenses for advisory committees, and for services of specialists in reviewing applications for assistance.*

*Appropriation Language Changes*

Inclusion of "Cooperative Research" and deletion of "of July 26, 1954" is a technical change to provide greater clarity.

Authorizations for foreign language research under Title VI and educational media research under Title VII of the National Defense Education Act, and for library research under Title II of the Higher Education Act of 1965, expire on June 30, 1968. The appropriation language assumes extension of special authority in these areas, although this special authority is not necessary due to the scope of the Cooperative Research Act. Foreign language research, educational media research and library improvement research continue to appear as sub-activities in the Research and Training justification.

Inclusion of "experimental, developmental, and pilot projects" in lieu of "special project activities" under Section 4(c) of the Vocational Education Act of 1963 makes clear the distinction between these activities and the training activities which are now requested in the "Education Professions Development Activities" appropriation.

AMOUNTS AVAILABLE FOR OBLIGATIONS

| | 1968 | 1969 |
|---|---|---|
| Appropriation | $90,967,000 | $142,300,000 |
| Unobligated balance brought forward | 30,781,411 | 29,581,411 |
| Comparative transfer to "Education Professions Development Activities" | −2,000,000 | |
| Cutback required by H.J. Res. 888: | | |
| Reduction below obligation level in the 1968 President's budget | −23,800,000 | |
| Reduction because of unanticipated carryover balances | −1,693,000 | |
| Total cutback | −25,493,000 | |
| Other unobligated balances carried forward | −4,088,411 | |
| Total available for obligation | 90,167,000 | 171,881,411 |
| Disposition of cutback: Carried forward for obligation in 1969 | 25,493,000 | |
| Total cutback | 25,493,000 | |

OBLIGATIONS BY ACTIVITY

| | 1968 estimate | 1969 estimate | Increase or decrease |
|---|---|---|---|
| Educational research and demonstration | $79,817,000 | $129,700,000 | +$49,883,000 |
| Construction | 1,200,000 | 29,581,411 | +28,381,411 |
| Training | 6,750,000 | 9,000,000 | +2,250,000 |
| Dissemination | 2,400,000 | 3,100,000 | +700,000 |
| Program support | | 500,000 | +500,000 |
| Total obligations | 90,167,000 | 171,881,411 | +81,714,411 |

OBLIGATIONS BY OBJECT

| | | | |
|---|---|---|---|
| Personnel compensation: Positions other than permanent | | $134,000 | +$134,000 |
| Personnel benefits | | 6,000 | +6,000 |
| Travel and transportation of persons | | 95,000 | +95,000 |
| Other services | $64,920,000 | 105,126,000 | +40,206,000 |
| Services of other agencies | | 2,000,000 | +2,000,000 |
| Equipment | 550,000 | 16,830,411 | +16,280,411 |
| Lands and structures | 650,000 | 12,750,000 | +12,100,000 |
| Grants, subsidies, and contributions | 24,047,000 | 34,940,000 | +10,893,000 |
| Total obligations by object | 90,167,000 | 171,881,411 | +81,714,411 |

*Summary of Changes*

| | |
|---|---|
| 1968 enacted appropriation | $90,967,000 |
| Unobligated balance brought forward | 30,781,411 |
| Comparative transfer to "Education Professions Development Act" | —2,000,000 |
| Cutback required by HJR 888: | |
| Reduction below obligation level in the 1969 President's budget | —23,800,000 |
| Reduction because of unanticipated carryover balances | —1,693,000 |
| Total cutback | —25,493,000 |
| Other unobligated balances carried forward | 4,088,411 |
| 1968 estimated obligations | 90,167,000 |
| 1969 requested appropriation | 142,300,000 |
| Unobligated balance brought forward | 29,581,411 |
| 1969 estimated obligations | 171,881,411 |
| Total change | +81,714,411 |

INCREASES PROGRAM

| | Base | Changes from base |
|---|---|---|
| 1. Costs to continue present authorized projects: | | |
| a. Educational laboratories and research and development centers | $33,920,973 | $14,079,027 |
| b. General education: | | |
| (1) Evaluation | 1,250,000 | 750,000 |
| (2) National achievement study | 1,000,000 | 1,000,000 |
| (3) Demonstration and development | 3,679,027 | 7,570,973 |
| c. Vocational education | 11,550,000 | 3,450,000 |
| d. Construction | 510,000 | 7,490,000 |
| e. Training | 6,750,000 | 435,000 |
| f. Dissemination | 2,400,000 | 600,000 |
| 2. Costs to fund new projects: | | |
| a. General education: | | |
| (1) General research | | 10,339,000 |
| (2) Evaluation | | 4,000,000 |
| (3) Demonstration and development | | 14,600,000 |
| b. Vocational education | | 700,000 |
| c. Foreign language education | | 2,500,000 |
| d. Educational media | | 4,000,000 |
| e. Library improvement | | 1,950,000 |
| f. Construction | | 21,581,411 |
| g. Training | | 1,815,000 |
| h. Dissemination | | 100,000 |
| i. Program support | | 500,000 |
| Total program increases | | +97,460,411 |

DECREASES PROGRAM

| | | |
|---|---|---|
| 1. Costs to continue present authorized projects: | | |
| a. General education: | | |
| (1) General research | 17,467,000 | —8,206,000 |
| b. Foreign language education | 3,000,000 | —2,500,000 |
| c. Educational media | 4,400,000 | —2,400,000 |
| d. Library improvement | 3,550,000 | —1,950,000 |
| e. Construction | 690,000 | —690,000 |
| Total program decreases | | —15,746,000 |
| Total net program change requested | | +81,714,411 |

*Explanation of Changes*

*Increases*

*1. Costs to continue present authorized projects.*—a. The regional educational laboratories and the Research and Development centers will continue work on developmental, demonstration, and research activities started in prior years.

b. General education:

(1) Evaluation studies started in 1968 would be continued.

(2) The national achievement study described in the 1968 budget request is expected to be started, with an assist from the related achievement studies conducted in 1968.

(3) Demonstration and development would continue on projects begun in prior years, including:

(a) The laboratory theatre program, previously shown under Regional Educational Laboratories;

(b) The general curriculum portion of the ES–70 comprehensive curriculum program;

(c) Preparation of teachers for preschool and elementary school levels;

(d) Educational stimulation of disadvantaged preschool children and their families; and

(e) Curriculum sequences for community colleges.

c. Vocational education research and demonstration projects begun in prior years would be continued.

d. Construction grant awards would be made for Research and Development center facilities at the Universities of Pittsburgh and Wisconsin, following planning grants in 1968.

e. The graduate training of educational researchers will be continued at the level anticipated by prior year support.

f. Dissemination activities, especially the Educational Resources Information Center (ERIC) will be continued at a level adequate to meet user requests for services. This will include extension of ERIC services to meet an unfilled need in journal and periodical literature indexing.

*2. Costs to fund new projects.*—a. General education:

(1) Support would be provided for 618 new research projects—as against 435 new projects in 1968—including greater stress on small research awards, studies in education for American Indians, and studies of human learning techniques as they affect attitudes.

(2) Ten new evaluation studies would be started, with emphasis on cost-benefit analyses and evaluations of programs for the disadvantaged and handicapped.

(3) Demonstration and development activities to be started in 1969 would include:

(a) A major demonstration of higher quality urban school program, to be initiated in the District of Columbia;

(b) A cooperative program with the National Endowment on the Arts and Humanities; and

(c) Intensive pilot studies to indentify and design promising new development and demonstration projects.

b. Ten new vocational education research projects would give added attention to the ES–70's curriculum development program, research coordination, adult and continuing education, and the new careers program.

c. Foreign language education activities would be continued at the same level of effort as in 1968, with support for 58 new projects stressing the improvements of curriculum and instructional methodology.

d. The support of 41 new educational media projects would include the operational demonstration of a computer center to be shared by geographically-dispersed schools in instruction and administration.

e. Library improvement would be continued at its 1968 level. The 35 new projects would include special work on networks for the shared use of library resources.

f. Construction and equipment grants would be made from funds appropriated in 1966 and 1967.

g. Programs would be developed for the training of educational technologists, and short-term training for inservice researchers would be expanded.

h. Dissemination activities would be strengthened by the addition of a new ERIC clearinghouse.

i. Necessary expenses would be provided for project review and the advisory services of experts relating to the content of activities supported under the Research and Training appropriation.

*Decreases*

*1. Costs to continue present authorized projects.*—a. General education-general research will require an estimated $9,261,000 to continue projects begun in prior years.

b. Foreign language education projects begun in prior years will require an estimated $500,000.

c. Educational media projects begun in prior years will require an estimated $2,000,000.

d. Library improvement projects begun in prior years will require $1,600,000.

e. Construction funds used for equipment in 1968 ($690,000) were for items requiring no follow-on funding commitments.

EXPLANATION OF TRANSFERS

| | 1968 estimate | 1969 estimate | Purpose |
|---|---|---|---|
| Comparative transfer to: "Education Professions Development Activities." | $2,000,000 | $2,800,000 | Transfer of vocational education activities to provide a more coordinated presentation of programs to improve teacher quality. |

| | 1968 estimate | 1969 estimate | Increase or decrease |
|---|---|---|---|
| 1. Educational research and demonstration: | | | |
| a. Laboratories and R. & D. Centers | $33,920,973 | $48,000,000 | +$14,079,027 |
| b. General Education: | | | |
| (1) General Research | 17,467,000 | 19,600,000 | +2,133,000 |
| (2) Evaluation | 1,250,000 | 6,000,000 | +4,750,000 |
| (3) National Achievement Study | 1,000,000 | 2,000,000 | +1,000,000 |
| (4) Demonstration and Development | 3,679,027 | 25,850,000 | +22,170,973 |
| c. Vocational Education | 11,550,000 | 15,700,000 | +4,150,000 |
| d. Foreign Language | 3,000,000 | 3,000,000 | |
| e. Educational Media | 4,400,000 | 6,000,000 | +1,600,000 |
| f. Library Improvement | 3,550,000 | 3,550,000 | |
| Educational research and demonstration (appropriation and obligations) | 79,817,000 | 129,700,000 | +49,883,000 |

*a. Regional Educational Laboratories and R & D Centers*

*Regional Educational Laboratories.*—As authorized by the Cooperative Research Act, the 20 Regional Educational Laboratories are given operational assistance support to invent and develop a rich array of alternative materials and practices from which the schools of America may select those that enable them to pursue more effectively their particular objectives. The goal of the laboratory program, therefore, is demonstrated improvement of school practice, to be accomplished through service to, and use of, the varied human resources of their regions.

The program design and development activities of the laboratories as a consequence of the support given over the past two years may be divided into five broad areas:

1. Programs which emphasize the development of new materials and instructional methods for improving the curriculum of the general student population;

2. Programs which emphasize the development and adaptation of materials and the establishment of specialized training programs to improve education for disadvantaged student populations;

3. Programs which emphasize the development of the skills of teachers and other educational personnel to enable them to utilize new materials, new methods, and new behaviors;

4. Programs which emphasize the development and application of technology to instruction and school management; and

5. Programs which emphasize the development of new forms of school organization and new forms of relationships between school and community.

The requested increase of approximately $13,000,000 in laboratory funds in Fiscal Year 1969 over Fiscal Year 1968 will permit the continuation of developmental work started in prior years, including materials preparation and field testing of projects under way and continuing assessment of research and practice to identify areas where additional improvements would be beneficial.

*Research and Development and Related Centers.*—Research and Development Center support was initiated in 1963 to concentrate human and financial resources on particular problem areas in education over an extended period of time. This strategy of continuous in-depth research and development makes it possible to focus on specific problems and to combine the efforts of specialists from many disciplines in the development of new concepts, practices and mate-

rials for use in the classroom. This central objective is shown in the nine Research and Development Centers, the Early Childhood Education Program, and the Policy Research Center Program. However, each of these arrangements has its own special character and organization.

*Research and Development Centers.*—The request for fiscal year 1969 for the nine R & D centers currently supported will continue activities currently under way in such areas as individualized instruction and teacher skill improvement. The increase over Fiscal Year 1968 is to cover the costs of moving projects from laboratory planning and development to field testing.

*Early Childhood Education.*—The Early Childhood Education program is centered on the education of children from birth to third grade, and is involved in studies of the cognitive, social, personality, and language development of the child; in curriculum research and development; in test construction and development of assessment techniques; in training program (for professionals and nonprofessionals) research; and in the development of techniques for fostering parental involvement. Six university-based centers and an ERIC clearinghouse were established in Fiscal Year 1967, and a National Coordination Center was created to assure optimal coordination and cooperation among the six centers and with other institutions and persons in the field of early childhood education. The funds requested in 1969 will continue the operations of this network and permit three additional universities to participate in the network.

*Policy Centers.*—Policy research centers are being established in Fiscal Year 1968 to analyze future educational needs and resources and, in the light of these analyses, to provide educational policy makers at all levels with relevant information and techniques for decision making.

Fiscal Year 1967 and 1968 funds have supported pilot efforts to explore the development of data and analyses which could be provided to policy makers at local, State, and Federal levels on which to base decisions relating to future developments in education. Five such contracts are currently being supported. In Fiscal Year 1968, we are establishing two operational policy research centers through expansion of the best two of these five pilot activities. These two centers would be continued in 1969.

*b. General education*

General education research and demonstration activities include general research, evaluation, the national achievement study, and demonstration and development as authorized by the Cooperative Research Act. They are carried out through grants to and contracts with universities and colleges and other public and private agencies, institutions and organizations including cooperation with other national governmental agencies.

(1) General Research. Over the past two years, the major interests in research on general educational problems have included school administration, individualized instruction, student thinking and learning, curriculum development, and the education of disadvantaged, urban, and minority groups. Special attention is being given to research needs in such areas as arts and humanities, and to small project research. Other special areas of interest have been sex education and family life, alcohol education, reading and literacy, educational problems related to urban life, and a new effort to refine the behavioral objectives of education.

The small project research support provides beginning researchers with training through actual experience in the field of educational research. These grants which are limited to $10,000 or less each, make it possible for an increased number of professors, doctoral students, and educational personnel previously uninvolved in educational research activity to develop their capacity to contribute substantially to the improvement of education. Many of these researchers are located in the several hundred small colleges which provide the largest share of the nation's elementary and secondary school teachers.

The fiscal year 1969 increase of $2,133,000 will meet several program needs: first, the broader support of the small research projects; second, the broader implementation of research projects in the education of American Indians; and third, to studies of human learning techniques as they affect attitudes. Expanded emphasis in this activity will be devoted to basic or fundamental research efforts begun in fiscal year 1968 in close cooperation with the National Research Council and the National Academy of Education.

| | 1967 | | 1968 | | 1969 | |
|---|---|---|---|---|---|---|
| | Number of projects | Amount | Number of projects | Amount | Number of projects | Amount |
| New | 444 | $9,541,765 | 435 | $8,227,752 | 618 | $10,339,000 |
| Continuation | 244 | 8,539,162 | 237 | 9,239,248 | 255 | 9,261,000 |
| Total | 688 | 18,080,927 | 672 | 17,467,000 | 873 | 19,600,000 |

(2) Evaluation. Evaluation studies in fiscal year 1968 are concentrating on data collection and analysis and on the identification of promising approaches and the building of models for use in evaluation to assist in the identification of effective education programs. While data collection will continue in fiscal year 1969, the primary emphasis will shift to the conduct of in-depth cost-benefit studies of educational programs at all levels, with special emphasis on the disadvantaged. Most of these studies will take two to three years to complete, and include phases for study design and vertification, actual survey and data collection activities, data analysis, and the formulation of conclusions and recommendations. Included in these studies will be an effort to determine the extent to which programs for the disadvantaged under Title I of the Elementary and Secondary Education Act have been able to make a start in overcoming the problems which they have set out to eliminate. Other studies will analyze the use, effects, and value of various Office of Education programs for the handicapped and for the support of higher education.

| | 1967 | | 1968 | | 1969 | |
|---|---|---|---|---|---|---|
| | Projects | Amount | Projects | Amount | Projects | Amount |
| New | | | 17 | $1,250,000 | 10 | $4,000,000 |
| Continuation | | | | | 13 | 2,000,000 |
| Total | | | 17 | 1,250,000 | 23 | 6,000,000 |

(3) National Achievement Study. Fiscal year 1968 funds are being used for supporting data compilation and for a national survey of educational achievement that is somewhat more limited in scope than the survey which was justified as a part of the 1968 budget. As would be expected, there are difficulties in designing a national survey that will in fact give a valid sampling of the types and extent of personal development resulting from national education support. Progress in this direction is being made, and the studies being undertaken this year are an essential step. The 1969 request for $2,000,000 is based on the expectation that the design of the more comprehensive survey discussed last year will be completed and materials and equipment preparation can be started during the next year.

(4) Demonstration and Development. These funds are used to design and develop improved educational techniques, processes, materials, and equipment of national significance and to test these improvements in natural school settings.

*Prior years*

Activities supported in 1967 and 1968 have included curriculum improvement projects in English and language arts, the arts and humanities, and the natural and social sciences. The purpose of these projects is to update curriculum content and to organize it according to current knowledge about learning and motivation. One of these efforts—Harvard Project Physics—has already received national attention and promises to have a major impact on secondary school physics curriculum across the country. In addition, preliminary work is being undertaken, reflecting a policy to move much more substantially into development as the most direct means of improving educational practices. Top priority for concerted efforts in the immediate future has been assigned to three projects: (1) comprehensive improvement in the preparation of teachers for the preschool and elementary levels, (2) development of television programs designed to provide educational stimulation for preschool children between the ages of 3 and 5—aimed not only at the children, but also at their parents, especially in disad-

vantaged homes—and (3) development of integrated curriculum sequences for community junior colleges. Design or pilot efforts in all of these areas are scheduled for completion early in fiscal year 1969.

*Fiscal year 1969*

During fiscal year 1969 the following activities are planned:

(1) Smaller-scale development projects associated with individual curriculum areas, as distinguished from the "total-program" approaches represented by the items in (2) below, will be continued.

(2) Follow-on operationalizing requirements of the three pilot efforts designed in 1968. These three efforts are estimated to require a total of $6,000,000 in the next fiscal year.

(3) The Laboratory Theatre Program, now operational in three cities (Providence, New Orleans, and Los Angeles), will be supplemented with other projects in the arts and humanities. This effort will be carried out in close cooperation with the National Endowment on the Arts and Humanities. The Laboratory Theatre was conceived as a three-year venture to explore the ways in which an institution of the arts can join with the schools to make theatre education a vital and relevant factor in the educational process. The 1968 funding for the Laboratory Theatres, $679,027, was justified under Regional Educational Laboratories, but is included under General Education Demonstration and Development because of the proposed change of emphasis.

(4) A major urban school demonstration will be initiated in the District of Columbia to serve as a national model. The extensive activities to be supported include the demonstration and further refinement of a variety of new approaches to instruction, curriculum, school organization and teacher effectiveness, and will require $10,000,000 in fiscal year 1969. Present planning calls for this demonstration to be carried out primarily in an area of the city which reflects significant social and economic problems common to many major American cities. It is expected to be coordinated, in its community school dimensions, with programs of other agencies.

(5) Pilot and design efforts will be started in other high priority areas, including the development of educational programs for persons in isolated and thinly populated areas.

(6) Funds are planned to be expended on the general curriculum development portion of the ES–70 program, which is described more fully under the Vocational Education research justification, which follows:

| | 1967 | | 1968 | | 1969 | |
|---|---|---|---|---|---|---|
| | Number of projects | Amount | Number of projects | Amount | Number of projects | Amount |
| New | 6 | $465,170 | 4 | $1,163,947 | 26 | $14,600,000 |
| Continuation | 21 | 2,532,474 | 15 | 2,515,080 | 10 | 11,250,000 |
| Total | 27 | 2,997,644 | 19 | 3,679,027 | 36 | 25,850,000 |

*c. Vocational education*

The Commissioner of Education is authorized to make grants to colleges and universities, and other public or nonprofit private agencies and institutions, to State boards, and with the approval of the appropriate State board, to local educational agencies, to pay part of the cost of research programs and of experimental, developmental, or pilot programs developed by such institutions, boards, or agencies, and designed to meet the special vocational education needs of youths, particularly youths in economically depressed communities who have academic, socioeconomic, or other handicaps that prevent them from succeeding in the regular vocational education programs.

An amount of $15,700,000 is requested for fiscal year 1969 to continue this program. Since the authorization of these activities in 1963, more than 600 research projects have been funded. In fiscal year 1969, it is estimated that $15,000,000 will be required for continuing effort started in prior years and $700,000 will be required for new projects in the following critical areas:

*Curriculum Development.*—The prime area of concern in vocational education is curriculum development and improvement. During fiscal year 1968, plans are progressing in the development of the organic curriculum, or ES–70's program,

an attempt to synthesize academic and vocational education and personal development for the comprehensive high school and junior college. Specifically, an approach is being developed which would give varying degrees of exposure to all three types of education. The purpose is to prepare them to cope with today's rapidly-changing world, even if they leave the schoolroom at grade nine; graduates would have a series of post high school options ranging from direct employment to entering a four-year college. During fiscal year 1969, plans call for development of the organic curriculum within a network of fifteen participating school districts.

*Research Coordinating Units (RCU's) and Research and Development Centers.*—Forty-four State RCU's have been established and operating since 1965. Forty units are located at State Departments of Education or at universities in cooperation with State Departments of Education, and four are at research foundations and similar organizations. During fiscal year 1968, two additional units are being established. The RCU program encompasses such activities as inventorying State research resources, reviewing State vocational programs, formulating State research needs, and communicating research results. These units provide a direct link to State vocational education organizations.

The two national Research and Development centers for vocational education, at Ohio State University and North Carolina State University, will continue sponsoring conferences, supporting research activities, publishing research findings and disseminating research results.

*Adult and Continuing Education.*—A major role of adult education is training, retraining and upgrading worker skills. Adult education also represents opportunities for youth, particularly those from disadvantaged environments, to adapt more readily to change, become involved in community affairs, and find rewarding uses for leisure time. This field has remained relatively untouched by systematic research and development. FY 1969 plans call for assessing the content, quality, and nature of on-going programs for adults in relation to personal aspiration, development of new occupational skill clusters, and retraining needs in our society.

*New Careers Program.*—A major emphasis in the attempt to match educational needs and labor market demands is the new careers program. Current effort is identifying those tasks presently performed by professionals which could be accomplished by less trained sub-professional personnel, and is restructuring these tasks into a progressive sequence of jobs or career ladders requiring increments of education and training that offer advancement opportunities to professional-level responsibilities. The 1969 request provides for continuation of this program. Work would be supported to identify meaningful job and skill clusters in a variety of industries, and to develop further knowledge of the economic and manpower implications for this vital area of concern.

Other emphases will include:

1. Develpment of a common set of specifications for facilities and equipment in area-vocational schools and comprehensive-vocational high schools;
2. Use of computers in flexible scheduling, record keeping, and vocational school administrative actions;
3. Programs directed toward information systems development, stimulation and games experimentation, systematic changes in the role of the school counselor, and development of guidance programs; and
4. Evaluation and cost-benefit analyses of vocational technical programs.

| | 1967 | | 1968 | | 1969 | |
|---|---|---|---|---|---|---|
| | Number of projects | Amount | Number of projects | Amount | Number of projects | Amount |
| New | 64 | $5,077,081 | 97 | $4,824,000 | 10 | $700,000 |
| Continuation | 75 | 4,047,088 | 51 | 6,726,000 | 220 | 15,000,000 |
| Total | 139 | 9,124,169 | 148 | 11,550,000 | 230 | 15,700,000 |

*d. Foreign Language Education*

Foreign language research and development is an effort to increase and improve the national competence in foreign languages and foreign area studies. It has been supported under authority of the National Defense Education Act. This authority expires June 30, 1968, and the Office of Education proposes to continue this activity under the Cooperative Research Act.

During fiscal year 1967 research was supported to compare the efficiency of two methods of teaching foreign languages: the traditional grammar-translation method and the audio-lingual method. Other projects were supported to test the feasibility of teaching foreign languages to high school students by means of a programmed, self-instructional course; to scientifically measure the growth of language competence in children; and to develop teaching materials for the uncommon languages to meet the expanding needs of the Government (especially the Peace Corps), business, and industry. Work was carried out on materials in 28 languages.

In fiscal year 1968, the Office of Education is supporting projects which promise to improve instructional methodology both on the theoretical and applied levels. At present, the theoretical foundations of language teaching approaches are not clearly supported by empirical research studies; therefore, a determined effort needs to be continued in this area. On the applied level, a great deal more knowledge is needed relative to the effectiveness of the various elements which make up the total foreign language learning environment including foreign language laboratories, class scheduling, programmed instruction, computer-assisted instruction, and the role of the teacher.

In fiscal year 1969, basic research on the nature of language and of the language learning process will be supported. Attention will continue to be given to developing a new teaching methodology designed to upgrade the teaching of foreign languages at all grade levels. Materials will be developed to meet the needs of Americans who specialize in work relating to critical geographical areas. In addition, support is planned for the development of curriculum materials that will provide learning experiences relating to the peoples, cultures, nations, and regions where particular languages are spoken, as well as for studies to further the understanding of the countries where non-English languages are spoken.

| | 1967 | | 1968 | | 1969 | |
|---|---|---|---|---|---|---|
| | Number of projects | Amount | Number of projects | Amount | Number of projects | Amount |
| New | 57 | $1,940,540 | 57 | $1,600,000 | 58 | $2,500,000 |
| Continuation | 14 | 853,000 | 18 | 1,400,000 | 12 | 500,000 |
| Total | 71 | 2,793,540 | 75 | 3,000,000 | 70 | 3,000,000 |

*e. Educational media*

Federal support for educational research relating to and involving the use of advanced communications media was authorized from fiscal years 1959 through 1968 by Title VII of the National Defense Education Act as amended. Such research also is authorized on a continuing basis under the Cooperative Research Act, and it is under this authorization that continuing appropriations for media research activities are requested.

In fiscal year 1967, stress was placed on the dissemination of the findings of earlier media research. During fiscal year 1968, support is given to studies evaluating the substantial volume of research supported in this field since passage of the National Defense Education Act. Studies of media applications are being carried out in such areas as verbal learning through media, remedial assistance to disadvantaged students, technology for community colleges, programming for instructional television, and automated data processing for educational administration.

In fiscal year 1969, these evaluations and application searches will be continued. The bulk of the increase of $1,600,000 is requested for the operational demonstration of a centralized computer facility for both administrative and instructional uses by geographically dispersed schools. Feasibility studies indicate that such systems are both operationally and economically reasonable, and the demonstration will permit refinement of the actual expenses and operating procedures which would be incurred by school systems in making use of similar facilities.

| | 1967 | | 1968 | | 1969 | |
|---|---|---|---|---|---|---|
| | Number of projects | Amount | Number of projects | Amount | Number of projects | Amount |
| New | 35 | $1,782,765 | 75 | $3,886,000 | 41 | $4,000,000 |
| Continuation | 29 | 2,588,713 | 7 | 514,000 | 30 | 2,000,000 |
| Total | 64 | 4,371,478 | 82 | 4,400,000 | 71 | 6,000,000 |

*f. Library improvement*

Library and information science research and demonstration projects relate to the improvement of libraries or of training in librarianship. They direct attention to new techniques, systems, and equipment for processing, storing, and distributing information and for dissemination of the results of such projects. These activities have been carried out under the Higher Education Act of 1965, which expires June 30, 1968. Extension of this authority is being requested, but these activities could be carried out under the Cooperative Research Act.

The accelerated production of scientific knowledge strains the ability of libraries and information systems in their efforts to acquire, store, process, retrieve on demand, and distribtue information to the students, scholars, and general public of the United States. In order to meet the increasing demands for knowledge—that which has accrued from the past and that which is currently being generated—it is necessary to carry on a continuing program aimed at increasing both intellectual and physical access to information and documents.

To respond to this need, the following major areas of study have been identified:

Evaluation and improvement in the techniques and scope of training for library and information science personnel.

Studies of users and uses of libraries, including assessment of information and reader services provided by libraries; characteristics, interests, and requirements of the differing classes of library users in different settings; identification of and planning for meeting the needs for library services not now being served.

Organization of library and information services, including management, personnel recruitment and utilization, finance, and governmental relations.

Current and projected roles for libraries in society.

Integration of library services in school and other instructional programs.

Control of library resources, including documentation, cataloging, classification and indexing, abstracting, acquisition, network and system planning and analysis, and development of automated procedures.

Library technology, including preservation of materials, storage and physical access, reprography, and application of data processing and other electronic and automatic equipment to library processes.

These are being attacked through interpretive and integrative studies of current literature, feasibility and design studies, experiments, evaluations, field tests, and demonstration and pilot implementation projects. Nearly half of the FY 1967 funds were directed toward projects concerned with control of library resources, and the balance was distributed to projects in the other areas.

During fiscal year 1968, primary support is being directed to the study of library and information networks, patterns of reading and uses of graphic media, studies of librarianship education and curriculum development, and the role of libraries in academic and school curriculum development.

The fiscal year 1969 request will support continued research in the program areas listed above, with additional work on library and information networks.

| | 1967 | | 1968 | | 1969 | |
|---|---|---|---|---|---|---|
| | Number of projects | Amount | Number of projects | Amount | Number of projects | Amount |
| New | 38 | $3,381,052 | 56 | $3,175,000 | 35 | $1,950,000 |
| Continuation | | | 4 | 375,000 | 25 | 1,600,000 |
| Total | 38 | 3,381,052 | 60 | 3,550,000 | 60 | 3,550,000 |

| | 1968 estimate | 1969 estimate | Increase or decrease |
|---|---|---|---|
| 2. Construction (appropriations) | | | |
| Construction (obligations) | $1,200,000 | $29,581,411 | +$28,381,411 |

*Justification of estimate*

The Educational Research Construction Program was established under Section 4, Title IV of the Elementary and Secondary Education Act of 1965 to provide facilities and equipment for the Regional Educational Laboratories, Research and Development Centers and other Federally supported educational research activities.

Title IV authorizes $100,000,000 to be appropriated over a period of five fiscal years, beginning with fiscal year 1966, for the provision of such facilities as may be deemed necessary to achieve the objectives of Federally supported educational research. Under this authorization $32,400,000 has been appropriated in fiscal years 1966 and 1967.

The attached table indicates the total funds obligated for fiscal years 1966–67, and available and planned for obligation in fiscal year 1968 and 1969. The major increases for fiscal year 1969 are in facilities construction and computer acquisition required in the laboratories and R&D centers. Two Research and Development Centers (Wisconsin and Pittsburgh) have already applied for facilities construction grants; planning money in the amount of $510,000 is being provided for this fiscal year (1968) with an additional $8,000,000 planned for actual construction in Fiscal Year 1969. A third Center at Stanford University and the Southwest Regional Educational Laboratory at Los Angeles are expected to apply for construction grants in Fiscal Year 1969. Our plans are to support these two planning efforts and to initiate actual construction for Southwest Regional Laboratory in Fiscal Year 1969.

The other major obligational increase will be for computers, and is attributable to plans for supporting computer systems at three of the laboratories: The Southwest Regional Laboratory, Los Angeles; the Northwest Regional Educational Laboratory, Portland, Oregon; and the Southwest Educational Development Laboratory, Austin, Texas. The $7,500,000 planned for this area will cover grant awards for the proposed systems.

The remainder of the obligational increases in construction funds for Educational Laboratories in Fiscal Year 1969 will permit the funding of anticipated requests during the year for program equipment, together with a backlog of such requests carried over from 1968.

Additional Fiscal Year 1969 obligations are planned for the construction of facilities where needed for full implementation of demonstration projects supported by the Office of Education independent of the laboratories and R&D Centers. One of these projects is a proposed computer utility demonstration of the economic efficacy of providing computer-based resources and services to several public educational jurisdictions simultaneously for all or a number of the following purposes:

Administration of higher education
Student guidance
Local school district administration
Problem-solving
Computer-managed instruction
Library cataloging
Vocational education
Teaching of programing
Development of appropriate equipment

Previous studies already have indicated both the economic and the technological feasibility of such a central system when the cost is amortized over a large population. These construction obligations would be used for the equipment required in this demonstration; other costs would be funded from the Educational Media activity.

| | 1968 estimate | 1969 estimate | Increase or decrease |
|---|---|---|---|
| 3. Training (appropriations and obligations) | $6,750,000 | $9,000,000 | +$2,250,000 |

*Justification of Estimate*

Title IV—Section 2(b) of Public Law 89–10 authorizes the Commissioner of Education to make awards to public, private, profit and nonprofit-making institutions, organizations, and agencies, to assist them in providing training in research and research-related areas in the field of education. Awards may be made for training programs at the undergraduate, graduate and postdoctoral levels, for institutes, inservice programs, and special projects dealing with educational research, and for institutional development of training capabilities.

The emphasis on innovative educational activities in recent years has created a growing demand for research and research-related personnel. The Educational Research Training Program encourages, stimulates, and supports training in educational research and in areas related to the ultimate implementation of research, including curriculum development, educational technology, and dissemination. The program includes the development of the training staffs at various institutions, the development of specialized training programs, and the granting of trainee stipend awards. More specifically, the program provides:

1. Undergraduate assistance to recruit capable career researchers;
2. Graduate training stipends, which are awarded through graduate schools and are the principal mechanism for increasing the flow of competent research personnel into the field;
3. Postdoctoral grants to help update the skills of educational researchers and to acquaint trained researchers in other fields with research in education, awarded on the basis of national competition;
4. Institutes which provide short-term intensive training in particular aspects of research;
5. Special projects, including seminars, workshops, personnel exchanges, inservice training programs, or other non-degree training; and
6. Program development grants, to strengthen college and university staffs and to develop curricula for training in educational research.

The increase requested for 1969 will provide for two major program development projects, involving up to 20 institutions and expected to substantially improve the quality of research training programs; the extension of the institute and special project activities to reach greater numbers of planning and research personnel in elementary and secondary education; and a moderate expansion of assistance to full-time trainees to keep pace with the need for career research personnel.

| | 1968 estimate | 1969 estimate | Increase or decrease |
|---|---|---|---|
| 4. Dissemination (appropriation and obligations) | $2,400,000 | $3,100,000 | +$700,000 |

*Justification of Estimate*

Support for increased educational research will contribute little to improvement of education unless comparable attention is given to the dissemination and use of findings from research and development activities. As part of Title IV of Public Law 89–10, Congress recognized this need and authorized the Office of Education to develop programs to disseminate the results of supported activities. What is now the Educational Resources Information Center (ERIC) program was created to provide rapid access to the results of educational research. Through ERIC services, teachers, administrators, other educational specialists, researchers, public officials, professional organizations, and business and industrial groups have clear and direct access to the results of research and development efforts in education.

The original scope of ERIC, limited to research reports, has been broadened to include all kinds of documents that can contribute to educational planning and development. These documents now include reports relevant to education issued by or under support from the National Science Foundation, Office of Economic Opportunity, Department of Defense, Department of Labor, and the Social and Rehabilitation Service. Discussions are now underway with other agencies to the same end.

The ultimate goal of ERIC is to provide tools, products and services to the educational community that will permit any person or group to have access to all significant documents pertinent to educational development. Further develop-

ment will be necessary before this goal is reached. A firm foundation, however, has been laid in the five basic elements of the ERIC system:

1. Central ERIC—the Office of Education staff members responsible for coordinating the system and for arranging for acquisition of documents from all OE-supported programs and from other Government agencies.

2. The ERIC clearinghouses—each of which focuses on a specific topic or field in education, and is responsible for abstracting and indexing reports, preparing bibliographies, review articles, and interpretative reports for use by teachers and administrators, and for providing answers to requests for information.

3. The contractor that provides the services required to merge the output from all the clearinghouses into the monthly announcement bulletin, *Research in Education.*

4. The ERIC Document Reproduction Service (ERDS) that provides to requesters the full text of all documents announced in *Research in Education.*

5. The Government Printing Office—printer and distributor of *Research in Education.*

During the fiscal year 1967 six new clearinghouses were established, bringing the total to eighteen. *Research in Education* begun in November 1966, with 100 reports has expanded and included over 400 report listings in December 1967. By June 1968, about 700 reports will be announced monthly. In addition to the 2,000 copies distributed by the Office of Education, 3,700 are being sold by the Superintendent of Documents. In fiscal year 1967, three special collections of documents were organized and disseminated to educators through ERIC. These were a 1,200 document collection of all reports submitted to the Bureau of Research, Office of Education, from 1956 to 1965; descriptions of over 1,000 projects under Title III, Elementary and Secondary Education Act, in the fiscal year 1966; and over 800 documents from the Office of Education's collection of reports related to new developments in higher education. Reference volumes are available for each collection, and the full text can be obtained quickly and inexpensively through ERIC Document Reproduction Service.

Educators have begun to use ERIC's services heavily. In June, 1967, for instance, over 20,000 documents were provided upon request to educators. During calender year 1968 over 1,500,000 requests for documents are expected.

During fiscal year 1968, support is being continued for the clearinghouses, preparation of *Research in Education* and other ERIC activities. Each of the clearinghouses is increasing preparation of selective bibliographies and interpretations and reviews of research for use by teachers and administrators. These interpretative reports are being written in clear, plain English without jargon and technical language and are prepared expressly for use by educators.

Also in fiscal year 1968 the ERIC Thesaurus of Educational Terms, the first comprehensive cross-listing of terms widely used in education is being widely disseminated to educators. A special collection of research reports on manpower requested by the Bureau of Budget, Department of Labor, Office of Economic Opportunity, and Department of Defense is being prepared and will be disseminated through ERIC.

In fiscal year 1969, funds are requested to continue the existing clearinghouses and to provide for preparing and disseminating interpretative summaries of research for use by educators. At least one additional clearinghouse will be established to help fill present gaps in the ERIC system, and the indexing of journal literature will be undertaken to fill-in still another gap in ERIC's coverage of educational literature. These activities and the increased flow of documents expected from the clearinghouses will require increased support for the contract under which *Research in Education* is prepared. Continued attention will be given to collection of educational documents from Government agencies, States, foundations, professional organizations and from information centers in foreign countries.

| | 1967 | | 1968 | | 1969 | |
|---|---|---|---|---|---|---|
| | Number of projects | Amount | Number of projects | Amount | Number of projects | Amount |
| New | 4 | $418,317 | | | 1 | $100,000 |
| Continuation | 13 | 2,274,425 | 14 | $2,400,000 | 14 | 3,000,000 |
| Total | 17 | 2,692,742 | 14 | 2,400,000 | 15 | 3,100,000 |

| | 1968 estimate | 1969 estimate | Increase or decrease |
|---|---|---|---|
| 5. Program support (appropriations and obligations) | | $500,000 | +$500,000 |

*Justification of Estimate*

Funds are requested to provide for payment of field readers, project reviewers and advisory committees. The Cooperative Research Act, as amended, states "No grant shall be made or contract or jointly financed cooperative arrangement entered into under this subsection until the Commissioner has obtained the advice and recommendations of a panel of specialists . . .". This necessitates the use of field readers to review and make recommendations on research proposals received for support. Support is also required for specialists to provide recommendations regarding program emphasis and current and future manpower needs in educational research. The following advisory committees advise and consult with the Commissioner with respect to his functions:

Research Advisory Council
Advisory Committee on Library Research and Training Projects
Advisory Committee on National Educational Laboratories

In addition, the Curriculum Development Advisory Committee assists and makes recommendations on establishment of curricula for vocational and technical education.

BIOGRAPHICAL SKETCH

Name: R. Louis Bright.
Position: Associate Commissioner for Research.
Birthplace and date: Oil City, Pennsylvania, June 4, 1925.
Education: Carnegie Institution of Technology—B.S. in Mathematics, M.S. and D.Sc. in Electrical Engineering.
Experience:
Present: Associate Commissioner for Research.
1962–66: Associate Director, Westinghouse Research Laboratories.
1957–62: Advisory Engineer, New Products Laboratories of Westinghouse and Manager of the Industrial Computer Program.
1953–57: Engaged in extensive work on semiconductor device design, semiconductor power control circuitry and computer circuitry at Westinghouse Electric Corporation.
1946–53: Member of the Electrical Engineering Department Staff at Carnegie Institute of Technology.
1951–52: Special consultant to the Electronics Branch of the Office of Naval Research.
1945: Engaged in radio control design development at Wright Air Development Center.
Association memberships:
Chairman of the Institute of Electrical and Electronics Engineers Subcommitte on Solid State Circuitry.
Program and Publications Policy Committee of the Professional Group on Circuit Theory.
Tau Beta Pi, Sigma Xi, Eta Kappa Nu, Phi Kappa Phi.
Awards: American Institute of Electrical Engineers Alfred Nobel Prize for a paper presented on transistor switches.

BUDGET REQUEST

Senator HILL. All right, Dr. BRIGHT.

Dr. BRIGHT. Mr. Chairman, it is my privilege and pleasure to appear in behalf of the "Research and training" appropriation request of $142,300,000.

PROGRAM EMPHASIS

The research program which I wish to present to you today is far different than the one when I first appeared before this committee

2 years ago. Today there is a major emphasis on development and dissemination, an emphasis on providing fully tested realistic alternatives for use in the classrooms of our local schools. The Bureau of Research is no longer conducting merely a research program. We are conscientiously attempting to strengthen those research-related activities that have a direct bearing on the improvement of education in classrooms.

This new thrust toward development has been implemented in several ways, one of which has been the establishment of the regional laboratories.

### Philadelphia Regional Laboratory

One of the outstanding projects undertaken by a regional laboratory is that of the regional laboratory at Philadelphia representing the eastern Pennsylvania Region, New Jersey, and Delaware. They selected as their major thrust the development of the techniques necessary to replicate the individually prescribed instruction system developed by the Office of Education sponsored Research and Development Center at the University of Pittsburgh. This is an individualized system that enables each elementary school student to advance at his own speed completely independently of the others his age.

I think that this development program, along with subsequent derivations of it, will markedly change elementary schooling across the country within a decade. If so, the wisdom of Congress in providing an educational research and development program will have been demonstrated.

### New Training Programs Teachers of Preschool and Elementary Children

Another approach being used by the Office to support development projects is the issuance of formal requests for proposals to undertake major development activities in certain prescribed areas. One, for example, was for the establishment of completely new training programs for teachers planning to work in the early childhood area either with preschool or the elementary grades. This is the first time the Office has ever issued a request for a proposal of this type and the response of the teacher training institutions was extremely enthusiastic.

### Comprehensive High Schools

Another major development program relates to the comprehensive high school. It is estimated that 80 percent of the Nation's children who are now in fifth grade will not graduate from a 4-year college. This raises a very serious issue as to just what this 80 percent of our school population is equipped to do. As a result of this question we are encouraging people to take a completely new look at the comprehensive high school and see if we could not attain the objectives of giving almost every student both a salable skill and also the requirements necessary to enter postsecondary education if he later decides to do so.

### Formation of Advisory Group

We feel that through the efficiencies gained through individualized instruction it will be possible to attain this dual objective. To assist

in the planning and implementation of this program, we have formed an advisory group of 17 local school superintendents and 15 State School Officers from across the country.

### Standarized Higher Education Building Designs

In a similar vein, we are undertaking a major study of higher education facilities in cooperation with the States of Indiana and California. The hope of this program is that it will result in standardized building designs for higher education facilities that will result in approximately a 10 to 15 percent cost reduction. You gentlemen are aware of the total money that the Federal Government is investing in higher education facilities, and I think it is clear that the cost payoff of such a program can be immense.

### Rural Schools

We hope in the coming year to undertake two or three more development programs in addition to continuing activities on those which were initiated this last year. One of the areas in which we hope to undertake major programs is a new look at the rural schools: How can we really give a first-class education to a student in a school system where it is not feasible to get more than 200 or 300 students from kindergarten through 12th grade together in one location.

Senator Hill. That is a problem, is it not?

### District of Columbia Demonstrations

Dr. Bright. We think it is possible to do something.

We are also requesting $10 million for the support of major demonstrations in the District of Columbia. It is anticipated that these demonstrations will have significant national significance in developing programs that can be replicated by other cities with similar problems.

Senator Hill. Do you have plans for this?

Dr. Bright. No, this will be worked out by the district schools cooperating with the community, and so on, to outline just where it is and so on with certain restrictions. Under this authority, of course proposals must come to us, and be reviewed by outside experts which judge them on their excellence. We are also specifying that these funds should not be used primarily for the construction of new facilities but should be used for operation, with perhaps minor alterations.

### Preschool Instructional TV Series

Another major activity which we began this year is an instructional TV series for the preschool youngsters, particularly for children from poverty homes. We anticipate that this program will cost $4 million; however, it is estimated that it would cost over $2 billion to provide educational facilities to include these children in preschool institutional programs. Hence, if our TV program has any significant success at all in reaching these children, it will furnish an alternative to the expenditures of very large sums.

### Central Computer Installation

Another exciting developmental activity begun last year is a study of the economic feasibility of reducing local school computer costs by having a very large central computer installation simultaneously serve 50 or more school districts, junior colleges, or small 4-year colleges.

### Study, Design and Demonstration of Microimage Library for Educational Institutions

Still another development project is the study, design and demonstration of a microimage library for educational institutions. The cost of providing a new university library is typically about $25 million. Such an expenditure is out of the question if we think about providing adequate library facilities on all of the new community college campuses. Through the use of microphotography we think that an equivalent library could be replicated for something on the order of $25,000. This program is intended to demonstrate the feasibility of this approach.

### Curriculum in Emerging Vocational Areas

We are also supporting the development of curriculum in newly emerging vocational areas such as biomedical instrument technicians, microprecision skills, and radiographic technicians.

Our objective is to try and identify occupations that will be in demand 5 years from now and develop the curriculum materials and techniques so that our junior colleges and vocational schools can be training people for contemporary rather than obsolete occupations.

### Techniques and Materials for Teaching Foreign Languages

Another development problem which we propose to look at relates to the techniques and materials for the teaching of foreign languages. We expect to coordinate this development with the Department of Defense, Department of State, Peace Corps, and other Federal activities interested in training people in modern foreign languages. Here the emphasis will be on computer-aided methods of language instruction that can be readily replicated whenever it is necessary to train groups of people in the languages.

### Government Operations Committee Report

Let me summarize my presentation of these proposed development efforts. As was pointed out in the Government Operations Committee Report No. 34, "Federal Research and Development Programs: The Decisionmaking Process," in 1966: "it is development which not only justifies research but makes it possible to take advantage of unexpected benefits of research." The report went on to also point out such developmental activities are far more expensive than research activities. The major part of the funding increase which we are requesting this year is to support such development activities.

### Budget Bureau Nonreduction

Senator Hill. The Budget Bureau did not reduce the Department's request, did it?

Dr. Bright. No, it did not.

Senator HILL. The Department reduced your request?

Dr. BRIGHT. That is correct.

Senator HILL. But the Budget Bureau did not reduce the Department's request.

Dr. BRIGHT. That is correct. I think they also recognized the importance of these development activities directed toward classroom practice.

Senator HILL. Yes.

### ULTIMATE COST REDUCTION

Dr. BRIGHT. Most of these development projects are directed toward the reduction of costs or the creation of more cost-effective techniques and should over a few years pay back many times their cost. I must admit I am biased, but I feel that these development activities promise the greatest payoff of all the Federal programs in education.

### NATIONAL ACHIEVEMENT STUDIES

As I indicated to you last year in defense of the new line item for national achievement studies, we feel it is very important that we have data taken on a sample basis across the Nation so that we can know what the actual educational achievements of various age groups in the Nation are.

Such data are necessary to identify problem areas in which we should be mounting programs, and it is also necessary on a repeating basis to try to measure the effects of the programs that have been implemented.

Last year we were not certain that we would be supporting this program, which was originally sponsored by the Carnegie Foundation, and stated that we were reserving judgment until their tests evaluating their assessment instruments had been completed. These tests are now complete. The National Assessment Committee has estimated that such a national assessment program would cost about $4 million per year. We feel that it will be advisable to eliminate the more costly parts of this study, and to hold the costs to $2 million a year. We think that this is an extremely worthwhile activity.

### SMALL GRANT PROGRAM

A major change in the research program has been the administration of our small grant program, grants of $10,000 or less. As we analyzed this program a year and a half ago, we found that about 90 percent of the small grants were going to the half dozen or so major universities that received by far the bulk of our large grants. Consequently, we have regionalized the small grant program placing entire responsibility for its administration in the nine HEW regional offices. In each office there is a Director of Research who makes sure that the small colleges in the area are familiar with the procedures and who can work with individual faculty members to point out deficiencies in proposals. Although there has been no special consideration given to small colleges in the review procedure, we have found, within 1 year, a redistribution of funds, with about 40 percent

of the funds now going to small colleges. This regionalized program has generated an enormous amount of interest in the small colleges and is recommended for an increase next year.

CATEGORICAL AREAS OF MEDIA, LANGUAGE AND LIBRARY RESEARCH

I would like to call your attention to the fact that this year we are requesting that the funds for the categorical areas of media, language, and library research be appropriated under the authorization of the Cooperative Research Act. This act is broad enough to support all of the activities undertaken under the categorical research authorities of the NDEA and Higher Education Act. This change will simplify our administration of these programs in that a common set of guidelines and review procedures can be utilized.

Senator HILL. It will make it more efficient, will it not?

Dr. BRIGHT. Yes, sir.

The funds will still be used for the purposes specified in the corresponding categorical legislation. Title 4(c) of the Vocational Education Act is sufficiently different and we are requesting separate funds under that authority.

PROGRAM CHANGES

In summary the major changes have been a much greater emphasis on programs geared to the development of materials, systems, or techniques for use in classrooms; a more active dissemination program both to educational researchers and also to teachers and administrators; an expansion of the basic research activities into new fields which have heretofore not been closely related to educational problems, and a regionalization of small grant activities for the purpose of increasing the participation and research activities in small colleges.

PERCENTAGE OF TOTAL FEDERAL RESEARCH AND DEVELOPMENT BUDGET

The educational research and development budget which we are requesting is slightly less than 1 percent of the total Federal R. & D. effort, a level which I do not think actually reflects the Federal emphasis upon education. Stated from a somewhat different point of view this education R. & D. budget is approximately one-fifth of 1 percent of the total national expenditure on education including the elementary, secondary, and university levels.

Senator HILL. Yet most important for the future.

Dr. BRIGHT. I think this is certainly correct.

Senator HILL. We are just slow in getting started.

Dr. BRIGHT. That is right. I think we are making great progress at the present time.

SUBCOMMITTEE RECESS

Senator HILL. You have brought us another splendid statement. We certainly want to thank you for it, very much.

The subcommittee will now stand in recess.

(Whereupon, at 1:20 p.m. Tuesday, April 9, the subcommittee was recessed, to reconvene at the call of the Chair.)

# DEPARTMENTS OF LABOR, AND HEALTH, EDUCATION, AND WELFARE, AND RELATED AGENCIES APPROPRIATIONS FOR FISCAL YEAR 1969

TUESDAY, APRIL 23, 1968

U.S. SENATE,
SUBCOMMITTEE OF THE COMMITTEE ON APPROPRIATIONS,
*Washington, D.C.*

The subcommittee met at 10 a.m., in room 1224, New Senate Office Building, Hon. Lister Hill (chairman) presiding.

Present: Senator Hill.

## DEPARTMENT OF HEALTH, EDUCATION, AND WELFARE

### OFFICE OF EDUCATION

### FOREIGN LANGUAGE TRAINING AND AREA STUDIES

**STATEMENT OF ROBERT LEESTMA, ASSISTANT COMMISSIONER FOR INTERNATIONAL EDUCATION**

**ACCOMPANIED BY:**

**HAROLD HOWE, II, COMMISSIONER OF EDUCATION**

**PETER P. MUIRHEAD, ASSOCIATE COMMISSIONER FOR HIGHER EDUCATION**

**MRS. FREDRIKA M. TANDLER, DEPUTY ASSISTANT COMMISSIONER FOR INTERNATIONAL EDUCATION**

**D. LEE HAMILTON, DIRECTOR, DIVISION OF FOREIGN STUDIES**

**S. WILLIAM HERRELL, EXECUTIVE OFFICER, BUREAU OF HIGHER EDUCATION.**

**BERNARD SISCO, ASSISTANT COMMISSIONER FOR ADMINISTRATION**

**LEON SCHWARTZ, DEPUTY ASSISTANT COMMISSIONER FOR ADMINISTRATION**

**MRS. SALLY H. BOND, ACTING BUDGET OFFICER**

**JAMES B. CARDWELL, DEPUTY ASSISTANT SECRETARY, BUDGET**

APPROPRIATION ESTIMATE

"FOREIGN LANGUAGE TRAINING AND AREA PROGRAMS

"For grants, contracts and payments for language and area programs authorized by Title VI of the National Defense Education Act and to carry out the provisions of section 102(b)(6) of the Mutual Educational and Cultural Exchange Act of 1961, [$15,700,000] *$19,250,000.*"

AMOUNTS AVAILABLE FOR OBLIGATION

| | 1968 | 1969 |
|---|---|---|
| Appropriation | $15,700,000 | $19,250,000 |

OBLIGATIONS BY ACTIVITY

| | 1968 estimate | 1969 estimate | Increase or decrease |
|---|---|---|---|
| Language and area studies | $12,700,000 | $16,050,000 | +$3,350,000 |
| Foreign language training and area studies | 3,000,000 | 3,200,000 | +200,000 |
| Total obligations | 15,700,000 | 19,250,000 | +3,550,000 |

OBLIGATIONS BY OBJECT

| | 1968 estimate | 1969 estimate | Increase or decrease |
|---|---|---|---|
| Other services | $5,830,000 | $8,360,000 | +$2,530,000 |
| Grants, subsidies, and contributions | 9,870,000 | 10,890,000 | +1,020,000 |
| Total obligations by object | 15,700,000 | 19,250,000 | +3,550,000 |

*Summary of changes*

| | |
|---|---|
| 1968 enacted appropriation | $15,700,000 |
| 1969 estimated obligations | 19,250,000 |
| Total change | +3,550,000 |

| | Base | Changes from base |
|---|---|---|
| Increases: | | |
| Program: | | |
| 1. Language and area programs: | | |
| (a) Language and area centers | $5,830,000 | $2,530,000 |
| (b) Language and area fellowships | 6,870,000 | 820,000 |
| 2. Foreign language training and area studies | 3,000,000 | 200,000 |
| Total change requested | | 3,550,000 |

EXPLANATION OF CHANGES

*1. Language and area programs*

(*a*) An increase of $2,530,000 will provide a total of $8,360,000 for program expansion and development at 106 continuing centers, the establishment of 4 new centers and for summer programs including 3 faculty development programs.

(*b*) An additional amount of $820,000 will provide a total of $7,690,000 to support 2,749 grants as follows, 2,054 graduate fellowships, an increase of 166. 80 postdoctoral fellowships, an increase of 60, and 615 undergraduate summer stipends, an increase of 100.

*2. Foreign language training and area studies*

For foreign language training and area studies, an increase of $200,000 will provide a total program level of $3,200,000 to support 284 grants, involving 693 participants engaging in research and study overseas. This represents an increase of 8 grants and 100 participants over 1968.

| | 1968 estimate | 1969 estimate | Increase |
|---|---|---|---|
| 1. Language and area programs (title VI—NDEA) | $12,700,000 | $16,050,000 | +$3,350,000 |
| 2. Foreign language training and area studies (Fulbright-Hays) | 3,000,000 | 3,200,000 | +200,000 |
| Total appropriation and obligations | 15,700,000 | 19,250,000 | +3,550,000 |

GENERAL STATEMENT

Programs supported under this request are designed to help American citizens know and understand other countries. World War II thrust upon the United

States new responsibilities throughout the world. It became necessary to recognize the inadequacy of language training in our educational system and our lack of knowledge of different areas of the world. Complex relationships with other nations brought about by techmological changes in communications and transportation have multiplied the demand for trained personnel with language and area skills.

While U.S. participation in world affairs has had to expand rapidly, our educational resources in foreign studies have lagged far behind. During the past decade the Federal support of language and area programs has contributed greatly to the development of national resources to meet emergency national needs. But since these needs have increased as fast as the available resources, Federal support should not only be continued but augmented.

| | 1968 estimate | 1969 estimate | Increase |
|---|---|---|---|
| 1. Language and area programs: | | | |
| (a) Language and area centers | $5,830,000 | $8,360,000 | +$2,530,000 |
| (b) Language and area fellowships | 6,870,000 | 7,690,000 | +820,000 |
| Total (appropriation and obligations) | 12,700,000 | 16,050,000 | +3,350,000 |

JUSTIFICATION OF ESTIMATE

The search by business and government for American citizens well-trained in modern foreign languages and area studies has revealed the inadequacy of such training in our educational system.

Responding to this need, Congress passed in 1958 the National Defense Education Act. Through Title VI of this legislation Federal funds have supported the development of resources in language and area studies. This authorization expires June 30, 1968, however, proposed legislation would provide an indefinite authorization for fiscal year 1969.

By 1967–68 American universities and colleges were operating 106 NDEA language and area centers with total enrollments of about 80,000. The program annually provides more than 2,500 grants for advanced language and area study. In 1965–66 over 500 doctorates, 1,350 masters degrees and 2,500 B.A.'s were earned at these centers. Faculty engaged in the language and area center programs numbered 1,869 and taught 3,041 different courses.

But the rate of change in the world is such that the requirements for language and area competence have grown at least as fast as the supply. For example, before World War II the U.S. exchanged Ambassadors with the 17 nations and ministers with 43. Now it is necessary to staff 117 ambassadorial posts, in addition to 145 consulates and nine special missions throughout the world. From 1946 to 1966 the U.S. export trade increased by more than 300% and U.S. private investments abroad rose from $12 billion in 1940 to $81 billion in 1965. Long neglected areas of the world, like Asia and Latin America, by the force of circumstances now demand greatly increased attention. This need was clearly cited by President Johnson at Punta del Este. The President indicated that he would call upon the resources of American higher education institutions for the establishment of Alliance for Proggress Centers to "improve our understanding of our sister Republics to the South." These centers will provide opportunities for U.S. and Latin American scholars and students to study and work together for inter-American unity and strength.

It is increasingly apparent that if our colleges and universities are to meet the growing demand for skills in language and area studies, continued and increased federal support will be needed to assist them.

*(a) Language and area centers*

Title VI of the NDEA recognizes three basic premises: (1) Adequate resources in language and area studies are vital to our national well-being, (2) the most suitable agent for the development of these resources is American higher education, and (3) it is both appropriate and necessary for the Federal government to support development in this critical area. Title VI funds support grants or contracts to colleges and universities for the development and operation of language and area centers. Each center focuses on a specific geographic area and offers instruction and research opportunities in the languages and cultures relevant to that area. The areas of specialization of the centers cover every major geographic region, but special emphasis has been placed on those languages and cultures in which the U.S. instruction has been most inadequate.

Summer intensive language programs offered by individual or groups of cooperating centers have been supported through separate contracts since 1962. These programs contribute to the more rapid development of resources in language and area studies by enabling students to complete degree programs in a shorter period of time than would otherwise be possible and by offering courses in the critical languages to students for whom instruction is not available during the academic year.

The fiscal year 1967 funds in the amount of $6,086,000 supported 98 continuing language and area centers, the establishment of 8 new centers, and the operation of 21 special summer language programs. These 106 centers, located at 63 colleges and universities, offer instruction in more than 140 languages and related area studies and are distributed by world area of specialization as follows: Eurasia (including East European, Slavic, and Uralic-Altaic languages), 24 centers; East Asia, 24 centers; Latin America, 16 centers; South and Southeast Asia, 16 centers; Africa, 13 centers; the Middle East, 12 centers; and Northwest Europe, 1 center.

In fiscal year 1968, $5,830,000 will support the 106 continuing centers and 21 summer programs.

In fiscal year 1969, $8,360,000 is requested for language and area center programs. The $2,530,000 increase will support the further development and expansion of programs needed to accommodate rapidly growing student enrollments and to meet the pressing demand for specialists. This increase will provide: (1) $2,236,000 for program expansion and development at the 106 existing centers, including $800,000 for the development of Alliance for Progress programs at 16 Latin American centers with emphasis on the professional fields and broadened research and study in the economic, political, and social problems of the Western Hemisphere; (2) $200,000 for establishment of 4 new centers at a unit cost of $50,000 (with stress on Asian studies and Latin America (Alliance for Progress)), and (3) $94,000 for summer programs including 3 faculty development programs (stipends for participants come from fellowship funds). The summer faculty development programs proposed for fiscal year 1969 are designed to increase the availability of college and university instruction in language and area studies by providing opportunities for faculty members to add competence in foreign studies to their academic specialities.

LANGUAGE AND AREA CENTERS, NDEA, VI

| | 1967 | 1968 | 1969 |
|---|---|---|---|
| Continuing centers: | | | |
| 106 at an average cost of $52,859 | $5,603,157 | | |
| 106 at an average cost of $50,452 | | $5,348,000 | |
| Do | | | $5,348,000 |
| Expansion funds | | | 2,236,000 |
| Development of Alliance for Progress programs at 16 continuing centers at an average cost of $50,000 | | | (800,000) |
| New expansion funds in 1969 for 90 remaining centers at an average cost of $15,955 | | | (1,436,000) |
| New centers: 4 new centers in 1969 at an average unit cost of $50,000 | | | 200,000 |
| Summer programs: | | | |
| 21 at an average cost of $22,992 | 482,843 | | |
| 21 at an average cost of $23,000 | | 482,000 | |
| 24 at an average cost of $24,000 | | | 576,000 |
| Total | 6,086,000 | 5,830,000 | 8,360,000 |

*(b) Language and area fellowships*

In addition to providing support for language and area centers, Section 601 of Title VI authorizes the support of fellowships in language and area studies. Grants are available to undergraduate students for study during the summer and to graduate and postdoctoral students for advanced training during the summer and/or academic year. The postdoctoral awards provide special study opportunities for faculty members of colleges which want to build language and area programs. Undergraduate and graduate award recipients must be potential foreign language and area studies teachers or experts providing other services of a public nature. The program is designed to encourage capable students to specialize in language and area studies and thereby support the efforts of colleges and universities to produce the experts needed in education, government, and business. Since 1959 more than 10,000 undergraduate, graduate, and postdoctoral fellowships have been awarded for the study of 90 modern foreign languages and for study in fields related to all aspects of the civilizations in which these languages are spoken.

With the Nation's commitment in the area of foreign studies, as emphasized in the President's Message on International Education and again n his statements at Punta del Este and Williamsburg, it is urgent that continuing and increased support be given to provide the additional teachers and experts needed to meet demands in this area more adequately.

In fiscal year 1967, 2,556 fellowships were supported with $6,870,000 and in fiscal year 1968 the same amount of funds will support 2,423 fellowships. The $820,000 increase requested in fiscal year 1969 will raise the number of stipends to 2,749.

The increase of 326 will be distributed as follows: (1) graduate—166, (2) postdoctoral—60, and (3) undergraduate—100. 64 of the additional graduate fellowships will be awarded to Alliance for Progress language and area study programs, and the 60 additional postdoctoral awards will be granted to participants in three faculty development summer programs. This increase in stipends will help ensure that the steadily expanding resources of the NDEA language and area centers and Alliance for Progress Centers will continue to be effectively utilized.

LANGUAGE AND AREA FELLOWSHIPS, NDEA, VI

| | 1967 | 1968 | 1969 |
|---|---|---|---|
| Graduate fellowships: | | | |
| 2,025 at an average cost of $3,125 | $6,329,567 | | |
| 1,888 at an average cost of $3,300 | | $6,186,000 | |
| 2,054 at an average cost of $3,300 | | | $6,736,000 |
| Postdoctoral awards: | | | |
| 9 at an average cost of $10,116 | 91,047 | | |
| 20 at an average cost of $11,000 | | 220,000 | |
| 80 at an average cost of $5,000 | | | 400,000 |
| Undergraduate summer stipends: | | | |
| 522 at an average cost of $860 | 449,386 | | |
| 515 at an average cost of $900 | | 464,000 | |
| 615 at an average cost of $900 | | | 554,000 |
| Total | 6,870,000 | 6,870,000 | 7,690,000 |

(Average unit costs vary according to changes in tuition rates and to the number of awards held for study during the summer only. The average awards also include stipends, travel allowances, and allowances for up to 4 dependents.)

| | 1968 estimate | 1969 estimate | Increase |
|---|---|---|---|
| 2. Foreign language training and area studies (appropriation and obligations) | $3,000,000 | $3,200,000 | +$200,000 |

JUSTIFICATION OF ESTIMATE

Section 102(b)(6) of the Fulbright-Hays Act authorizes overseas study programs for teachers and prospective teachers in order to encourage modern foreign language training and area studies in U.S. schools, colleges, and universities. The general objectives of study abroad are: (1) intensive study of the language, literature and civilization of the host country, and (2) specialized work in the student's major discipline. In addition the overseas experience brings the individual benefits of contacts with a foreign culture.

In the past the teachers of foreign language and area studies have not had access to a laboratory in their specialized fields for study and investigation as had the natural scientists. The overseas area is their laboratory and they must know it at first hand in order to keep their teaching relevant. The students preparing themselves as foreign language and area specialists who have had overseas experience in their area are only a token number. For example, assistance under NDEA in foreign language and area studies is almost entirely domestic.

Expert consultants in this field recommend that eventually all language and area specialists should be required as part of their advanced training to study and do research overseas in their area of specialization.

The Fulbright-Hays foreign language training and area studies programs supplement the NDEA by providing overseas study opportunities which support existing sequences of language and area programs in colleges and universities, which enable them to build into their teaching and courses a component of foreign studies.

More specifically, overseas study has served a wide variety of related academic purposes. It has enabled library specialists to acquire books and materials from foreign countries; it has made it possible for American educators to maintain scholarly contact with specialist overseas; it has helped language instructors to improve their command of and familiarity with a spoken language. Projects fall into three major categories for which separate competitions are held: (1) Grants for overseas Research and Study—(a) graduate students—overseas research and study undertaken by advanced graduate students of language and area studies, (b) faculty study and research grants (Higher Education and Secondary) and study grants; (2) Foreign studies extension program—group and individual overseas projects undertaken by institutions of higher education (often in cooperation) including undergraduate, graduate and faculty study programs, the establishment of research and study centers, the acquisition and/or preparation of teaching materials, and visits by faculty members to establish academic relationships with their foreign counterparts; (3) Foreign curriculum specialist program—the utilization of foreign curriculum specialists by State departments of education, school systems, and colleges and universities in their domestic curriculum planning and development activities. The number of institutions and persons assisted through these programs is far too small when measured in terms of the demand for language and area specialists and the significance of these activities in language and area training.

In fiscal year 1967, $2,996,000 provided 269 grants for the support of 615 professors, teachers, and prospective teachers engaged in language and area training and program development activities. Grants for overseas projects included 119 fellowships for graduate students who are preparing for college and university teaching careers, 90 awards for faculty study grants (Higher Education and Secondary) and 28 grants (374 participants) under the Foreign Studies Extension program for the support of seminars and other group activities conducted by institutions of higher education. Thirty-two (32) grants were made to bring foreign specialists to State departments of education, large school systems and colleges and universities to assist them in their program and curriculum development activities. The fiscal year 1968 estimate of $3,000,000 will support approximately 276 grants, involving 593 participants, to be distributed in the same general pattern as in fiscal year 1967.

In fiscal year 1969 an increase of $200,000 is requested to provide for 100 additional participants to assist rapidly expanding foreign language and area studies programs. Grants for overseas projects will include 126 fellowships for graduate students who are preparing for college and university teaching careers, 95 faculty study and research grants (Higher Education and Secondary), and 33 grants (442 participants) under the Foreign Studies Extension program for the support of seminars and other group activities conducted by institutions of higher education. Thirty grants will be made to bring foreign specialists to State departments of education, large school systems, and colleges and universities to assist them in their program and curriculum development activities.

FOREIGN LANGUAGE TRAINING AND AREA STUDIES (FULBRIGHT-HAYS)

| | 1967 actual | 1968 estimate | 1969 estimate |
|---|---|---|---|
| A. Fulbright-Hays, section 102(b)(6): | | | |
| 1. Grants for overseas research and study | $1,813,556 | $1,911,000 | $1,911,000 |
| a. Graduate students: | | | |
| 119 in 1967 at an average cost of $6,600 | 792,625 | | |
| 126 in 1968 at an average cost of $6,900 | | 869,000 | |
| 126 in 1969 at an average cost of $6,900 | | | 869,000 |
| b. Faculty study grants (higher education and secondary): | | | |
| 90 in 1967 at an average cost of $11,343 | 1,020,931 | | |
| 95 in 1968 at an average cost of $11,000 | | 1,042,000 | |
| 95 in 1969 at an average cost of $11,000 | | | 1,042,000 |
| 2. Foreign studies extension (including summer seminars) | 752,116 | 684,000 | 884,000 |
| 374 participants in 1967 through 28 grants to universities at an average cost of about $27,000 | 752,116 | | |
| 342 participants in 1968 through 25 grants to universities at an average cost of about $27,000 | | 684,000 | |
| 442 participants in 1969 through 33 grants to universities at an average cost of about $27,000 | | | 884,000 |
| 3. Foreign language and area studies specialists from abroad | 385,328 | 360,000 | 360,000 |
| 32 in 1967 at an average cost of $12,000 | 385,328 | | |
| 30 in 1968 at an average cost of $12,000 | | 360,000 | |
| 30 in 1969 at an average cost of $12,000 | | | 360,000 |
| 4. Overseas professional support services | 45,000 | 45,000 | 45,000 |
| Program total | 2,996,000 | 3,000,000 | 3,200,000 |

## Biographical Sketch

Name: Robert Leestma.

Position: Assistant Commissioner for International Education; Director, Institute for International Studies.

Birthplace and date: Detroit, Michigan, October 15, 1927.

Education: University of Michigan—A.B., M.A., Ph.D.

Experience: Present: Assistant Commissioner for International Education; Director, Institute for International Studies; 1967–68: Assistant to the Assistant Secretary for Education (International Education); 1965–67: Director, Office of Multilateral Policy and Programs and Director of the Multilateral Policy Planning Staff, Bureau of Educational and Cultural Affairs, Department of State; 1964–65: Deputy Chief, Education Division, Bureau for Africa, Agency for International Development; 1961–64: Associate Professor and director of Peace Corps training programs, University of Michigan; 1958–61: Education advisor to the Government of Thailand, International Cooperation Administration; 1955–58: Education and mass communications advisor to the Government of Vietnam, International Cooperation Administration; 1951–55: Assistant Director, Audio-Visual Education Center, and Lecturer, School of Education, University of Michigan; 1950–51: Teacher, English and social studies, Ann Arbor Public Schools; 1949–50: Research and Teaching Assistant, Community Adult Education Program, University of Michigan.

Association memberships: American Educational Research Association; Comparative Education Society; Association for Asian Studies; Society for International Development; Siam Society; American Academy of Political and Social Science; Department of Audio-Visual Instruction of the NEA; Phi Delta Kappa; American Association of University Professors.

Awards: Phi Kappa Phi; Payne Scholar, University of Michigan; Hinsdale Scholar, University of Michigan.

Publications: "Some Problems Reported by Teachers of Adult Students and Some Suggestions for Their Alleviation," *University of Michigan School of Education Bulletin*, Vol. 22, No. 7, April, 1951. Pp. 107–109.

*Supplementary Course Materials in Audio-Visual Education* (with F. L. Lemler), Slater's Bookstore, Ann Arbor, 1953. Pp. vii–163. Revised Edition, 1959.

"Directed Observation in Film Utilization," *Audio-Visual Communication Review*, Vol. 2, No. 2 Spring, 1954. Pp. 103–108.

*Audio-Visual Materials for Teaching Reading*, Slater's Bookstore, Ann Arbor, 1954. Pp. ix–108.

"Tools of Thailand," *Audio-visual Instruction*, Vol. 7, No. 1, January 1962., Pp. 24–25.

*Second Peace Corps Training Program, Thailand*, University of Michigan, June, 1962. Pp. 85. (Syllabus)

*Combined Report: First and Second Peace Corps Training Programs for Thailand.* Ann Arbor: The University of Michigan, Office of the Dean, State-wide Education, 1963. Pp. 108.

In process: "Foreign Influences in Thai Education from the 17th Century to the Present" (monograph), and "The Interaction of the U.S. and Other Great Powers in International Education" (chapter).

### BUDGET REQUEST

Senator HILL. The subcommittee will kindly come to order. I am glad to have you gentlemen here with us. Are you going to give us the testimony first?

Mr. LEESTMA. Yes, sir, if I may.

Senator HILL. You may proceed, sir.

Mr. LEESTMA. Mr. Chairman, it is my privilege to present our 1969 budget request for $19,250,000 to support the foreign language training and area programs of American educational institutions and organizations.

This request will enable us (1) to continue support of 106 language and area centers, (2) to fund approximately 2,750 fellowships in foreign language and area studies, and (3) to sponsor approximately 700 participants in grants for overseas language and area studies.

These three programs have a common objective: to improve the quality and increase the number of Americans trained in modern foreign languages and related area studies.

### PROGRAM CONTRIBUTIONS TO U.S. EDUCATION AND SOCIETY

Language and area programs supported under title VI of NDEA since 1958 and under the Fulbright-Hays Act, section 102(b)(6) since 1964, have made the following contributions to meeting the national needs of American education and society:

1. Helped establish 106 language and area centers at 63 colleges and universities with 2,100 faculty members and approximately 80,000 students enrolled in 90 foreign languages and related area studies.
2. Assisted in the production of 2,300 scholars and teachers at the doctorate level and 6,300 at the master's degree level in previously neglected foreign languages and related area studies.
3. Provided opportunities for approximately 2,000 educators, and students to engage in oversea research and study programs in support of the development of language and area studies in U.S. schools, colleges, and universities.

### CRITICAL AND UNCOMMON LANGUAGE CLASSES

One aspect of this support for language and area programs deserves special mention: for a number of critical languages, the centers assisted under the National Defense Education Act have over one-half of the enrollments in the United States.

Examples are: Chinese, Hindi-Urdu, and Korean. In the case of 44 uncommon languages, 50 percent or more of the enrollments were at higher educational institutions receiving NDEA assistance, in-

cluding 25 languages being taught solely under the auspices of NDEA centers.

Many of these are languages of sovereign nations and were not taught at American universities before passage of the National Defense Education Act in 1958.

### UNIVERSITY LANGUAGE AND AREA CENTER ENROLLMENTS

In 1967–68, American universities were operating 106 language and area centers with total enrollments of about 80,000, including 2,000 advanced students who received NDEA title VI fellowships.

In 1965–66, over 500 doctorates, 1,300 master's degrees and 2,500 bachelor's degrees were earned at these centers.

Senator HILL. Quite a number, wasn't it?

Mr. LEESTMA. Yes, quite a number, sir.

Faculty members engaged in these programs numbered approximately 1,900 and taught over 3,100 different courses.

With the Federal assistance summarized above, American education is producing more and better specialists in foreign languages and area studies, but the need for them also increases and continues to exceed the supply of graduates from the existing program.

### DEARTH OF SCHOLARS HAVING PRECISE KNOWLEDGE OF SOME COUNTRIES

Public and private activities are taking place increasingly in countries about which only a few scholars have any precise knowledge. General area and language competence is lagging behind the national responsibilities.

Senator HILL. Give me an illustration of those private activities.

Mr. LEESTMA. The reference is basically to the range of private business activities abroad, but also to a wide range of nonprofit organizations and educational enterprises.

It has become increasingly apparent that if our colleges and universities are to meet the critical and growing demand for persons with knowledge and understanding of other areas of the world, they must move forward in the field of international studies at an accelerated rate.

Fortunately, our colleges and universities have shown increasing awareness that they must reshape their curriculums to give them greater relevance to the world in which we live.

Senator HILL. We live in quite a different world; don't we?

Mr. LEESTMA. Quite a different world.

Senator HILL. Even different from the world in which you were born.

Mr. LEESTMA. Yes, very different. For example, since 1960, 25 or 30 new nations have come into being in Africa alone.

### INCREASE IN INSTITUTIONAL RESOURCES DEVOTED TO LANGUAGE AND AREA STUDIES

American higher education has responded to the availability of Federal assistance by greatly increasing the amount of institutional resources devoted to language and area studies.

As the language development program evolved and centers were established, it became clear that the potential of the centers for growth exceeded the possibilities foreseen by the original legislation.

Today, the Federal Government contributes on the average less than 15 percent of the language and area centers' operating costs.

The universities are under increasing pressure from the growing numbers of students responding to these quality language and area programs and by the disproportionate university resource allocation required to underwrite them.

In view of the many needs throughout the total university curriculum, the universities cannot afford to provide all the resources required to meet the growth of student interest and the national interest in international studies.

BUDGET REQUEST

For this reason, we request $19,250,000 in fiscal year 1969. This requested increase of $3,550,000 over the $15,700,000 available in the current fiscal year for language and area programs will enable us to: (1) Provide $2,235,000 for program expansion at existing centers, including $800,000 for the development of Alliance for Progress programs at 16 Latin American centers, (2) $820,000 for an increase of 326 fellowships, including 64 additional graduate fellowships for Alliance for Progress language and area study programs, (3) $200,000 for the establishment of four new centers at an average unit cost of $50,000, (4) $94,000 for special summer programs for faculty development, and (5) $200,000 in the Fulbright-Hays program to finance 100 additional American participants in overseas language and area studies programs at all levels.

The language and area programs to be assisted by the 1969 budget request will move us further toward the goal of supplying the experts needed by our colleges and universities, our secondary schools, by our Government, and by private business to meet national needs in the shrinking world in which we live.

We will be pleased to answer any questions you may have.

ADMINISTRATIVE COSTS

Senator HILL. Is it right that none of the funds asked for are used for administrative work?

Mr. LEESTMA. None of these funds?

Senator HILL. None of these funds here are used for administrative work?

Mr. LEESTMA. That is correct.

Senator HILL. How much of the appropriation for salaries and expenses is earmarked for this particular account?

Mr. SISCO. The appropriation for salaries and expenses includes approximately $560,000 in 1968 and about $740,000 in 1969 for these programs.

Senator HILL. Is there anything else you would like to add on this particular subject?

Mr. LEESTMA. No, sir.

Senator HILL. Do you know how we got the National Defense Education Act?

Mr. LEESTMA. Not in precise detail. I would appreciate further background, sir.

Senator HILL. We had been trying for years to pass an education act, the Congress and the Federal Government.

Finally, the Russians put the sputnik in the air and here was our opportunity. That is why we called it the National Defense Education Act. Sputnik confirmed the wisdom of that act; isn't that true?

Mr. LEESTMA. It did indeed, sir.

Senator HILL. None could have signaled the need for the act better than the sputnik.

Mr. LEESTMA. It was a highly dramatic and visible signal.

Senator HILL. People could understand that and the need for this act.

## Educational Research and Training (Special Foreign Currency Program)

STATEMENT OF ROBERT LEESTMA, ASSISTANT COMMISSIONER FOR INTERNATIONAL EDUCATION

ACCOMPANIED BY:

HAROLD HOWE II, COMMISSIONER OF EDUCATION

PETER P. MUIRHEAD, ASSOCIATE COMMISSIONER FOR HIGHER EDUCATION

MRS. FREDRIKA M. TANDLER, DEPUTY ASSISTANT COMMISSIONER FOR INTERNATIONAL EDUCATION

D. LEE HAMILTON, DIRECTOR, DIVISION OF FOREIGN STUDIES

S. WILLIAM HERRELL, EXECUTIVE OFFICER, BUREAU OF HIGHER EDUCATION

BERNARD SISCO, ASSISTANT COMMISSIONER FOR ADMINISTRATION

LEON SCHWARTZ, DEPUTY ASSISTANT COMMISSIONER FOR ADMINISTRATION

JOE G. KEEN, BUDGET OFFICER

MRS. SALLY H. BOND, ACTING DEPUTY ASSISTANT SECRETARY, BUDGET

### Appropriation Estimate

*"EDUCATIONAL RESEARCH AND TRAINING (SPECIAL FOREIGN CURRENCY PROGRAM*

*"For payments in foreign currencies which the Treasury Department determines to be excess to the normal requirements of the United States, for necessary expenses of the Office of Education, as authorized by law, $4,000,000, to remain available until expended: Provided, That this appropriation shall be available, in addition to other appropriations to such office, for payments in the foregoing currencies."*

AMOUNTS AVAILABLE FOR OBLIGATION

| | 1968 | 1969 |
|---|---|---|
| Appropriation | | $4,000,000 |
| Unobligated balance brought forward | $213,217 | |
| Total | 213,217 | 4,000,000 |

OBLIGATIONS BY ACTIVITY

| | 1968 estimate | 1969 estimate | Increase or decrease |
|---|---|---|---|
| Training, research, and study grants | $101,280 | $3,200,000 | +$3,098,720 |
| Research in foreign education | 111,937 | 800,000 | +688,063 |
| Total obligations | 213,217 | 4,000,000 | +3,786,783 |

OBLIGATIONS BY OBJECT

| | 1968 estimate | 1969 estimate | Increase or decrease |
|---|---|---|---|
| Travel and transportation of persons | $2,217 | $82,000 | +$79,783 |
| Other services | 181,000 | 3,718,000 | +3,537,000 |
| Services of other agencies | 30,000 | 200,000 | +170,000 |
| Total obligations by object | 213,217 | 4,000,000 | +3,786,783 |

*Summary of changes*

| | |
|---|---|
| 1968 enacted appropriation | |
| 1969 estimated appropriation | $4,000,000 |
| Total change | +4,000,000 |
| 1968 enacted appropriation | |
| Unobligated balance brought forward | 213,217 |
| 1968 estimated obligations | 213,217 |
| 1969 estimated obligations | 4,000,000 |
| Total change | +3,786,783 |

| | Base | Changes from base |
|---|---|---|
| Increases: | | |
| Program: | | |
| 1. Training, research, and study grants | | $3,200,000 |
| 2. Research in foreign education | | 800,000 |
| Total change requested | | 4,000,000 |

EXPLANATION OF CHANGES

1. *Training, research, and study grants.*—$3,200,000 is requested to continue support in Foreign Studies in American institutions, to strengthen at all levels American educational institutions and improve American teaching by giving teachers, administrators and students an opportunity for overseas training.

2. *Research on foreign education.*—A total of $800,000 is requested for research and related activities in India and Israel in FY 1969. The amount will provide support for research projects begun in FY 1966 and FY 1967 and for new projects in these countries as well as in Yugoslavia and the U.A.R. It will provide support for continuation of the development in English of annotated bibliographies and translations of selected materials on education in other countries.

GENERAL STATEMENT

The U.S. now owns over $1.7 billion in the local currencies of Burma, Ceylon, Guinea, India, Israel, Pakistan, Poland, Tunisia, the U.A.R. (Egypt) and Yugoslavia which are excess to normal U.S. needs in those countries.

The Executive Branch and Congress have been consistently concerned that government-wide efforts be made to develop research and training projects and educational materials purchases which can be financed without dollar drain in excess foreign currency countries.

Public Law 480, 83rd Congress, as amended, authorizes the use of foreign currencies derived from the sale of surplus agricultural commodities abroad for the carrying out of programs of U.S. Government Agencies in scientific, educational and cultural areas. Foreign currencies in Burma, Ceylon, Guinea, India, Israel, Pakistan, Poland, Tunisia, the United Arab Republic (Egypt), and Yugoslavia support overseas foreign language training and area studies and research for all levels of American education.

The Office of Education, in response to the request from the White House, Bureau of the Budget and the Congress has developed two general educational programs, one in training and the other in research, to strengthen American

education and American education institutions through the use of the excess local currencies. No foreign currency funds were appropriated to the Office of Education for these programs in FY 1968, but 7 continuing FY 1967 training projects were supported in FY 1968 by a modest amount of carry-over funds and by the use of Fulbright-Hays dollars. Continuing projects of research on foreign education were also supported in FY 1968 by funds carried over from FY 1967.

EDUCATIONAL RESEARCH AND TRAINING (SPECIAL FOREIGN CURRENCY PROGRAM)

| | 1968 estimate | 1969 estimate | Increase or decrease |
|---|---|---|---|
| 1. Training, research, and study grants (appropriation) | | $3,200,000 | +$3,200,000 |
| Training, research and study grants (obligations) | $101,280 | 3,200,000 | +3,098,720 |

JUSTIFICATION OF ESTIMATE

*Activities in FY 1967 and 1968*

These funds will be used primarily to assist ongoing overseas programs of U.S. educational institutions in the field of foreign language and area studies and to make participation possible for the growing number of U.S. educational institutions which have a strong desire to initiate similar overseas projects in these fields.

The teacher of foreign language and area studies has not had, in the past, access to a laboratory in his specialized field for study and investigation as has the natural scientist. The foreign area is his laboratory and he must know it at first hand in order to keep his teaching fully relevant. The persons preparing themselves as foreign language and area specialists often have no overseas experience in their area. Assistance under the National Defense Education Act (Title VI) in foreign language and area studies is a domestic program and expert consultants in this field urge that eventually all Title VI NDEA trained language and area specialists should be required as a part of their advanced training to pursue study and research overseas in their area of specialization.

American educational institutions and organizations have been encouraged by the U.S. Government to engage in overseas activities which will prepare the specialists urgently needed by this country. A number of these institutions have initiated continuing projects which have received support in excess foreign currencies through the Division of Foreign Studies. From 61 proposals in FY 1967, the Division of Foreign Studies selected 25 projects for grants totaling the equivalent of $823,467 and involving 395 faculty and student participants. Thirteen grants ($472,993) supported graduate and undergraduate study programs. Included in this category is the Professional Schools Indian Study Project which is being conducted in India by the University of California in Berkeley. Twelve graduate students of education, business, agriculture, and other professional fields are participating in the eight-month program which includes instruction in the Hindi language, a seminar on the role of the professional in an emerging society and supervised work experience at appropriate institutes, agencies, and businesses. $67,784 provided three grants for faculty research and study programs in India and Israel, $62,519 was obligated for two curriculum development projects in India and the U.A.R., and three grants totaling $97,306 assisted institutions in the establishment and operation of research and study centers in India, Tunisia, and the U.A.R. The remaining four grants ($122,865) provided graduate fellowships for study in programs conducted in India, Pakistan, Poland, and Tunisia. One year fellowships for study in India enabled seven advanced graduate students to participate in the American Institute of Indian Studies' research program. The fellowship recipients are undertaking research required to complete doctoral degree programs. A summer seminar for 20 secondary school teachers of World, Middle Eastern or Far Eastern History designed to improve the participants, knowledge and understanding of South and Southeast Asia and to enable them to enrich their teaching and affect the curriculum in their home institutions was supported by a grant of $49,111. A Workshop/Seminar for Social Science Supervisors and Curriculum Directors designed to train 25 elementary and secondary supervisory personnel in the nature and variety of curriculum materials of Asian and S.E. Asian subject matter was supported by a grant of $62,185. In addition, a seminar for 38 American school administrators on Indian education and culture was conducted at a cost of $95,000.

Representative P.L. 480 type projects to be supported in FY 1968 (primarily through use of dollar appropriation because of no P.L. 480 appropriation in FY 1968):

1. *Continuing Projects in India* ($115,000)

In FY 1967 several projects in India included grants for graduate fellowships in Indian Studies to the American Association of Indian Studies ($75,000); The Educational Resources Center of the New York Education Department which develops and distributes teaching and curriculum material on India to U.S. universities, colleges and secondary schools ($75,000); The Wisconsin University "Year in India" Programs including 27 participants ($90,000).

In FY 1968 support to these programs was drastically reduced and supported in Fulbright-Hays dollars as the result of our inability to support them in excess foreign currencies. Dollar support was approximately $25,000, $45,000, and $45,000 respectfully.

2. *Graduate Fellowships in Poland* ($20,000)

The fellowships support American participation in a graduate student exchange program sponsored between Stanford University and the University of Warsaw. Recipients of the one-year fellowships receive intensive Polish language and area training, attend courses at the University of Warsaw, and undertake individual research.

*3. Overseas Center in Cairo ($20,000)*

Support is provided to a Center at the American University in Cairo which offers intensive Arabic language instruction and makes its resources available to American scholars interested in developing materials and improving the methods and techniques of teaching Arabic. The two main purposes of the Center are: (1) to improve the competence of American instruction within a consortium of American universities in modern Arabic, and (2) to serve as a base for American scholars interested in methodology of the teaching of Arabic and to improve the methods and materials used in teaching the language.

*Proposed Activities in 1969*

One of the basic ways the Office has developed to creatively use nondollar surplus foreign currency funds to strengthen American educational institutions and improve American teaching has been through training teachers in overseas teacher seminars and Foreign Studies Extension Programs of U.S. educational institutions. Excess currencies were utilized in conjunction with Fulbright-Hays dollar funds in the support of overseas projects in language, area and international studies in FY 1967 and 1968. The two basic criteria which govern international studies grants to American educational institutions are: (1) that the project must support foreign language and area studies and research throughout American education (college and secondary teachers and administrators, graduate and undergraduate students) by means of overseas education and training opportunities and; (2) it must be part of or contribute primarily to the total language area, and international studies program of the institution involved.

These grants are intended to promote modern foreign language training and area and international studies by supporting visits, research, and study in foreign countries by American school administrators, curriculum supervisors, elementary and secondary teachers, college and university professors and students to improve their skill in languages and their knowledge of the cultures and civilizations of other peoples. Funds amounting to $3,200,000 are requested in FY 1969 for the continuation of this activity, through approximately 80 projects involving nearly 1,600 participants located throughout the continuum of American education. Three different types of projects will be supported: (1) Cooperative projects—(36) grants ($1,600,000) to groups of American educational institutions and organizations to carry out, in cooperation with foreign educational institutions and organizations, such projects and programs of language and area studies as faculty team seminars, interdisciplinary and cooperative seminars, study and research in foreign culture, language and civilization, and conferences to establish inter-institutional relationships; (2) Overseas group and individual research and study projects—(33) grants ($1,000,000) to individual or groups of educational administrators and teachers for the support of the overseas research and study activities of institutions; (3) Overseas seminars in language, area and international studies—(12) grants ($600,000) to institutions for the support of faculty and student seminars in language and area studies.

Although no appropriation was made in FY 1968 for P.L. 83–480, funds to be utilized by OE for overseas projects in support of American Education, past

projects supported by P.L. 83–480 funds have generated considerable academic and congressional interest. Consequently, 115 proposals totaling $3,500,000 were submitted for consideration in FY 1968, including 7 continuation proposals for projects supported in FY 1966 and 1967. These projects were only partially funded in FY 1968 by approximately $100,000 in P.L. 480 funds from FY 1967 appropriation and from FY 1968 Fulbright-Hays dollar appropriation.

It is anticipated that more than 200 training, research and study proposals totaling about $5,000,000 will be submitted in FY 1969 for projects similar to the following:

(1) *Cooperative Projects in Foreign Studies for American Educational Institutions* (36 grants—$1,600,000)

(a) Faculty members of American colleges and universities would undertake cooperative research and study projects designed to improve instruction and develop research skills in language and area studies. The projects would be conducted abroad.

(b) Groups of American institutions in cooperation with foreign universities would establish overseas centers which would offer advanced training in research and special summer study programs, and engage in the acquisition, development, and distribution of educational materials.

(c) American graduate and undergraduate institutions would participate in joint academic year programs offered by cooperating American and foreign universities. Faculty members of the cooperating institutions would plan and supervise the programs.

(2) *Overseas Group and Individual Research and Study Projects* (33 grants—$1,000,000)

(a) American institutions of higher education would send faculty teams overseas to acquire educational materials, engage in research, and to establish professional relationships with their foreign counterparts.

(b) American students enrolled in professional schools would participate in academic year study programs overseas sponsored by American institutions. The programs are designed to provide training in the international aspects of the various professional fields.

(3) *Overseas Summer Seminars in Language, Area and International Studies (12 grants—$600,000)*

$400,000 is requested to finance 8 grants to American institutions offering graduate and undergraduate programs in foreign studies to assist them in the establishment and/or continuation of overseas summer seminars for their students enrolled in their language and area programs and for faculty members of the various discipline who are participating in the institutions' international studies program development activities. $200,000 is requested to finance 4 summer seminars for experienced American elementary and secondary teachers, supervisors and curriculum directors in social science, area or international studies and for school administrators. These projects are aimed at improving the individual competency of elementary and secondary school teachers and supervisors, and at broadening the international outlook of school administrators by increasing their knowledge of other civilizations and cultures.

Typical of the overseas summer seminars for all levels of American education to be supported with excess foreign currency are:

(a) *Teachers' Seminar in South Asia* ($45,000)

A group of 25 secondary and junior college teachers who have completed summer study in an Indian Studies Program will be selected to participate in an 8-week seminar in India. The seminar program will include study of educational, social, and technological institutions, and conferences with Indian scholars and public officials.

(b) *Graduate Seminar in Africa* ($40,000)

The seminar will be jointly sponsored by an American institution and a university in the foreign area. Twelve advanced graduate students of African Studies will participate in the program which will offer training in field research relating to Africa.

(c) *Language and Area Seminar in Israel* ($50,000)

Twenty-two college and university professors will attend a 6-week language and area seminar in Israel. The program will include intensive Hebrew language instruction, area courses, and other activities designed to improve the quality of instruction and research in Hebrew studies.

(d) *Seminar for Social Science Supervisors* ($48,000)

Twenty elementary and secondary school supervisors of social science concerned with the teaching of World, Middle or Far Eastern History to attend an eight-week seminar on Indian history, institutions, culture, and India's relationship to foreign countries. Emphasis will be placed on the collection and preparation of educational materials.

(e) *Seminar for Secondary School Teachers of World History* ($48,000)

Twenty teachers of World or regional history will attend an eight-week seminar on India and Southeast Asia. Lectures on history, geography, economic and social life with visits to places of historic and cultural interest will be provided.

(f) *Elementary and Secondary Education Teacher Training Seminars* ($96,000)

Two grants of $48,000 each in the special foreign currencies of India and Yugoslavia will be available to provide opportunities for experienced teachers, supervisors, curriculum directors, State department of education officials, and school administrators to obtain further training and experience. Project proposals will be received from State departments of education, teacher training institutes, colleges and universities.

1. TRAINING, RESEARCH, AND STUDY

*Summary of estimated obligations by country*

| | *1969* |
|---|---|
| Guinea | $60,000 |
| Ceylon | 180,000 |
| India | 1,560,000 |
| Pakistan | 300,000 |
| Poland | 200,000 |
| Tunisia | 200,000 |
| United Arab Republic | 400,000 |
| Yugoslavia | 300,000 |
| Total | [1]3,200,000 |

[1] Special projects for Burma or the Congo (Kinshasa) may be supported within the total available funds.

| | 1968 estimate | 1969 estimate | Increase or decrease |
|---|---|---|---|
| 2. Research in foreign education (appropriation) | | $800,000 | $800,000 |
| Research in foreign education (obligations) | $111,937 | 800,000 | 688,063 |

JUSTIFICATION OF ESTIMATE

*Research on Foreign Education*

Special foreign currencies appropriated to the Office of Education are used to support educational research and research-related activities abroad.

Research programs and activities to be undertaken with P.L. 480 funds are designed to serve three main purposes for the benefit of American education. The first is the investigation of educational programs, methodology and problems in other countries which are of major concern in the United States, or which are of worldwide educational concern and are therefore also of major interest to the United States. The second major purpose of the program is meeting national needs for information on foreign education particularly in relation to the planning and administration of international programs. The third main purpose is the provision and analysis of data which will enable American educational institutions, organizations and agencies to better plan, carry out and analyze the results of their various education exchange programs.

Research on educational problems of mutual concern to the U.S. and to the countries involved in the program will deal with such matters as: (1) teaching of foreign languages, including English as a second language and bilingualism; (2) the dropout problem and juvenile delinquency; (3) education for the handicapped and for cultural and racial minorities; (4) vocational education programs and their effectiveness in meeting national manpower needs; (5) the role of

education in national development; and (6) educational technology, such as instructional television, and its role in meeting urgent educational needs.

Needs of comparative educators for information on and understanding of various aspects of education systems in other countries, will be met by continuation of the annotated bibliography and translation program on educational literature in Burma, Ceylon, India, Israel, Pakistan, Poland, Tunisia, and Yugoslavia. The bibliographies and translations will be made available to American scholars through the Office of Education's dissemination system.

*Activities in FY 1968*

A total of 20 educational projects in Israel and 14 in India were underway in FY 1968. Reports on 11 of these were completed in January 1968. Limited funds carried over from FY 1967 were used to continue 5 of the research projects in Israel. Bibliography and translation projects on educational materials in 8 countries were also in progress during FY 1968.

*Proposed Activities in FY 1969*

A total of $800,000 is requested for support of educational research projects for American education conducted by foreign institutions and for the continued development abroad of annotated bibliographies and translations of selected educational materials on education. $354,000 will be required to continue support of research projects currently underway in India and Israel and $246,000 for new projects in these countries and in Yugoslavia and possibly the U.A.R.

These new projects will concentrate on important educational problems of primary concern to the educational systems of both the U.S. and the countries involved. It is estimated that $200,000 in special foreign currencies will be needed to continue the bibliography-translation program.

RESEARCH IN FOREIGN EDUCATION

For country by country obligations see table below:

PUBLIC LAW 480 EDUCATION RESEARCH—FISCAL YEAR 1969 ESTIMATED OBLIGATIONS BY COUNTRY

| Country | Education bibliographies and translations | Foreign research projects | | Total by country |
|---|---|---|---|---|
| | | Continuing | New | |
| Burma | $5,000 | | | $5,000 |
| Ceylon | 5,000 | | | 5,000 |
| India | 20,000 | $96,840 | $45,428 | 162,268 |
| Israel | 45,000 | 257,285 | 90,447 | 392,732 |
| Pakistan | 15,000 | | | 15,000 |
| Poland | 40,000 | | | 40,000 |
| Tunisia | 10,000 | | | 10,000 |
| United Arab Republic (Egypt) | 15,000 | | 70,000 | 85,000 |
| Yugoslavia | 45,000 | | 40,000 | 85,000 |
| Total | 200,000 | 354,125 | 245,875 | 800,000 |

BUDGET REQUEST

Senator HILL. Mr. Leestma, are you going to testify now on Public Law 480?

Mr. LEESTMA. That is right.

Senator HILL. You may proceed.

Mr. LEESTMA. Mr. Chairman, I welcome this opportunity to present our 1969 budget request for $4 million in excess foreign currencies to support the overseas training and research programs of American educational institutions and organizations in foreign language and area studies.

OVERSEA PROJECTS IN FOREIGN LANGUAGE AND AREA STUDIES AND OVERSEA EDUCATIONAL RESEARCH PROJECTS

This request will enable us to (1) continue to strengthen American educational institutions by supporting their efforts to develop over-

seas projects in foreign language and area studies, and (2) continue to support overseas research projects on educational problems of mutual concern to the United States and to the countries involved.

Both of these programs have a common objective: to expand and improve the resources of American educational institutions in foreign language, area, and international studies.

### PROGRAM FUNDING SINCE 1961

Since 1961, $3,430,750 has been appropriated to the Office of Education for overseas education research and training projects in 10 countries with excess foreign currency. These projects have involved approximately 700 individuals from American educational institutions.

### U.S. EXCESSIVE OWNERSHIP OF LOCAL CURRENCIES

As you are aware, the United States now owns over $1.7 billion in the local currencies of Burma, Ceylon, Guinea, India, Israel, Pakistan, Poland, Tunisia, the United Arab Republic (Egypt) and Yugoslavia which are excess to normal U.S. needs in those countries.

Senator HILL. Are you going over to collect those funds?

Mr. LEESTMA. I do not know that we could collect them, sir, but we would like to see more of them spent in support of priority education projects.

### PROGRAM DEVELOPMENTS

The Office of Education, in response to requests from the White House, Bureau of the Budget, and Congress, has developed programs to strengthen American eductional institutions through the use of these excess local currencies.

### OVERSEA SOCIAL SCIENCE AND HUMANITIES SEMINARS

One of the most effective ways the Office has developed to effectively utilize these funds to strengthen the language, area, and international studies programs of American educational institutions, has been to train elementary, secondary, and college teachers in social science and humanities seminars abroad.

### INSTITUTIONAL LANGUAGE AND AREA STUDIES CURRICULUMS

These funds have also provided important opportunities for American institutions to strengthen their language, area, or international studies curriculums and programs by engaging in overseas projects.

### FULBRIGHT-HAYS APPROPRIATION SUPPLEMENT

Since fiscal year 1966, excess foreign currencies have been utilized to supplement Fulbright-Hays appropriations in support of these overseas projects of American institutions.

### 1968–69 INSTITUTIONAL PROPOSALS

In fiscal year 1968, 115 proposals totaling $3,500,000, were submitted by American educational institutions for consideration by the Office of Education.

It is anticipated that in fiscal year 1969 more than 300 training research, and study proposals totaling about $5 million will be submitted by American educational institutions for their projects abroad.

### 1968 FUNDING AND PROGRAMS

No Public Law 480 appropriation was made in fiscal year 1968 for the Office of Education, but $100,000 was carried over primarily from the cancellation of Near Eastern projects caused by the 6 days' war of June 1967.

This money was utilized to support three foreign currency projects in India: graduate fellowships in Indian and Pakistani studies for the Maxwell School of Public Administration, Syracuse University, $40,000; the Educational Resources Center of the New York Education Department which develops and distributes teaching and curriculum material on India to United States universities, colleges and secondary schools, $46,000; and the University of Wisconsin "year in India" program, $14,000.

Senator HILL. When you speak of Wisconsin's "year in India" program, define that a bit, will you?

Mr. LEESTMA. That is a program, sir, that sends undergraduate students for a year abroad.

Mr. HAMILTON. That is correct. Not only from the University of Wisconsin but other universities as well.

Senator HILL. It is not limited to students only from the University of Wisconsin?

Mr. HAMILTON. That is correct.

### U.S. INSTITUTIONAL OVERSEA TRAINING ACTIVITIES

Mr. LEESTMA. In fiscal year 1969, we are requesting $3,200,000 for overseas training activites of American institutions. Three different types of projects will be supported, all aimed at strengthening the language and area programs of American universities, colleges, and secondary schools:

(1) Cooperative projects, 36 grants of $1,600,000 to groups of American educational institutions and organizations to carry out such programs of language and area studies as faculty team seminars, interdisciplinary and cooperative seminars, study and research in foreign languages and civilizations, and conferences; (2) overseas group and individual research and study projects (33 grants of $1 million), to individuals or groups of educational administrators and teachers for the support of the overseas research and study activities of American institutions; (3) overseas seminars in language, area and international studies (12 grants of $600,000), to institutions for the support of faculty and student seminars in language and area studies.

### U.S. OVERSEAS RESEARCH PROJECTS

The second major purpose of Public Law 480 funds is to support the overseas aspect of American research projects. In fiscal year 1968, $116,000 in carryover funds will support eight continuing bibliographic and translation projects in the Public Law 480 countries.

In fiscal year 1969, $800,000 is requested for overseas research programs and activities, designed to serve three main purposes:

(1) investigation of educational programs, methodology, and problems in other countries which are of major concern in the United States; (2) meeting U.S. national needs for information on foreign educational systems; and (3) providing data which will enable American educational institutions, organizations, and agencies to improve the planning, execution, and evaluation of their educational exchange programs.

EXAMPLES OF COMMON PROBLEMS

Here are some examples of the type of education problems which would be of mutual concern to the United States and the countries involved which may be supported by overseas language, area, or international studies research: (1) teaching of foreign languages, including English as a second language and bilingualism; (2) the dropout problem and juvenile delinquency; (3) education for the handicapped and for cultural and racial minorities; (4) vocational education programs and their effectiveness in meeting national manpower needs; (5) the role of education in national development; (6) educational television; and (7) continuation of annotated bibliographies and translation programs of comparative educational literature.

We are convinced that this program of training and research for American education represents a very practical use of excess foreign currency for the benefit of all levels of American education.

We will be pleased to answer any questions you may have.

CONGRESSIONAL DENIAL OF 1968 BUDGET REQUEST

Senator HILL. You had an estimate last year but the Congress did not give you any funds?

Mr. LEESTMA. That is right, sir.

Senator HILL. What was the main reason for that? Do you recall?

Mr. LEESTMA. I would like to call on my colleague, if I may, for the answer to that question.

Mr. CARDWELL. Mr. Chairman, the House initiated the action that eliminated the full request.

Senator HILL. They did and they did not allow you anything?

Mr. CARDWELL. That is right. My impression from the discussions that occurred is that they were concerned about whether the programs themselves would prove of benefit to this country. We have centered much of our discussion with them this year on that very point.

We would like to leave the Congress with all the information that we have that would substantiate our position which is that these programs do in the final analysis help this country and they do so by making use of funds that are otherwise excess.

Senator HILL. Otherwise excess?

Mr. CARDWELL. Yes, sir.

Senator HILL. In other words, if they were not used for this purpose they would not be used for any purpose?

Mr. CARDWELL. For any purpose having to do with education. That is correct.

DEPARTMENT REDUCTION OF BUDGET REQUEST

Senator HILL. I notice, however, that the Budget Bureau reduced your request by $3,400,000; is that right?

Mr. CARDWELL. I think the Department reduced the request.

Senator HILL. I mean the Department, not the Budget Bureau.

Mr. CARDWELL. We were concerned about growing from a "no-appropriation" in 1968 to a level of over $7 million in 1969. That was the basis for the $4 million level that is contained in this request.

Senator HILL. The Department cut down to the $4 million?

Mr. CARDWELL. Yes.

ANTICIPATED 1969 PROGRAM BENEFITS

Senator HILL. If you get this $4 million, what do you think the results will be?

Mr. LEESTMA. I think they will be significant, Mr. Chairman, for the reasons set forth in the statement. I think they would provide the very kind of overseas experience that is really inherent in the concept of language and area studies.

Experience abroad is, if you please, the living laboratory for language and area studies specialists.

Secondly, I believe the activities that would be financed under this request for excess foreign currencies would produce a variety of information of benefit to the United States along the lines listed on the last page of my prepared statement. Such projects would give more insight into, more knowledge of, what other countries are doing, the experiments they are conducting, to permit us to make judgments about the possible usefulness of their experience here in our own programs in the U.S.

From the standpoint of pure scholarship, the acquisition of knowledge about and insight into other countries, there is just no substitute for working with materials produced in other countries and, in fact, in making studies on the ground, so to speak.

Senator HILL. Making studies right at firsthand?

Mr. LEESTMA. Right at firsthand.

Senator HILL. Have you been over to Europe and personally investigated some of these programs?

Mr. LEESTMA. I have not yet had the opportunity to investigate any of these particular programs at firsthand. I am familiar with a good many of them at secondhand and with the kind of thing that could be done through my own foreign experience and therefore strongly support this program.

Senator HILL. When you say secondhand, what do you mean?

Mr. LEESTMA. Reading the reports that have been written, proposals that have been made, and talking with people who have plans in progress or who have conducted research activities with such funds in the times past.

Mr. HOWE. Mr. Leestma has just joined the Office of Education. He has been in the Secretary's Office for less than 6 months. Dr. Ralph Flynt, whom you may remember who appeared before you——

Senator HILL. Where is he now?

Mr. HOWE. He has gone to the Secretary's Office. He is in charge there of the studies requested by the Senate.

Mr. Leestma is in charge of the program for the first time and appearing before you for the first time.

Senator HILL. Is there anything else you would like to add, sir?
Mr. LEESTMA. No, sir.
Senator HILL. Is there anything you other gentlemen would like to add? How about you, young lady?
Mrs. TANDLER. No, thank you.

## Salaries and Expenses

**STATEMENT OF BERNARD SISCO, ASSISTANT COMMISSIONER FOR ADMINISTRATION**
**ACCOMPANIED BY:**
**HAROLD HOWE II, COMMISSIONER OF EDUCATION**
**LEON SCHWARTZ, DEPUTY ASSISTANT COMMISSIONER FOR ADMINISTRATION**
**MRS. SALLY H. BOND, ACTING BUDGET OFFICER**
**JAMES B. CARDWELL, DEPUTY ASSISTANT SECRETARY, BUDGET**

### Appropriation Estimate

"SALARIES AND EXPENSES

"For expenses necessary for the Office of Education, including surveys, studies, investigations, and reports regarding libraries; coordination of library service on the national level with other forms of adult education; development of library service throughout the country; purchase, distribution, and exchange of education documents, motion-picture films, and lantern slides; and for rental of conference rooms in the District of Columbia; [$37,385,000. *Provided*, That the sum made available in the 'Department of Health, Education, and Welfare Appropriation Act, 1967' for transfer to the 'Office of Secretary, salaries and expenses' for a comprehensive study of training programs financed in whole or in part with Federal funds shall remain available until June 30, 1968] *$46,100,000.*"

APPROPRIATION LANGUAGE CHANGES

It is requested that the "*Provided*, That the sum made available in the 'Department of Health, Education, and Welfare Appropriation Act, 1967' for transfer to the 'Office of Secretary, salaries and expenses' for a comprehensive study of training programs financed in whole or in part with Federal funds shall remain available until June 30, 1968." be deleted since availability expires.

AMOUNTS AVAILABLE FOR OBLIGATION

| | 1968 | 1969 |
|---|---|---|
| Appropriation | $37,385,000 | $46,100,000 |
| Actual transfer to "Operating expenses, Public Buildings Services," General Services Administration (rent) | −58,958 | |
| Cutback from the 1968 President's budget required by H.J. Res. 888 | −713,000 | |
| Total currently authorized for obligation | 36,613,042 | 46,100,000 |
| Plus: | | |
| Proposed release of reserves for increased pay and postal costs | 713,000 | |
| Proposed transfer of reserves created by H.J. Res. 888 from "Elementary and secondary educational activities" for increased pay and postal costs | 193,934 | |
| Total available for obligation | 37,519,976 | 46,100,000 |
| Disposition of cutback: To be used for pay and postal costs in this account (total) | 713,000 | |

OBLIGATIONS BY ACTIVITY

| | 1968 estimate | | 1969 estimate | | Increase or decrease | |
|---|---|---|---|---|---|---|
| | Positions | Amount | Positions | Amount | Positions | Amount |
| Executive direction and administration | 519 | $7,031,976 | 534 | $7,956,000 | +15 | +$924,024 |
| National Center for Educational Statistics | 272 | 5,638,000 | 328 | 8,297,000 | +56 | +2,659,000 |
| Elementary and secondary education | 516 | 7,311,000 | 571 | 8,418,000 | +55 | +1,107,000 |
| Adult, vocational, and library education | 285 | 4,228,000 | 318 | 4,939,000 | +33 | +711,000 |
| Higher education | 446 | 5,676,000 | 529 | 6,893,000 | +83 | +1,217,000 |
| Research | 258 | 3,841,000 | 284 | 4,308,000 | +26 | +467,000 |
| Education of handicapped | 89 | 1,133,000 | 145 | 2,001,000 | +56 | +868,000 |
| Educational personnel development | 160 | 2,661,000 | 209 | 3,288,000 | +49 | +627,000 |
| Total obligations | 2,545 | 37,519,976 | 2,918 | 46,100,000 | +373 | +8,580,024 |

OBLIGATIONS BY OBJECT

| | 1968 estimate | 1969 estimate | Increase or decrease |
|---|---|---|---|
| Total number of permanent positions | 2,545 | 2,918 | +373 |
| Full-time equivalent of all other positions | 142 | 126 | −16 |
| Average number of all employees | 2,422 | 2,755 | +333 |
| Personnel compensation: | | | |
| Permanent positions | $24,094,000 | $28,252,000 | +$4,158,000 |
| Positions other than permanent | 1,358,000 | 1,029,000 | −329,000 |
| Other personnel compensation | 318,000 | 317,000 | −1,000 |
| Total personnel compensation | 25,770,000 | 29,598,000 | +3,828,000 |
| Personnel benefits | 1,879,000 | 2,162,000 | +283,000 |
| Travel and transportation of persons | 2,077,000 | 3,438,000 | +1,361,000 |
| Transportation of things | 161,000 | 300,000 | +139,000 |
| Rent, communications, and utilities | 1,430,976 | 1,907,000 | +476,024 |
| Printing and reproduction | 1,049,000 | 1,689,000 | +640,000 |
| Other services | 4,729,000 | 6,163,000 | +1,434,000 |
| Supplies and materials | 324,000 | 396,000 | +72,000 |
| Equipment | 100,000 | 447,000 | +347,000 |
| Total, obligations by object | 37,519,976 | 46,100,000 | +8,580,024 |

*Summary of changes*

| | |
|---|---|
| 1968 enacted appropriation | $37,385,000 |
| Cutback required by H.J. Res. 888 | −713,000 |
| Proposed release of reserves for increased pay and postal costs | +713,000 |
| Proposed transfer of reserves created by H.J. Res. 888 from "Elementary and Secondary Educational Activities" for increased pay and postal costs | +193,934 |
| Actual transfer to "Operating expenses, Public Buildings Service," General Services Administration | −58,958 |
| 1968 total estimated obligations | 37,519,976 |
| 1969 estimated obligations | 46,100,000 |
| Total change | +8,580,024 |

| | Base | | Change from base | |
|---|---|---|---|---|
| | Positions | Amount | Positions | Amount |
| Increases: | | | | |
| A. Built in: | | | | |
| 1. Annualization of positions authorized | | | | $519,024 |
| 2. Increased pay costs | | | | 760,000 |
| B. Program: | | | | |
| 1. Cost to fund present authorized level: | | | | |
| (a) Reduction in lapse rate | | | | 1,135,000 |
| (b) Increased cost of other services | | | | 2,850,000 |
| 2. New programs: | | | | |
| (a) Salaries and related costs for new positions | | | 373 | 3,134,000 |
| (b) Computer services | | $1,750,000 | | 1,450,000 |
| (c) Studies and contracts | | 706,000 | | 391,000 |
| Total increases | | | 373 | 10,239,024 |
| Decreases: | | | | |
| 1. Cost relating to program support items reflected in other activities | | | | −1,659,000 |
| Total decreases | | | | −1,659,000 |
| Total net changes requested | | | +373 | +8,580,024 |

EXPLANATION OF CHANGES

The funds requested for Salaries and Expenses, Office of Education, represent an increase of $8,580,024 and 373 positions providing a total of $46,100,000 and 2,918 full time positions in 1969. This will support 2,755 man years, including part-time, temporary, and intermittent employment, and related costs.

The request first allows $1,279,024 for two types of built-in funding. They are:

(1) $519,024 necessary to annualize the 130 positions authorized in 1968.

(2) $760,000 necessary to annualize the 1968 pay cost.

Secondly, $8,960,000 to fund presently authorized level of operation, 373 new positions, additional computer services, and contracts:

(1) $1,135,000 is needed to fully fund currently authorized positions. The Office of Education presently does not have funds to support 10% of the authorized positions. This request will enable the Office to reduce the unfilled positions to 4%.

(2) $2,850,000 is needed to fund increased costs of utilities, communications, printing, travel, day-to-day housekeeping, etc.

(3) $3,134,000 to support 373 positions and related costs. This increase is required to cope with workload being generated in the following areas:

(a) The guaranteed student loan programs began to have an impact on the Office of Education in 1967 with a guarantee of 330,088 loans. By 1969 it is estimated there will be 1.7 million outstanding loans. With this program, the Office deals directly with 16,600 lending institutions although there are approximately 59,000 eligible, 2,000 higher education institutions and 84 State and nonprofit private insurance agencies. Each request for a loan has to be verified as to eligibility. This involves checking with the lending institution and the higher education institution as well as scanning 27 separate items on the application. Each loan will be coded and processed. Since each loan could possibly be kept active 15 years, the cumulative increment will be astronomical. Current projections indicate that a backlog of nearly 900,000 transactions will exist by July 1, 1968.

Pending legislation provides for the re-insuring of loans made by the State agencies and if there are defaults the purchase of 80% of the default as well as attempts to collect the default. Further amendments would also provide acquisition and conversion fees to lending institutions in an effort to encourage participation.

b. Two major educational programs were established by the 90th Congress. The first, the Education Professions Development Act, will broaden and strengthen programs to train teachers and other educational personnel. The second, the Elementary and Secondary Education Amendments of 1967, expands existing programs as well as providing new programs for dropout prevention, bilingual education, planning and evaluation, regional resource centers for the handicapped, centers for deaf-blind children, and recruitment of personnel and information on education of the handicapped.

With these programs the Office of Education undertakes certain responsibilities. Generally they are:

1. To prepare, reproduce and distribute guidelines and regulations in connection with the law.
2. To review all proposals to be sure all pre-requisites for funding are met.
3. To negotiate and notify recipient of award.
4. To maintain records with regard to awards.
5. To answer inquiries regarding the programs.
6. To gather necessary statistics.
7. To monitor and evaluate.
8. To report to Congress and the educational community.

(4) $1,450,000 increase in computer services to further aid in fulfilling the Office's responsibilities and to provide on a timely basis the needed statistical data. With this increment significant gains will be accomplished in the development of an integrated processing system for the programs which the Office administers; development of the accounting system into a comprehensive, timely reporting system; and the continued development of the software and acquisition of the hardware required for a sophisticated query system which will allow users of data bases to obtain data through the use of remote inquiry terminals located at strategic places.

(5) $391,000 increase in studies and contracts. This will support collection of basic data, and the development of statistical models. Also included are funds to support training of Office of Education personnel.

A decrease of $1,659,000 in the base is reflected for field readers, program consultants, evaluations and advisory committees previously funded in salaries and expenses but provided under program support in other activities in 1969.

EXPLANATION OF TRANSFERS

| | 1968 estimate | 1969 estimate | Purpose |
|---|---|---|---|
| Transfer to: "Operating expenses, public buildings service," General Services Administration | $58,958 | $58,958 | Rental of space. |
| Comparative transfer from: "Elementary and secondary educational activities" | 193,934 | 193,934 | Transfer provides funds for 1968 pay costs. |

| | 1968 estimate | | 1969 estimate | | Increase or decrease | |
|---|---|---|---|---|---|---|
| | Positions | Amount | Positions | Amount | Positions | Amount |
| Salaries and expenses | 2,545 | $37,519,976 | 2,918 | $46,100,000 | 373 | $8,580,024 |

INTRODUCTION

The request for 1969 of $46,100,000 and 2,918 positions will allow the Office of Education to fully respond to the administrative and technical support needed and desired by the educational community. Since the thrust of Federal Aid to Education began, the Office has utilized its administrative resources to prepare the guidelines and regulations; to review grant and contract proposals and to make the awards.

The time is fast approaching when we must answer other needs and questions such as: What impact is the Federal aid to education leaving on the educational community? Is there a need for further aid? Are the funds being spent in the local communities as intended by laws?

The requested increases will aid in answering such questions, as well as providing administrative resources to implement the new programs authorized by the Education Professions and Development Act and the 1967 amendments to the Elementary and Secondary Education Act. The vital functions of review, evaluation and planning will be allowed to be performed if the resources become available. There must be closer interaction between the educational communities and the Federal Government. This will involve site visiting, monitoring, collecting basic data and national reporting. Since the activities to follow will explain the requested increases along programmatic needs, the explanation provided below will speak to object class increments.

The request for 1969 for personnel compensation and benefits for permanent positions will support 2,629 man-years, an increase of 349. The lapse rate on the 1968 authorized positions is 10 percent which is above the accepted rate throughout the Federal Government of 4 percent. The request for 1969 will provide a 4 percent level for the positions previously authorized plus a 50 percent lapse on the 373 new positions requested. The budgeted amount for positions other than permanent reflects a decrease of $329,000 which in 1968 supported advisory committee and council members and direct programmatic consultant fees, which is being requested in other budget activities as program support.

There is requested $3,438,000 for travel expenses for 1969. The Office's needs for travel centers around two major areas: (1) Approximately 65% of the request will allow (a) visits to State agencies to aid in implementing new programs; to review and coordinate programs and to discuss administrative problems (b) visits to local educational agencies, institutions, and organizations for monitoring; data gathering; trouble shooting; and consultation to improve projects. It is estimated that these efforts will require 12,000 trips and 40,000 man-days of travel. (2) The 1969 estimate provides $1,168,000 for conference, workshop and meeting travel. An estimated 6,400 trips and 19,000 man-days of travel will be expended to implement new legislation; provide program explanation and interpretation; program development; and exchange of information.

Close interaction is often needed to provide the technical assistance desired by the educational community. With an estimated 60,000 active grants or contracts providing support for every phase of education, technical assistance is needed.

Fairly recent changes in regulations regarding travel and transportation of things have been implemented to assist and encourage individuals, especially those in critical shortage categories, to seek Federal employment. Our experience indicates that a level of $300,000 for transportation of things is warranted for 1969.

Nearly half of the request for rent, communications and utilities in 1969, $900,000, is for penalty mail. The recently increased postal rates and the volume of mail to and from the educational community necessitates this level. The cost to operate and maintain telephones in 1969 is estimated at $674,000. The charges for rental of equipment and rental of additional space is budgeted at $333,000.

The Office as the leader and focal point for Federal aid to education must communicate with the educational community. Printed material is one media used. Approximately 25 percent of the population is receiving some form of education. The programs attempt to reach each in some way. Our request for 1969 is $1,689,000. With these funds forms must be printed, reports made, statistics provided, digests prepared, booklets and magazines produced. Each in its own way aims at providing and informing the educational community, touching all 50 States and outlying areas and 26,000 school districts.

The funds requested for other services can be put into several categories. (1) Data processing services—the requested increment is $1,450,000 providing a total of $3,200,000 for 1969. With a volume of data flowing to and from the Office, manual record keeping is impossible. (2) Collection of statistical data—with the request for statistical data exemplified by the recent requirement for a report on educational manpower provided in the Education Professions Development Act, our requirements for 1969 are estimated at $300,000. (3) Miscellaneous—The requested support for fiscal year 1969 is for $2,663,000. This amount provides funds for machine repair; employee health unit; security clearances; procurement costs; support of committees, conferences, etc.; employee training; support of departmental library; employee compensation fund; and general housekeeping items.

The amount requested for 1969 for Supplies and Materials is $396,000. This represents $135 per position.

The equipment request provides $500 for new positions to be filled and $60 for positions previously funded.

Since the President's Budget was submitted, a new organizational unit, Educational Personnel Development, has been established to focus its efforts on Teacher Training Programs. The new activity is reflected in this submission.

Several noteworthy workload indicators to further illustrate the Office of Education's growth and magnitude of programs are shown on the attached sheet.

WORKLOAD INDICATORS

| | Fiscal year 1965 actual | Fiscal year 1967 actual | Fiscal year 1968 estimate | Fiscal year 1969 estimate |
|---|---|---|---|---|
| Number of programs administered | 37 | 88 | 91 | 100 |
| Funds available | $1,505,377,955 | $3,852,302,114 | $3,887,403,128 | $4,118,627,889 |
| Man-years available | 1,144 | 1,970 | 2,105 | 2,427 |
| Number of grant or contract proposals reviewed (other than student loans) | 20,286 | 58,594 | 64,000 | 75,000 |
| Number of awards (projects approved at State level) | 14,196 | 28,585 | 30,000 | 32,600 |
| Number of grants and contracts administered | 26,972 | 54,311 | 57,000 | 60,000 |
| Number of insured student loans eligible for interest payments | 0 | 379,000 | 1,300,000 | 1,700,000 |
| Incoming mail | 2,164,214 | 6,195,776 | 7,022,000 | 8,000,000 |
| Outgoing mail | 1,448,879 | 4,913,138 | 6,860,000 | 7,500,000 |

1. EXECUTIVE DIRECTION AND ADMINISTRATION

| | 1968 estimate | | 1969 estimate | | Increase or decrease | |
|---|---|---|---|---|---|---|
| | Positions | Amount | Positions | Amount | Positions | Amount |
| Personnel compensation and benefits | 519 | $5,365,000 | 534 | $5,831,000 | +15 | +$466,000 |
| Other expenses | | 1,666,976 | | 2,125,000 | | +458,024 |
| Total | 519 | 7,031,976 | 534 | 7,956,000 | +15 | +924,024 |

JUSTIFICATION OF ESTIMATE

Included in Executive Direction and Administration is the Office of the Commissioner and Staff Offices of Legislation; Program Planning and Evaluation; Information; Programs for the Disadvantaged; International; Federal-State Relations; and Administration.

The services and activities of this area represent those overall activities of the Office of Education which promote the advancement of the programs and facilitate their operation.

The funds requested for Executive Direction and Administration represent an increase of $924,024 and 15 new positions over 1968.

COST TO FUND PRESENT AUTHORIZED LEVEL

The request first allows $643,024 which will fund the annualization of pay cost authorized in 1968, increases in costs of utilities, communications, printing, travel, etc., and in addition will fund 22 more man-years over the 1968 base of 476. The need for the man-years can be exemplified by a description of the positions to be filled with these funds.

In the Office of the Commissioner, an education specialist will aid the Deputy Commissioner and his assistant in support of the manifold responsibilities, by performing diverse duties of research, writing, contacts and attending meetings of educational and governmental organizations and committees.

In the Office of Legislation a research assistant and a legislative specialist are requested to develop legislative specifications, prepare testimony, and provide technical assistance. Both positions will aid in meeting the growing demands for technical services and information on education programs by the Congress, authorizing committees, investigative committees and individual members.

The Office of Program Planning and Evaluation requests funds to fill five vacant positions. This office deals continuously with the current and projected impact of Federal programs on such economic factors as the demand for education, the costs of meeting that demand, the supply of real resources, and the social and economic return to such investments. Systems analysts will (1) conduct cost benefit analyses of existing and proposed educational programs, (2) assess the operational effectiveness of experimental educational programs, (3) estimate the resources required to implement and operate educational programs, (4) design evaluation procedures for educational programs, and (5) construct alternative means for allocations of Federal educational expenditures and assess the benefits of these alternatives.

The Office of Information requests funds to support two positions. An editor is needed to assist with the extensive editorial processing of 200–300 Office of Education manuscripts which are reviewed annually for policy, style, and layout. An Information Assistant will fill the need to carry out liaison and cooperative projects with the Bureaus.

Office of International Education requests funds for an Education Specialist to assist in the preparation of position papers on American policy in international education matters, official U.S. replies and documents for international bodies, and background papers for U.S. participation in international meetings on education.

To provide general assistance to the very small professional staff consisting of the Assoicate Commissioner and two senior specialists, the Office of Federal-State Relations requests funding for a Research Assistant to perform duties of research, writing and public contacts.

The Office of Administration requests funds to support 26 positions as follows:

In the Budget and Manpower Division, two positions are requested to be funded:

A Budget Analyst who will assist in the preparation of reports so that accurate and timely data can be developed to respond to a very large volume of Congressional and program requests. The cost reduction decisions require many reports that must be timely to impact the decision-making process.

A Management Intern to follow a training and development program in the Budget and Manpower area and mature professionally into the budget-making process.

In the Finance Division, 4 Accountants will be required.

One will be Head of the Reports Section of the Accounting Operations Branch. With the advent of the automated accounting system and professional skill brought to bear on reports production, not only can increasingly required reports imposed by external organizations be released in a timely manner, but additional resource data can be provided for program and institutional mangement.

Two will provide a professional background and capabilities to the multi-billion dollar letter of credit operation, to review requests for letters of credit, follow up a conformity with reporting requirements and most importantly to analyze the reports received. Constant surveillance and feedback to the States and the Program Offices is required to ensure that the Letter of Credit is properly handled as to utilization of funds from both a fiscal and program viewpoint.

A Systems Accountant will provide additional systems capability and review established procedures as defined in the accounting manuals being prepared with contract assistance for more expeditious handling of documents without increase in the clerical staffs.

In the Contracts Division, four contract specialists are requested to be funded.

Strong, professional leadership is required in the organization that provides a focus for receipt of broad guidelines from external organizations, primarily the Department, translation of the guideline into meaningful policy and workable procedures for dissemination to the Program Offices.

It is essential to establish a Procurement Review Office to insure that completed actions are reviewed, that minimum standards are being complied with, and that the overall quality and effectiveness of the office procurements are measured.

For maximum efficiency and equipment utilization strong leadership is required by the Office to ensure that property procedures and accounting requirements are fully adhered to by the recipients who procure equipment under contracts and grants.

The Management Evaluation Division requests funds for four analysts.

Two analysts are needed to work on the usual and numerous requests for management studies which cut across the Office as a whole, such as: (a) Grants Management Study; (b) Records Program Study; and (c) Reproduction Study, all of which could not be undertaken, though highly desirable.

Two analyst trainees are needed for productive work in the sorely neglected areas of issuances, and participation as team members in regular management studies while undergoing development for broader responsibilities within the Office.

The General Services Division requests funds for three positions.

The Office of Education presently has one Space Planning Specialist. The Office is faced with a considerable workload in planning and laying out space to alleviate current crowded conditions and to provide adequate space for newly formed Bureaus and other internal organizations. A Space Planning Assistant would be available to assist in the property management area when necessary.

Currently there is no Administrative Assistant in the General Services Division. One is needed to help relieve the Division Director of the burden of administrative details, such as preparing reports, maintining follow-up on reports from various organizations within the Office.

A Clerk-typist is needed to give support to higher grade technicians and professionals responsible for distribution of publications. The Office is in the process of converting mail lists to the Automatic Data Processing System which created an increasingly large workload related to the manual preparation of forms for key punching, responses to correspondence regarding additions to mail lists, liaison with the ADP Sections in the Office and in the Department.

The Personnel Division requests funds to fill nine vacant positions.

The Office has been carrying out recruitment with the detail of personnel specialists at the expense of neglecting other functions in the Personnel Division. To alleviate this problem area a personnel staffing specialist is the need.

Important aspects of position management have not been accomplished because of the lack of classification specialists to undertake these activities. The additional classifier would give the resources necessary at least for a minimal start in the important areas of annual classification surveys, assisting managers in achieving better position structures, control of high-grade positions, planning organizations, and developing career ladders.

The Appointments and Records Branch has been completely inundated by necessary paperwork in achieving and maintaining some semblance of accurate personnel records during a period of rapid expansion of the Office. The Office was able to keep its head above water only through considerable overtime, much of which was volunteered and uncompensated. An additional clerk will help in full implementation of the Automated Personnel Information Retrieval System now partially in operation, in assuring that employees get the protection of health benefits and life insurance, and in getting periodic step increases when due.

The Personnel Specialist Trainees will be part of a Management Intern Program the Office is developing. There is currently a lack of knowledge and capabilities in the Personnel Generalist field. Additionally, as vacancies occur, it has been difficult to find candidates to fill shortage categories such as position classification specialists. These two trainees will be rotated among the Branches in the Personnel Office, doing productive work as well as being developed toward filling higher level positions in the future.

Four Management Interns are for rotational training in broad administrative programs in various sectors of the Office of Education. This will fill a vital need for a long range development of career management talent. Heretofore, the Office has lost the pick of the graduating crop due to the lack of a Management Intern Program as a result of enormous demands on the available manpower ceilings.

NEW POSITIONS AND RELATED COST

The second requested increment of $135,000 will support the following 15 new positions requested in the Executive Direction and Administration area.

To support a new organizational entity, the Bureau of Educational Personnel Development, a Budget Analyst will be required to manage the Education Professions Development Act. The multifaceted and complex program requires the support of a high level analyst to insure a well-documented budget implemented in accordance with Department fiscal policies.

A Supervisory Accountant is requested to act as Assistant Branch Chief in the Accounting Operations Branch which is undergoing a transition from manual record keeping to automated accounting. This system introduces to the Branch a requirement for new procedures, new contracts, and new policies. This need plus an ever increasing workload, dictate the necessity for an accounting professional to supplement and back up the Branch Chief.

The Educational Professions Development Act and 1967 amendments to ESEA has created the need for three additional contract specialists who will negotiate and maintain the best interest of the Federal Government as outlined in the law.

Two Management Analysts at the journeyman level are requested to establish and implement a manpower utilization program within the Office. Their assignments would deal with establishment of work measurement standards, staffing criteria, and manpower surveys. These activities would deal with obtaining the best utilization of the manpower available through identifying and correcting poor manpower utilization practices.

There is a distinct need and value to Management Supervisory Training in the Office of Education as pointed out by the Edith Green report. The addition

of an Employee Development Officer would enable the Office to assure the minimal provision of the three proposed courses in this area. A Clerk-typist would provide assistance in lesson plans, handouts, and general support to classroom efforts.

A mathematician is necessary to design and execute mathematical models. This position would assist the Office in determining factors such as demand and cost-of-production in post-secondary education.

The increasing amount of detail involved with program functions, and the unit costs of these functions, need to be correlated by a cost analyst. One economic analyst would fill the need for assessing how economic factors (e.g. the demand for and costs of education, level of investment returns, supply of real resources) are affected by the impact of Federal programs. In addition, two secretaries are requested to be funded in order to assist in this work.

One institutional research specialist would deal with measuring the effects that Federal programs have on higher education institutions, especially with regard to their productivity and management of resources.

A research assistant is needed to provide backup work in connection with the special assignments carried out on behalf of the Commissioner by performing research and answering correspondence.

Also requested in this activity is an increase of $146,000 which will provide a total of $246,000 for employee training, A quote from the Edith Green report will best justify this request, "Certainly the Office should provide a model training program, or it will be accused of not practicing what it preaches."

NEW POSITIONS REQUESTED, FISCAL YEAR 1969

| | Grade | Annual salary |
|---|---|---|
| Executive direction and administration: | | |
| Program analyst | GS–15 | $18,404 |
| Contract specialist | GS–15 | 18,404 |
| Assistant branch chief | GS–14 | 15,841 |
| Contract specialist | GS–14 | 15,841 |
| Do | GS–13 | 13,507 |
| Mathematician | GS–13 | 13,507 |
| Budget analyst | GS–12 | 11,461 |
| Accountant | GS–11 | 9,657 |
| Research specialist | GS–11 | 9,657 |
| Management analyst (2) | GS–11 | 19,314 |
| Research assistant | GS–7 | 6,734 |
| Secretary | GS–7 | 6,734 |
| Do | GS–6 | 6,137 |
| Clerk-typist | GS–6 | 6,137 |
| Total (15) | | 171,335 |

2. NATIONAL CENTER FOR EDUCATIONAL STATISTICS

| | 1968 estimate | | 1969 estimate | | Increase or decrease | |
|---|---|---|---|---|---|---|
| | Positions | Amount | Positions | Amount | Positions | Amount |
| Personnel compensation and benefits | 272 | $3,062,000 | 328 | $3,707,000 | +56 | +$645,000 |
| Other expenses | | 2,576,000 | | 4,590,000 | | +2,014,000 |
| Total | 272 | 5,638,000 | 328 | 8,297,000 | +56 | +2,659,000 |

JUSTIFICATION OF ESTIMATE

The Center provides design, direction, coordination, and execution of the statistical programs of the Office of Education. It collects, processes, analyzes, and disseminates statistical data and analytical studies of the Office and the educational community. It develops comprehensive analytical models to illustrate the operational structure of American education and applies these models to the study of policy and budget allocation of Federal education programs. The Center also coordinates Federal, State, and local basic data systems.

The 1969 request provides for an increase of 56 positions and $2,659,000.

COST TO FUND PRESENT AUTHORIZED LEVEL

The request first allows $642,000 which will fund the annualization of pay cost authorized in 1968, increases in costs of utilities, communications, printing, travel, etc., and in addition will fund 24 more man-years over the 1968 base of 237. The need for the man-years can be exemplified by a description of the positions to be filled with these funds.

A major task in the Center is the production and updating of directories of public school systems and public and non-public secondary schools. To aid in production on a timely bases a statistical clerk position is requested to be funded in 1969.

To simplify and expedite the collection and improve the usefulness of data from State agencies and local school systems in conjunction with the Elementary Secondary General Information Survey, funding for a statistical clerk position is requested in 1969.

The Terminology Compatibility Branch is involved in a project to stimulate State and local school systems as well as individual schools to develop and implement modern management techniques to help in administration of education. Since this project involves cooperative development of handbooks, it is an extremely detailed, tedious and time-consuming job. An education specialist position in 1969 is required to handle the work.

The Higher Education Studies Branch launched a very successful adaptation of its basic survey program, known as the Higher Education General Information Survey. Numerous duplications and overlaps in requests for information have been eliminated, and collection and processing of data have become more efficient. To add the important area of Finance to this survey, an education specialist position is requested to be funded.

Two mathematicians are needed to aid in a study which will examine secondary school curricula in relation to the vocational aspirations and socio-economic backgrounds of the pupils. Sets of curricula will be developed which will enhance the quality of education in this area.

To conduct studies to guide the development of statistics on occupational training and to develop a comprehensive general purpose financial statistical system, two economists are requested to be funded in 1969.

Twenty-four positions are requested to be funded in the Automatic Processing Area. These computer systems analysts, computer programmers, computer technicians and secretarial typing assistants will program and maintain data processing systems to support specific education programs. Assistance of every kind is needed in the Automatic processing area. With the large number of programs, 100; institutions of higher education, 2,000; school districts, 26,000; and lending institutions, 16,600 the requests from the educational community for statistical information keeps mounting. The Office could and should be the focal point for educational statistics if they receive the needed resources.

NEW POSITIONS AND RELATED COSTS

The second requested increment for the National Center for Educational Statistics is for 56 new positions and supporting cost of $467,000. With the advent of new programs authorized by the Education Professions Development Act and the 1967 Amendments to the Elementary and Secondary Education Act, new demands will be placed on the Center.

Three professional positions will be required to aid in furnishing statistical data pertinent to the annual report on the condition and adequacy of educational manpower as outlined in the Education Professions Development Act.

Prior to an analysis of statistical data comes the survey or correction stage. An important phase of this Activity is the design of the survey and design of forms. This involves methodological research and consultative services. The request in 1969 in this area is for two professional and a clerical position.

When the data begins to flow into the Office from the educational community, a number of detailed activities begin. These include receipt control, follow-up, edit specification writing, pre-machine edit, error listing corrections, review and validation of State summaries, review and validation of final tables and related correspondence. To aid in performing these functions in 1969 the request is for five statistical clerks and two clerk-typists.

In the statistical references, estimates, and projections area, seven new junior professional positions are requested: (1) to provide statistical services for the budget and program operations including the allotment of Federal funds to States and counties under Office of Education programs; (2) to provide statistical services

to the Congress and to the Office of Legislation for legislative and program planning; (3) to develop new projections and prepare State projections of selected educational statistics; (4) to prepare analyses and reports and assist in the development and publication of the *Historical Statistics and User's Guide* and, (5) to participate in the rapidly expanding reference function with emphasis on the preparation of data for UNESCO, *Statistical Abstract of the United States, HEW Trends*, and a variety of yearbooks, abstracts, and almanacs.

The Automatic Data Processing area requests twenty-six new positions in 1969. They are: (1) thirteen will be computer systems analysts who will develop computer systems for analyzing data and for carrying out such analysis for all elements of the Office. They will aid in responding to requests for data analysis and for taking the initiative to devise methods for revealing and displaying meaningful relationships implied by available data for program managers. They will further aid in providing automatic data processing systems analysis and programming services for all the organizations within the Office; (2) ten computer programmers will specify what the computer must do with the detailed data being collected and manipulated; (3) three clerical positions will provide the backup to the analysts and programmers.

In addition to the needs for the automatic data processing area, ten new positions are requested to implement a Management Information System. This system will provide for the coordination, review, design and reporting of information systems. More specifically:

(A) Seven new positions are requested to:

(1) Assess requirements for a management information system.

(2) Recommend priority for developing needed systems.

(3) Determine and schedule resources needed for development modification of management information systems.

(4) Monitor the progress to assure timely accomplishments of all systems development.

(5) Maintain liaison with requesting bureaus or offices regarding their management information needs.

(6) Develop and maintain an up-to-date framework and inventory of management information systems.

(B) Three new positions are requested to:

(1) Assess reporting requirements necessary for efficient operation at several levels: (a) top management, (b) Bureau offices and (c) Division—Branch.

(2) Identify sources of information required.

(3) Design report formats and regularly issue specified reports.

(4) Coordinate reporting requirements with the development of management information systems.

The third requested increment for 1969 provides $100,000 for a survey of Educational Manpower preliminary to a report on educational manpower as required by the Education Professions Development Act.

The fourth requested increase of $1,450,000 providing a total of $3,200,000 will allow for the needed data processing services.

The data processing services fall into four specific units of measurement:

(1) *Administrative support* processes provide the basis for allocating internal resources among alternative Office activities and for monitoring the effectiveness with which the resources are applied in support of the operating program. Administrative support includes the following subsystems: Work Planning and Control, Manpower Planning and Control, and Financial Management (budgeting and accounting for program and S&E funds), and Contract Monitoring.

(2) The *program management* process consists of three major elements: program planning, program execution, and program evaluation. The universality of these common elements permits program managers to draw supporting information from a common data base, even though program management subsystems remain tailored to accommodate unique features of a particular program.

(3) *Educational statistics* involves the continuous process of collecting, processing, and presenting large volumes of data that will provide a picture of all elements of the total educational system, its resources, and its management.

(4) *Service and support* activities do not belong to a particular management process, but include the special efforts that are needed to integrate operating subsystems.

The following table shows the distribution of the total fiscal year 1969 costs:

| Unit of measurement | Continued costs | Cost of new projects | Total |
|---|---|---|---|
| Administrative support | $260,000 | $380,000 | $640,000 |
| Program management | 672,000 | 768,000 | 1,440,000 |
| Educational statistics | 483,000 | 157,000 | 640,000 |
| Service and support | 335,000 | 145,000 | 480,000 |
| Total | 1,750,000 | 1,450,000 | 3,200,000 |

New projects to be undertaken in fiscal year 1969 include:

*Administrative Support.*—A more sophisticated accounting system to replace the interim accounting system; expansion of both the personnel and contract system into an integrated administrative support system; and a budget formulation system.

*Program Management System.*—An integrated management system that supports the planning, execution, and evaluation of several diverse programs; application of existing data processing systems that can serve other programs; expansion of selected existing data processing systems.

*Educational Statistics.*—Development of new general information systems; special analyses of existing program data.

*Service and Support.*—Several projects that will improve the use of data processing in OE, such as computer operations, training, and programmer aids.

NEW POSITIONS REQUESTED, FISCAL YEAR 1969

| | Grade | Annual salary |
|---|---|---|
| National Center for Educational Statistics: | | |
| Research analyst | GS–15 | $18,404 |
| Computer systems analyst (6) | GS–14 | 95,063 |
| Program officer (2) | GS–14 | 31,682 |
| Reports officer (2) | GS–13 | 27,014 |
| Program specialist (3) | GS–13 | 40,521 |
| Computer analyst | GS–13 | 13,507 |
| Information specialist | GS–13 | 13,507 |
| Education specialist (2) | GS–13 | 27,014 |
| Computer programer (3) | GS–12 | 34,383 |
| Information specialist | GS–12 | 11,461 |
| Statistician (2) | GS–12 | 22,922 |
| Reports officer | GS–12 | 11,461 |
| Computer systems analyst (3) | GS–12 | 34,383 |
| Education specialist (3) | GS–12 | 34,383 |
| Statistician (2) | GS–11 | 19,314 |
| Reports analyst | GS–11 | 9,657 |
| Computer programer (3) | GS–11 | 28,971 |
| Information specialist | GS–11 | 9,657 |
| Computer systems analyst (3) | GS–9 | 24,162 |
| Computer programer | GS–9 | 8,054 |
| Computer programer (3) | GS–7 | 20,202 |
| Reports analyst | GS–7 | 6,734 |
| Secretary (2) | GS–5 | 11,130 |
| Program researcher | GS–5 | 5,565 |
| Clerk-typist (2) | GS–4 | 9,990 |
| Secretary-stenographer (2) | GS–4 | 9,990 |
| Clerk-typist (3) | GS–3 | 13,398 |
| Total (56) | | 592,529 |

3. ELEMENTARY AND SECONDARY EDUCATION

| | 1968 estimate | | 1969 estimate | | Increase or decrease | |
|---|---|---|---|---|---|---|
| | Positions | Amount | Positions | Amount | Positions | Amount |
| Personnel compensation and benefits | 516 | $5,536,000 | 571 | $6,373,000 | +55 | +$837,000 |
| Other expenses | | 1,775,000 | | 2,045,000 | | +270,000 |
| Total | 516 | 7,311,000 | 571 | 8,418,000 | +55 | +1,107,000 |

JUSTIFICATION OF ESTIMATE

The Bureau of Elementary and Secondary Education is responsible for effective leadership and management of $2,000,000,000 in Federal financial assistance programs. Educational programs operated by State and local school systems are financially assisted under the Elementary and Secondary Education Act, the National Defense Education Act, and Impacted Aid throuth Public Laws 874 and 815.

These programs are conducted through State plans agreed to between a State agency and the Office of Education, grants to local school districts, project grants to State departments of education and contracts with institutions of higher education.

The Bureau of Elementary and Secondary Education requests an increase of $1,107,000 and 55 new positions in 1969.

Several noteworthy administrative accomplishments of the Bureau in 1968 are noted below:

1. 440 proposals were received from State departments of education requesting funds to strengthen their activities under Title V of the Elementary and Secondary Education Act. All proposals were reviewed, and more than 200 of these proposals were funded, grants negotiated and awarded, and payments made.

2. The annual report of accomplishments in strengthening State departments of education was prepared for the Title V Advisory Committee.

3. Allocations and grants were made under Title I of the Elementary and Secondary Education Act in which about 16,000 local educational agencies participated with an estimated 18,000 local projects costing $1,191,000,000.

4. Program leadership teams assisted State departments of education in making the most effective use of increased funds available under Title I.

5. A Title I evaluation program has been accomplished for the past year including the review and analysis of evaluation reports from all the States culminating in the preparation of an annual report to the Congress on Title I accomplishments. In addition, a program to increase evaluation effectiveness for next year's activities is being developed by working with the State agencies and contractors.

6. More than 2,000 proposals will be received in 1968, for grants for supplementary educational centers under Title III of the Elementary and Secondary Education Act. An average of two readings per proposal will be given by field readers under contract with the Office, and about 1,300 individual grants will be awarded for new and for continuing projects.

7. State agencies will submit about 360 State plan amendments, descriptions of projected activities and program reports for Bureau review and determination under the several State plan programs of the Bureau.

8. Approximately 3,600 applications under the nonpublic school testing program will be received and processed through 10 contracts with testing agencies.

9. During fiscal year 1968, the Impacted Areas program will review and process applications from 4,200 school districts enrolling 50 percent of all the school population in the Nation.

10. About 2,500 applications for institutes and fellowship programs were reviewed, and contracts were negotiated for 680 awards.

11. For all programs approximately 70,000 inquiries and informational requests were provided with responses.

After two full years of operation, Elementary and Secondary Education Act programs are now being audited by both the Department of Health, Education, and Welfare, and the Government Accounting Office. During fiscal years 1968 and 1969 all States are expected to be audited on Titles I, II, and V. Resolution of problems identified by these audits requires an increase of staff resources to consult with State agencies on program questions, accounting systems, financial and program documentation, payment systems, and operation of the letter of credit systems. In addition to these audits of State agencies, an increasing number of audit reviews and determinations are expected on the 2,000 current supplementary education center projects of local school districts for which the Bureau bears responsibility under Title III of the Elementary and Secondary Education Act.

COST TO FUND PRESENT AUTHORIZED LEVEL

The request first allows $623,000 which will fund the annualization of pay cost authorized in 1968, increases in costs of utilities, communications, printing, travel, etc., and in addition will fund 30 more man-years over the 1968 base of 465. The need for the man-years can be exemplified by a description of the positions to be filled with these funds.

The substantial amount of the Bureau's resources were expended at merely the basic requirements to keep the programs and funds moving. The first requested increase of $623,000 to fully fund 30 man-years will enable the Bureau to accomplish its stewardship at a level above the bare minimal. The vital functions of review, evaluation, and planning will be measurably strengthened by this full funding. The understaffing in these areas, identified by the "Study of the U.S. Office of Education, House of Representatives," will receive relief as a result of this full-funding. To implement the major program changes and to prepare for the new programs recently authorized by the Congress by the Elementary and Secondary Education Act Amendments of 1967, the Bureau has begun working to prepare the necessary regulations, guidelines, and plans. Since these changes and new programs will be effective for the coming school year in September, 1968, a considerable effort must be made to give as much as possible leadtime to the States and local school systems. Joint development of these program policy statements with user organizations is receiving high priority. In all this work, a major objective is to design the State plans, the grant applications and awards, and the procedures, in such form and manner that States and local school systems may "package" the various categorical programs to achieve greater impact on critical problems with procedural and reporting requirements streamlined to the maximum extent.

In fiscal year 1968 the Bureau of Elementary and Secondary Education has begun an operation of major importance which will expand its scope in fiscal year 1969. By this plan of operation the Bureau will cooperate with the State educational agencies in systematic and comprehensive planning of the Federal assistance programs in the States. The States will use resources of the Office of Education to assess their needs, establish priorities, and develop evaluation mechanisms. The Federal assistance programs may be drawn upon to support and strengthen State and local school system programs. State planning efforts are expected to result in concentrating the funding of various Federal, State, and local programs; targeting programs in strategic locations, such as large urban areas and isolated rural areas; focusing expenditures on priority areas; and establishing program innovations to identify promising practices. A team of 10 to 20 people from a State educational agency and 6 to 9 people from the Office of Education work jointly to analyze the needs and priorities of the State. In order to implement these priorities, this team then identifies the State, local, and Federal financial resources available, such as Titles I, II, and III of the Elementary and Secondary Education Act, Model Cities, Headstart, Follow Through, and teacher training under the Higher Education Act. In fiscal year 1969 the Education Professions Development Act will be utilized. This work will also examine means to simplify application, procedural, and reporting requirements. An objective will be to enable a State to submit a single application to qualify for a number of State plan programs, each of which presently requires a separate application. Techniques are being sought for effective devices to collect information on local school district programs that will be of benefit to the State, the Office of Education, and the Congress. This consolidation and streamlining of guidelines, regulations, and reporting forms, when accomplished will be responsive to a major recommendation of the "Study of the U.S. Office of Education." The response to these efforts has been most encouraging. The requests from State departments of education for Office of Education personnel are greater than permitted under current resources, even if Bureau staff are reassigned. Progress in State efforts in fiscal year 1969 is dependent upon an increase in resources. To improve and expand this major priority of Office activity, 18 professional and 8 clerical positions are requested to be funded to these working teams.

A new "pinpoint" disaster program was authorized by the 1967 amendments to impacted areas program. These disasters are those which are localized and not large enough to be classified as a Federal disaster area. When public school facilities have been destroyed or seriously damaged by natural catastrophe or other destruction, the Governor certifies the need for disaster assistance from State, local, and Federal funds. While not all these situations would require assistance the Bureau will have an additional workload as a result of this "pinpoint" amendment. For this purpose 2 professional positions and 1 clerical position are requested.

Understaffing has been the most persistent factor in complicating the Bureau's planning, programming, and evaluation efforts. In order to make the Federal role in education an effective role, the Office of Education must plan and evaluate carefully. A conscious and deliberate process of identifying needs, planning, testing, evaluation, and replanning is required. This is particularly critical in our

dispersed system of elementary and secondary education, where what is done today may not have effect until at least 5 years from now. Effective use of the planning, programming, and budgeting system is inhibited through understaffing. Legislative planning and development must find proposals which meet educational needs, and also pass the tests of practicality, budgetary consideration, and political acceptability. Greater involvement in the planning and evaluation process is needed on the part of States, local school people, and educational organizations. Similarly, the translation of legislative enactments into operating programs is involving greater participation by the States and local school staffs. A recent development is the referral to the Committee on Intergovernmental Relations of draft regulatory material for comments and suggestions by associated organizations. For effective accomplishment of these objectives 6 professional and 3 clerical positions are included in the request for full funding.

The migrant education program under Title I received a substantial increase in funding level as a result of the 1967 amendments. From a fiscal year 1967 level of about $9,000,000, the full-funding amendment increases to $41,000,000 in fiscal year 1968. Since the increase was made available halfway through fiscal year 1968, a heavy workload has been required for prudent investment of these funds. A staff increase is necessary in order that these programs be tailored to fit migrant education needs, workable administrative procedures for records, accurate testing tools, effective and comprehensive educational opportunities and interstate planning and implementation. One Program Manager, one Program Specialist, and one secretary are requested to carry out this Federal grant role, especially as it pertains to projects following migrant transients across State lines. They are also needed to prepare the comprehensive report on progress made, make a projection of future plans, and compile an overall evaluation of the effectiveness of all programs.

The central Bureau staff must initiate means to achieve the most effective use of programs, personnel and resources. Maximum effectiveness in these areas is dependent on the articulation, coordination and implementation of policy, establishment of priorities among available resources, and support of administrative operations. Heavy demands are made upon Bureau staff on gearing Bureau operations with other parts of the Office of Education and with the central operating units of the Department. Policy determination and coordination require frequent contact with other government agencies, the Bureau of the Budget, and the White House. Numerous requests for public contacts, speaking engagements and workshop participation have not been able to be accepted due to limited staff. Additional program and personnel responsibilities necessitate an increase in staff assigned to internal Bureau management functions such as information, financial management, personnel, correspondence control, and budget. For central Bureau management four professional and two clerical positions are requested to be funded in 1969.

NEW POSITIONS AND RELATED COSTS

The second requested increase for elementary and secondary educational activities in 1969 is funding of fifty-five new positions and related costs of $484,000.

Title IV of the 1967 amendments recognized the need for adequate leadtime to States and local school districts to plan for assistance provided under the Elementary and Secondary Education Act. In order to make use of this leadtime, planning assistance was authorized so that vital activities would not be overcome by lower-priority demands. Evaluation assistance was also authorized in recognition of the responsibility vested in local, State, and Federal officials for prudent investment of tax resources. In fiscal year 1969, $100,000 will be granted to each State agency for planning. Special projects for evaluation of these programs will be funded with State agencies and the Office of Education has requested $4,500,000 for this purpose. It is essential that a fully adequate staff be available in the Office of Education to implement the results of evaluation as well as administer the grant program to the States. Without adequate staff, these expenditures risk failure to ask the most relevant questions or to understand and translate the results into meaningful planning. The Office of Education staff will cooperate with State agencies, institutions of higher education and other organizations with evaluation expertise to design particular evaluative techniques, negotiate evaluation contract proposals, monitor contract performance, and analyze data on the effectiveness of programs in attaining goals sought by the Congress. Staff will also use the evaluation results to plan how to increase effectiveness of these programs. For this purpose the request provides funds for 8 professionals and 4 clerks. Pro-

fessional staff will be experienced in educational planning, economics, urban and rural sociology, test measurements, and statistics.

The 1967 amendments authorize two new programs of grants made directly to local educational agencies of a developmental and demonstration nature. For dropout prevention projects under section 707, $30,000,000 has been requested for fiscal year 1969. For bilingual education programs under Title VII, the fiscal year 1969 request is $5,000,000. Both these programs will develop "planned variations" in teaching methods and techniques so as to learn which elements are the most effective in teaching these particular children. Bureau staff will work with State and local district education staff so that projects funded under these programs will be integrated with other programs under State plans Federal funding. The objective will be to bring these new programs together with other programs such as Title I, Title III, and teacher training, so as to concentrate a "critical mass" of resource approach to these problems.

Dropout prevention demonstration projects, at the level of $2,000,000 to $3,000,000 for each project, will be funded at 10 to 15 locations of outstanding need in which there are high concentrations of school dropouts. Projects of this magnitude require a close and continuous relationship among the State, Federal, and local district grantee to develop the demonstration project, evaluate progress made and disseminate the results of the project through the involvement of other State and local educators. Each Bureau team will be able to handle an average of five projects. Bureau teams will be composed of professionals with expertise in actual school situations which have successful dropout prevention programs. For this purpose three Program Managers, two Program Specialists, fourteen Education Specialists, seven secretaries and two clerks are requested.

The bilingual program will concentrate upon the special educational needs of an estimated 3,000,000 children who are educationally disadvantaged because of their inability to speak English. Pilot projects, demonstrations of varied approaches, and solutions for problems of a given school will be initiated. Every effort will be made to incorporate these projects with other sources of funding in the grantee schools so as to maximize achievements. To administer this program, develop varied approaches, work out financing proposals with applicants, evaluate progress, and encourage other interested educators to benefit from these demonstrations and pilot projects, a staff of one Program Manager, one Program Specialist, five Education Specialists, two Education Assistants, and three secretaries are requested.

These new program activities bring about a need for central Bureau coordination and management. Administrative services necessary to support these new programs and people will require additional staff for assistance in financial and program management. For this purpose one professional position and two clerical positions are requested.

NEW POSITIONS REQUESTED, FISCAL YEAR 1969

| | Grade | Annual salary |
|---|---|---|
| Elementary and secondary educational activities: | | |
| Program officer | GS–15 | $18,404 |
| Education specialist (2) | GS–15 | 36,808 |
| Research analyst | GS–15 | 18,404 |
| Information officer | GS–15 | 18,404 |
| Program specialist | GS–15 | 18,404 |
| Education specialist (4) | GS–14 | 63,364 |
| Economist | GS–14 | 15,841 |
| Program specialist | GS–14 | 15,841 |
| Statistician | GS–14 | 15,841 |
| Education specialist (9) | GS–13 | 121,563 |
| Program manager (2) | GS–13 | 27,014 |
| Program specialist | GS–13 | 13,507 |
| Program manager | GS–12 | 11,461 |
| Education specialist (2) | GS–12 | 22,922 |
| Education specialist (6) | GS–11 | 57,942 |
| Education assistant | GS–11 | 9,657 |
| Mathematician | GS–11 | 9,657 |
| Education assistant | GS–9 | 8,054 |
| Secretary (7) | GS–6 | 42,959 |
| Secretary (3) | GS–5 | 16,695 |
| Clerk-typist (4) | GS–5 | 22,260 |
| Clerk (3) | GS–4 | 14,985 |
| Secretary-typist | GS–4 | 4,995 |
| Total (55) | | 604,982 |

4. ADULT, VOCATIONAL, AND LIBRARY PROGRAMS

| | 1968 estimate | | 1969 estimate | | Increase or decrease | |
|---|---|---|---|---|---|---|
| | Positions | Amount | Positions | Amount | Positions | Amount |
| Personnel compensation and benefits | 285 | $3,374,000 | 318 | $3,893,000 | +33 | +$519,000 |
| Other expenses | | 854,000 | | 1,046,000 | | +192,000 |
| Total | 285 | 4,228,000 | 318 | 4,939,000 | +33 | +711,000 |

JUSTIFICATION OF ESTIMATE

The adult, vocational, and library program plans for 1969 will:

(1) foster interlibrary cooperation by utilization of 45 networks involving 904 libraries serving 8,600,000 people;

(2) focus on the solution of urban and suburban problems by means of 341 institutions conducting 623 projects in 1,878 communities involving 433,000 participants;

(3) provide library services to cover 70,000 physically handicapped;

(4) consider 4,861 grant applicants for acquisition of library materials;

(5) provide State institutional library services covering 500 State institutions and affecting 300,000 inmates and patients;

(6) make new or improved library services available to 85,000,000 people;

(7) support 204 public library construction projects;

(8) train 3,991 persons in library and information science;

(9) provide basic education to 411,000 adults;

(10) train 1,600 persons as teachers, administrators, or specialists in adult basic education;

(11) support 47 experimental demonstration projects in adult basic education;

(12) provide vocational training for 8,555,000 persons; and,

(13) support 320 construction projects at area vocational education schools.

The requested increment in administrative costs for 1969 will handle the expansion of coverage of existing programs, provide for the inauguration of newly acquired programs, and provide for the initial reporting of results of recently implemented programs.

The funds requested for Adult, Vocational, and Library programs represent an increase of $711,000 and 33 new positions over 1968.

COST TO FUND PRESENT AUTHORIZED LEVEL

The request first allows $448,000 which will fund the annualization of pay cost authorized in 1968, increases in costs of utilities, communications, printing, travel, etc., and in addition will fund 47 more man-years over the 1968 base of 227. The need for the man-years can be exemplified by a description of the positions to be filled with these funds.

(1) One professional and two clericals will monitor urban program activities and provide the needed expertise to assist in evaluating the overall impact of the Community Services and Continuing Education programs.

(2) Two professionals and three clericals will work with State agencies and institutions of higher education to promote and implement grant-supported community service programs which will include providing expert advice and assistance on interpretation of program policies and regulations.

(3) Three professionals will be responsible for the review and evaluation of many proposals concerning special experimental demonstration projects of the Adult Basic Education program, as well as interpretation of regulations and policies, and review of ongoing and completed projects.

(4) Three professionals and three clericals will review and evaluate the many proposals for teacher training institutes under the Adult Basic Education Program and review, evaluate and develop curriculum for such institutes as well as curriculum for training under-educated adults.

(5) Two college library specialists will provide guidance and leadership for the library resources and training programs.

(6) A library education specialist will provide leadership in solving the problems involved nationally in library education.

(7) A school library specialist will provide leadership and coordination between school librarians and all other types of librarians.

(8) A college and university library specialist will provide leadership in coordination of institutions of higher education with State educational and library agencies and professional associations related to the field of higher education in librarianship.

(9) A special library specialist will coordinate widespread and rapid development of special libraries in business and industry, government, research centers, and organizations with all other types of library programs.

(10) In recent years, the development of new technologies has brought about many changes in business, industry and government. These developments are beginning to influence the library field through such things as new mechanized methods of storage and retrieval and cataloging. A library systems specialist and clerk-typist will keep abreast of these new and ever changing advancements in library technology and library education.

(11) Three professionals and 2 clerical positions will aid in the program planning and development of vocational and technical education. These positions will relate to the kinds of competency and expertise essential to the discharge of the responsibilities for forecasting trends, identifying emergency needs, and projecting plans for establishing and maintaining a national leadership position.

(12) A professional and a secretary will review plans and designs for modern vocational and technical education facilities.

(13) Two professionals will aid in making the teacher education activity more responsive to a broader spectrum of modern occupational needs.

(14) Four occupational specialists will provide expertise and leadership in technical and service vocational occupations.

(15) One professional and one secretary will provide leadership and direction for the program planning and evaluation activities of the Bureau.

(16) Four professionals are needed to provide grants management services for public library programs, adult education special projects and teacher training programs, and innovative vocational education programs.

(17) Twelve positions will provide needed secretarial, program and clerical assistance required as a result of the expanded activities of the Bureau.

NEW POSITIONS AND RELATED COSTS

The second requested increment for the Adult, Vocational and Library Programs is for 33 new positions and supporting costs of $263,000.

The 33 new positions are requested to help cope with the problem of providing educational stimulus to urban areas in general and the ghetto in particular.

Vocational and technical education is aimed at improving opportunities for the unemployed and underemployed of all ages throughout the Nation. In FY 1969 enrollment in these programs is expected to exceed 8,500,000, up almost 1,000,000 over FY 1968. Of this group 300,000 will be enrolled in special programs for the educationally disadvantaged. This training will be carried out in an estimated 1,877,000 training stations and 1,650 vocational schools. This expanded coverage requires the addition of one program assistant and one secretary.

Approximately 100,000 librarians are needed now to staff school, public, research, and academic libraries but only 3,000 new professionals graduate annually. The Library Training Program is designed to increase the number and competence of librarians. Plans have been made to award 503 fellowships and train 3,488 librarians in the institutes in FY 1969. Proper administration of this program will require a Branch Chief, and four persons to provide secretarial, grants management and clerical support. Leadership and direction of the five programs under the Library Services and Construction Act require a Branch Chief, four professionals, and two clerk-typists. Two library specialists and two clerk-typists are needed to give expert assistance and advice to professional organizations, State and local education library agencies in providing public library service to adults. Two library systems specialists are required to assist in the development of national plans for automated systems for libraries. Three positions are requested to provide administrative and clerical assistance in the Office of the Division Director.

Problems in the urban areas can be alleviated somewhat by providing sufficient education to the educationally deprived to give them some hope for the future. Toward this goal, programs in basic adult education are projecting an expansion in FY 1969 to include 411,000 enrollees; an increase of 29 percent over 1968. To determine what teaching methods produce the best results in the least amount of time with these adult education groups, demonstration projects in curriculum innovation are planned to include 54,666 enrollees, or 26 percent more than in FY 1968. To provide the teachers necessary to carry out this increased coverage,

23 Adult Basic Education Institutes are planned for FY 1969. These institutes will train 1,600 teachers, 300 more than last year, in adult basic education. If these plans are to be carried out, three additional education specialists and three persons to provide secretarial assistance will be required. Three education specialists and a clerk-typist are needed to monitor urban program activities and to assist in evaluating the over-all impact of the University Community Service Programs.

Surveys and evaluations planned for FY 1969 include such things as an interpretation of summaries of the varied methods of evaluating the quality and adequacy of academic book collections; an evaluation of education and training programs for State and local government employees; a continuing follow-up survey to obtain employment and earnings information on people who were enrolled in Adult Basic Education Programs; and an analysis of the number and kind of library services available to children and young adults who are educationally deprived.

Such activities cannot be carried on effectively, if at all, without proper and adequate staffing. We feel that the granting of the requested positions and funds will best serve the interests of those toward whom the entitling legislation was directed.

NEW POSITIONS REQUESTED, FISCAL YEAR 1969

| | Grade | Annual salary |
|---|---|---|
| Adult, vocational, and library programs: | | |
| Branch chief (2) | GS–15 | $36,808 |
| Educational specialist (2) | GS–14 | 31,682 |
| Library specialist | GS–14 | 15,841 |
| Education specialist (6) | GS–13 | 81,042 |
| Library specialist (3) | GS–13 | 40,521 |
| Education specialist | GS–11 | 9,657 |
| Program assistant | GS–11 | 9,657 |
| Grants management assistant (2) | GS–9 | 16,108 |
| Program assistant | GS–9 | 8,054 |
| Do | GS–7 | 6,734 |
| Administrative assistant | GS–7 | 6,734 |
| Secretary (2) | GS–5 | 11,130 |
| Secretary (3) | GS–4 | 14,985 |
| Clerk-typist (3) | GS–4 | 14,985 |
| Clerk-typist (4) | GS–3 | 17,864 |
| Total (33) | | 321,802 |

5. HIGHER EDUCATION

| | 1968 estimate | | 1969 estimate | | Increase or decrease | |
|---|---|---|---|---|---|---|
| | Positions | Amount | Positions | Amount | Positions | Amount |
| Personnel compensation and benefits | 446 | $4,560,000 | 529 | $5,117,000 | +83 | +$557,000 |
| Other expenses | | 1,116,000 | | 1,776,000 | | +660,000 |
| Total | 446 | 5,676,000 | 529 | 6,893,000 | +83 | +1,217,000 |

JUSTIFICATION OF ESTIMATE

The Bureau of Higher Education programs in 1969 will provide Federal assistance designed to improve and extend opportunity for higher education. These programs include construction grants and loans, student financial assistance, aid to developing institutions, support for prospective school and college teachers and foreign language and area centers.

The funds requested for Higher Education represents an increase of $1,217,000 and 83 new positions over 1968.

COST TO FUND PRESENT AUTHORIZED LEVEL

The request first allows $449,000 which will fund the annualization of pay cost authorized in 1968, increases in costs of utilities, communications, printing, travel, etc., and in addition will fund 5 more man-years over the 1968 base of 423. The need for the man-years can be exemplified by a description of the positions to be filled with these funds.

The rapid expansion of the National Defense Graduate Fellowship program in terms of participating institutions and academic departments requires a more highly developed system for maintaining records on active fellowships and fund authorizations, including processing and fiscal control. The request here is for four professional and two clerical.

To assist in the timely preparation of the *Higher Education Directory* and to reduce the present time lag in providing eligibility data to higher education programs, three positions are requested to be funded in 1969.

NEW POSITIONS AND RELATED COSTS

The second requested increment for Higher Education programs is for 83 new positions and supporting costs of $623,000.

The guaranteed student loan programs impact results in a request for 53 new positions for 1969. The estimated 750,000 new loans anticipated for 1969 will result in 1,700,000 loans outstanding. The new positions will aid in providing the resources desperately needed to support the administrative workload involved. Some idea of the workload involved follows.

Confirmations or reconciliations have to be made with the 16,000 lending institutions participating in the Guaranteed Loan programs. The Office has received over 600,000 applications for interest benefits as of December 31, 1967. However, guarantee agencies report that many more loans have been made and are eligible for interest benefits.

At the beginning of the programs and at the request of lenders assurance was given that the Office would confirm student status for them. This will involve sending lists to all participating educational institutions requesting student status and then making necessary adjustments. Although computer services wil aid in processing data regarding the loans, computer input and verification will have to be made.

The Federal program of Insurance was implemented early this fiscal year when States began running out of reserve funds with which to guarantee loans. As of December 31, 1967, 17 States were in the program, and it appears certain that by March an additional 10 will be. Under this program 27,200 loans have been insured. This puts the Office in all phases of the lending business.

Pending legislation will further involve additional workload. This involves the re-insuring of loans made by the State agencies and if there are defaults the purchase of 80% of the default as well as attempts to collect the default. Further amendments would also provide acquisition and conversion fees to lending institutions in an effort to encourage participation.

Two professionals and one clerical position are requested (1) to plan and initiate the transition of 16 existing language and area centers to the Alliance for Progress Centers, (2) to continue development of the post doctoral summer faculty development program, (3) to plan and contract out the program evaluation study of the existing 106 language and area centers, (4) to complete the analysis of the National Defense Fellowship Program.

Title I of the Higher Education Facilities Act of 1963 provides grants to higher education institutions for construction of undergraduate academic facilities. It is anticipated that the number of projects under construction at the end of 1969 will be 1,500, an increase of 100 over 1968. To support this increment two new positions are requested in 1969.

Title III of the Higher Education Facilities Act authorizes loans for construction of academic facilities in higher education institutions. A loan analyst is requested to aid in implementing and analyzing data with regard to the loans.

Part E of the Education Professions Development Act authorized grants to, or contracts with, colleges and universities to assist them in training persons who are serving or preparing to serve as college teachers, administrators, or educational specialists in all areas of higher education. The requested funding for 1969 will support 150 institutes and 1,365 fellowships. To implement this new authority five professionals and seven clerical positions are requested.

A more highly developed research and publication program particularly for evaluation studies and analysis is needed to properly administer the National Defense Graduate Fellowship Program. Two new positions are requested to insure broadest participation of student population in publications.

Title III of the Higher Education Act provides support to institutions of higher education which because of inadequate financial resources cannot achieve their potential for contributing significantly to the educational resources of the Nation. If this program is to be effectively administered, eight new positions are requested

in 1969 to support processing cooperative programs for 50 more developing colleges over 1968.

The Educational Talent Search Program's basic objectives are (1) to identify and encourage qualified youth of exceptional financial need to complete or re-enter their secondary education and/or undertake post-secondary educational training, and (2) to inform these youths of the opportunities available to them for financing a higher education. In 1968, 225 proposals were received and 80 funded. The 1969 requested level of funding will provide funds for 135 of 275 proposals received. To support this program in 45 states two new positions are requested for 1969.

The third requested increment provides $145,000 for a contract to review and analyze the existing programs of language and area studies throughout American institutions of higher education. The basic objective of this contract study would be to determine the scope and extent of Government sponsored and privately funded programs of language and area studies. This would be accomplished by analyzing a representative sample of current programs in order to determine their specific nature, curriculum content, program accomplishment and multiplier effect of this educational innovation brought about by the experience in World War II and the added impetus of the National Defense Educational Act of 1958

NEW POSITIONS REQUESTED, FISCAL YEAR 1969

| | Grade | Annual salary |
|---|---|---|
| Higher education: | | |
| Program officer (4) | GS–14 | $63,364 |
| Program specialist (5) | GS–14 | 79,205 |
| Education specialist (2) | GS–14 | 31,682 |
| Program manager | GS–14 | 15,841 |
| Program officer (12) | GS–13 | 162,084 |
| Program specialist (3) | GS–13 | 40,521 |
| Loan analyst | GS–13 | 13,507 |
| Program analyst | GS–13 | 13,507 |
| Program specialist | GS–12 | 11,461 |
| Program officer (2) | GS–12 | 22,922 |
| Program analyst | GS–11 | 9,657 |
| Program assistant | GS–11 | 9,657 |
| Education specialist | GS–11 | 9,657 |
| Program assistant (3) | GS–9 | 24,162 |
| Program analyst (4) | GS–7 | 26,936 |
| Program assistant (2) | GS–6 | 12,274 |
| Secretary | GS–6 | 6,137 |
| Secretary (14) | GS–5 | 77,910 |
| Clerk-typist (4) | GS–5 | 22,260 |
| Account maintenance clerk (6) | GS–5 | 33,390 |
| Clerk (8) | GS–4 | 39,960 |
| Clerk-typist (4) | GS–4 | 19,980 |
| Clerk (2) | GS–3 | 8,932 |
| Total (83) | | 755,006 |

6. RESEARCH

| | 1968 estimate | | 1969 estimate | | Increase or decrease | |
|---|---|---|---|---|---|---|
| | Positions | Amount | Positions | Amount | Positions | Amount |
| Personnel compensation and benefits | 258 | $3,055,000 | 284 | $3,342,000 | +26 | +$287,000 |
| Other expenses | | 786,000 | | 966,000 | | +180,000 |
| Total | 258 | 3,841,000 | 284 | 4,308,000 | +26 | +467,000 |

JUSTIFICATION OF ESTIMATE

The long-range improvement of education depends largely on the availability of new, tested, alternative methods and equipment. The individual school or teacher may select those tools that are applicable to their particular needs. The educational research program, supports a variety of major projects to design, develop, test and demonstrate promising new educational technology and methods, as well as a broad base of research in areas relevant to learning and teaching. In its several aspects, the research program will involve the cooperation and participation of States, local schools, universities, industry and other governmental

agencies in nearly 1,400 projects. Noteworthy in 1969 will be extension of developmental work at the 20 regional educational laboratories and the university-based research and development centers; initiation of a cooperative demonstration program with the National Foundation for the Arts and Humanities; continuation of such development efforts as the organic curriculum for vocational and general education, multiple-school computer sharing, library resource sharing and community college curriculum improvement; and $10,000,000 for a major urban demonstration school in the District of Columbia. Research training programs will be increased to 1,230 full-time and 1,200 short-term trainees in an effort to qualify more people to participate in the advancement of educational methods and technology. The information dissemination activities of the Educational Resources Information Center (ERIC) will be expanded to keep pace with the needs of educational information users in schools throughout the country.

The funds requested for Research represent an increase of $467,000 and 26 new positions over 1968.

COST TO FUND PRESENT AUTHORIZED LEVEL

The request first allows $184,000 which will fund the annualization of pay cost authorized in 1968, increases in costs of utilities, communications, printing, travel, etc., and in addition will fund 10 more man-years over the 1968 base of 234. The need for the man-years can be exemplified by a description of the positions to be filled with these funds.

A Program Specialist and a secretary are required to establish and maintain systematized program planning and evaluation processes, taking account of *key reference points* both within and outside the Bureau of Research. The Program Specialist is also required to continue liaison with other bureaus and staff offices of the Office of the Director and with other Governmental agencies engaged in educational or education-related research. In addition, he will manage Bureau activities required under the PPB System and carry out statistical analyses or other special studies requested by the Office of the Secretary (HEW), by the Bureau of the Budget, by interagency groups, or by Congressional committees.

It is important to note that the 20 Laboratories and 9 Research and Development Centers are very complex enterprises despite the somewhat small number of contracts involved. In 1968, the Laboratories are conducting 41 major programs and 169 distinct projects and activities; concurrently the Research and Development centers are conducting 36 major programs and 269 specific projects and activities. The nature of the task of administering and evaluating these 29 institutions is more difficult and involves a significantly higher volume of work than normal contract administration due to their dependence on the office for their formation and support. These institutions need a great deal of consultation and evaluation to develop into a well coordinated national network of educational research, development and installation organizations. To provide rigorous assessment, effective monitoring, and meaningful coordination, seven professional and two clerical positions are requested to be funded in 1969.

During fiscal year 1969 Elementary-Secondary Education Research will continue to direct a major portion of its resources to serving the most critical and urgent needs of identified program areas. Plans are to continue to fund useful and worthwhile projects not specifically associated with the identified program areas being emphasized. In this area efforts will include Early Childhood Education, Teacher Education, School Administration and Organization, and Basic Research in Education.

To give the research program the management review, monitoring, and planning it requires in the Elementary and Secondary Education Research area, an education officer in the Basic Studies Branch is requested to be funded in 1969.

In the Instructional Materials and Practices Branch an education officer and a research assistant are requested. The officer will assume responsibility for the administrative and program functions while the research assistant will give aid in preliminary readings of proposals and process reports.

To perform effectively the necessary professional functions associated with the Organization and Administration Studies Branch, an additional research coordinator must be available to deal with school organization and administration problems. The critical need in the coordinator's office is a secretarial staff that can process the work of the coordinator into a final product. The final process in the production cycle is at the secretarial level, and without an adequate staff on the production line the goals of the program will not be achieved. The request for 1969 is to have funding ability for a secretary.

A research assistant and program assistant is requested to assist in the research training program. At present there is neither to aid in administering the 150 projects totaling $7,000,000.

To develop a program of research which will further the interest, objectives, and needs of the Bureau of Research a research associate and secretary will be needed to assist in program development and to undertake the major burden of day-to-day operating needs in the area of comprehensive and vocational education research.

NEW POSITIONS AND RELATED COSTS

The second requested increment of $283,000 will support 26 new positions requested by the Bureau of Research.

To formulate imaginative research and carry it out into effective practice, the Bureau requests three professional positions. The scope of their research and development work would include: (1) studies of diffusion processes and factors influencing change in educational settings; (2) research on the characteristics, change processes, and research information needs of such educational decision-makers and practitioners as board members, administrators, supervisory personnel, and teaching staff; (3) studies of the design of messages for transmitting research results to these audiences; (4) evaluation of the effectiveness of a variety of dissemination techniques including research interpretations in print and other formats, demonstrations and site visits, and conferences symposia, and consultation; and (5) identification of the roles and means of articulating the efforts of such dissemination mechanisms as local information analysis centers, State education agencies, regional organization, professional associations, and Federal agencies.

Functions to be performed include; (1) soliciting and reviewing proposals for research and development; (2) execution of staff functions relating to award of grants and contracts; (3) engaging in project monitoring and evaluation activities; (4) carrying out program planning and evaluation activities; and (5) maintaining continuing liaison with other organizational units in the Office of Education, other Federal, State, and local education agencies, and private and professional associations.

With the continuation and expansion of the Early Childhood Education Program and Teacher Education Program in this Bureau, two additional professional staff members are required. Their functions would be to develop a variety of model teacher education programs, both preservice and inservice, to monitor the projects and to insure quality return for the investments that are being made in research and development in both the early childhood education program, as well as the teacher education program.

One of the organizational activities in the Bureau of Research deals with Comprehensive and Vocational Education Research. This program provides support for research and related experimental, demonstration and training projects at secondary (grades 9 through 12), post-secondary, and community college levels. Adult and community educational programs as well as training of staff for educational programs are part of this organization's activities. Funding support is provided for basic educational research studies; development, evaluation and field testing of instructional materials and practices; organization and administration studies; and career opportunities projects. Making known the research findings and educational innovations is a major responsibility. Specific support needs are illustrated below:

(1) Work falling within the purview of the research for academic subjects and other research at the high school level requires a research assistant to aid in the evaluation and processing of proposals for contract, and processing technical and final reports and vouchers. (2) New projects and expansion of existing work in the rapidly growing area of computer-based educational systems have created an increasingly heavy workload for the systems team, which now is composed of a Research Associate-in-Charge and a Secretary. A Research Assistant is badly needed to assist in proposal processing, monitoring projects, and replying to routine requests for information. (3) A Team that is currently responsible for 61 active projects in Federal support is presently staffed with a Research Associate-in-Charge and one secretary. It is expected that the FY 69 workload will exceed 125 active projects. The need for long-range planning, proposal processing, and review requirements warrants two Research Associates. They will also aid in embarking on constructive planning to develop research programs in support of institutional organization, finance, facilities, and school plant management. (4) A Research Associate-in-Charge is requested to support projects designed to

create or improve comprehensive student-personnel service programs and to strengthen preservice and inservice education programs for educational manpower. Certification and accreditation standards, mobility of educational personnel, recruitment procedures, staffing patterns and communication processes at secondary and post secondary levels are other areas of concern. (5) An additional position is required for planning, structuring and stimulating a coordinated program of research and development in the community college area of education. He will aid in monitoring its on-going projects and review and process incoming proposals.

Two secretaries are requested in the office of the Associate Commissioner to keep up with the increasing volume of mail generated by the new programs and their success throughout the educational community.

Program obligational authority of $35,100,000 for the Regional Educational Laboratory Program, $12,900,000 for the Research and Development Center Program, and $29,581,411 for the Educational Research Facilities Construction Program have been made in 1969. This represents an increase of approximately $11,300,000 in the Laboratory Program, $2,100,000 in the Research and Development Center Program, and $28,380,000 in the Construction Program. Activities projected by the Laboratories represent significant expansion in developmental work consistent with the growth of these institutions in their initial years. A substantial increase in construction grants for new facilities, major alterations, computer acquisitions and other specialized equipment is visualized. Five professional positions are requested for FY 1969 to strengthen the basic structure for growing monitoring, evaluation and administrative tasks. The bureau must be able to maintain a staffing level equal to the responsibility of spending wisely the additional program funds requested.

At present there are approximately 460 projects totaling approximately $16,000,000 directed toward higher education research. The present staff has been able to prepare the guidelines and regulations, review project proposals and make awards. Eight new positions are requested in 1969 to monitor projects, make site visits and provide necessary technical competence.

NEW POSITIONS REQUESTED, FISCAL YEAR 1969

| | Grade | Annual salary |
|---|---|---|
| Research: | | |
| Research officer | GS–15 | $18,404 |
| Research associate (2) | GS–14 | 31,682 |
| Program officer | GS–14 | 15,841 |
| Education specialist (6) | GS–14 | 95,046 |
| Research analyst (2) | GS–14 | 31,682 |
| Program manager | GS–13 | 13,507 |
| Administrative officer (2) | GS–13 | 27,014 |
| Research assistant (2) | GS–12 | 22,922 |
| Program officer | GS–12 | 11,461 |
| Research assistant (2) | GS–9 | 16,108 |
| Program specialist | GS–9 | 8,054 |
| Research assistant | GS–7 | 6,734 |
| Secretary (3) | GS–5 | 16,695 |
| Clerk | GS–5 | 5,565 |
| Total (26) | | 320,715 |

7. EDUCATION FOR HANDICAPPED

| | 1968 estimate | | 1969 estimate | | Increase or decrease | |
|---|---|---|---|---|---|---|
| | Positions | Amount | Positions | Amount | Positions | Amount |
| Personnel compensation and benefits | 89 | $795,000 | 145 | $1,183,000 | +56 | +$388,000 |
| Other expenses | | 338,000 | | 818,000 | | +480,000 |
| Total | 89 | 1,133,000 | 145 | 2,001,000 | +56 | +868,000 |

JUSTIFICATION OF ESTIMATE

The Bureau of Education for Handicapped administered four programs which aided 2,000,000 handicapped children in 1968. The 1969 request provides for a

53% dollar increase in the programs administered in 1968 and for four newly enacted programs.

To implement this growth in 1969, $868,000 and 56 new positions are requested.

COST TO FUND PRESENT AUTHORIZED LEVEL

The request first allows $415,000 which will fund the annualization of pay cost authorized in 1968, increases in costs of utilities, communications, printing, travel, etc., and in addition will fund 8 more man-years over the 1968 base of 78. The need for the man-years can be exemplified by a description of the positions to be filled with these funds.

A Branch Director for the Curriculum and Media Branch of the Division of Research will provide leadership ability in exploring and solving the problems in development and use of media for the handicapped.

A Branch Director position is requested to be funded in the Mental Retardates Branch of the Division of Training Programs. Mental retardation is one of the major areas of handicapping conditions. The direction will be provided in the review of proposals, monitoring of grants, and consulting and communicating with the field.

Two professional positions are requested to be funded to provide technical assistance in administering programs to assist states in developing and implementing plans for sound and constructive programs for education of handicapped children, and to aid State-operated or supported institutions for handicapped children.

Two positions will be funded to assist in adequately operating the fellowships program which directs its funds toward training teachers and allied personnel to work with the handicapped.

In the Office of the Associate Commissioner two clerical positions are requested to be funded to provide the needed assistance in answering correspondence, typing reports and keeping adequate files.

NEW POSITIONS AND RELATED COSTS

The second requested increment of $453,000 will support 56 new positions to support the handicapped programs authorized by the 1967 Amendments to the Elementary and Secondary Act.

The Regional Resource Centers for Handicapped Children were established by Title VI, Part B of the 1967 Amendments to the Elementary and Secondary Education Act. The requested funding level in 1969 will permit the establishment of four Regional Resource Centers which will help teachers develop and implement education programs for those handicapped children who are failing to learn under present practices. Six positions are required to administer the Regional Resource Centers Program in 1969. The new staff will assist in establishing the objectives, determine policies and procedures governing the award of grants and contracts, prepare guidelines and regulations, review proposals, and provide assistance in the overall administration of the program.

The 1967 Amendments to ESEA under Title VI, Part C, provided authorization to fund a number of model centers for deaf-blind children. Grants or contracts will be made in 1969 to support six centers with limited facilities. In addition, planning will be supported for four centers where services do not exist and, where feasible, pilot programs of diagnostic services, parent counseling, and basic education will be started. Three facilities for training teachers and related specialists will be encouraged to develop further, and research in education procedures for deaf-blind children will be expanded.

To implement this activity six positions are requested to prepare guidelines and regulations, determine program goals, review and evaluate proposals, and provide technical assistance.

Title VI, Part D of the Amendments, authorizes grants and contracts to be made:

(1) to institutions or public or non-profit private agencies to encourage students and professional personnel to work in various fields of education of the handicapped;

(2) to disseminate information about the programs, services, and resources available to teachers, parents and their handicapped children.

The funds requested for these new programs in 1969 will provide for approximately 16 awards. To review proposals, monitor the grants and contracts, provide

clerical support, and interact with the educational community on recruitment and information about the handicapped, six new positions are requested in 1969.

The 1967 Amendments to ESEA not only provided for new programs directed to the handicapped education but expanded the Captioned Films for the Deaf Program to include media services for all areas of the handicapped. Eleven positions are requested in 1969 to provide media specialists and support staff to cover the additional handicapping areas of speech and hearing, visually handicapped, physically handicapped, mentally handicapped, emotionally disturbed, and special learning disabilities. This staff request will aid in reviewing proposals, making recommendations, supplying technical advice and competence, recommending policies and administrative guidelines, and communicating and interchanging with the field of special education.

Title V, Section 501, of the Mental Retardation Amendments of 1967 (P.L. 90–170) provides grants for training of Physical Educators and Recreation Personnel for Mentally Retarded and other handicapped children. To prepare guidelines and regulations, review proposals, award grants, monitor projects and provide technical assistance, ten positions are requested in 1969 to implement this new program.

Public Law 88–164, Section 302, as amended, authorizes funds to aid in the acquisition of new knowledge and dissemination of research information relative to the education of handicapped children. A system of fourteen Instructional Materials Centers were established to fulfill this need. In these Centers the massive efforts in 1969 will move from the developmental to the demonstrative phase. To aid in this emphasis on dissemination three positions are requested for 1969.

The request for special projects under the teacher education program provides for a $2,000,000 level in 1969. This is a large increment over the 1968 base of $346,000. The added workload in reviewing proposals, awarding funds, monitoring and providing technical assistance gives rise to a request for five additional positions. The number of projects is expected to rise from 3 to 20.

About 79 program development grants will be made in institutions to develop teacher training programs. Program Development grants may take the form of either establishing new programs or expanding existing programs to more adequately cover the needs of the area. Besides reviewing proposals and awarding grants, close monitoring is necessary because of the diversity of the training programs. To adequately administer this program six additional positions are requested.

With the implementation in 1969 of the new and expanded programs directed toward education of 5,000,000 handicapped children, three additional positions are needed in the Office of the Associate Commissioner to handle the added management, fiscal, budget, and personnel services, as well as correspondence and reports.

NEW POSITIONS REQUESTED, FISCAL YEAR 1969

| | Grade | Annual salary |
|---|---|---|
| Education for handicapped: | | |
| Branch chief (4) | GS–15 | $73,616 |
| Program specialist | GS–14 | 15,841 |
| Education specialist (3) | GS–14 | 47,523 |
| Section chief | GS–14 | 15,841 |
| Education specialist (13) | GS–13 | 175,591 |
| Education specialist (3) | GS–12 | 34,383 |
| Program assistant (7) | GS–9 | 56,378 |
| Program assistant | GS–7 | 6,734 |
| Administrative assistant | GS–7 | 6,734 |
| Secretary (2) | GS–6 | 12,274 |
| Secretary (13) | GS–5 | 72,345 |
| Clerk-typist (7) | GS–4 | 34,965 |
| Total (56) | | 552,225 |

8. EDUCATIONAL PERSONNEL DEVELOPMENT

| | 1968 estimate | | 1969 estimate | | Increase or decrease | |
|---|---|---|---|---|---|---|
| | Positions | Amount | Positions | Amount | Positions | Amount |
| Personnel compensation and benefits | 160 | $1,902,000 | 209 | $2,314,000 | +49 | +$412,000 |
| Other expenses | | 759,000 | | 974,000 | | +215,000 |
| Total | 160 | 2,661,000 | 209 | 3,288,000 | +49 | +627,000 |

JUSTIFICATION OF ESTIMATE

After the enactment of the Education Professions Development Act, a Bureau of Educational Personnel Development was established. This Bureau will be responsible for the administration of all parts of the Education Professions. Development Act except Part E, training programs for higher education personnel.

The internal structure for the Bureau is based on a functional approach rather than on a subject matter or legislative title approach. This type of organization will enable the Office to focus on priority subject areas and to appraise and shift this focus without changing the organizational framework. The new Bureau will assess the needs for educational personnel and develop general plans for meeting these needs; develop examples of approaches to training; administer Section 504, Attracting Qualified Persons to the Field of Education; Part B2, Attracting and qualifying Teachers to Meet Critical Teacher Shortages; Part C, Teacher Fellowship Program; and Part D, Advanced Training and Retraining, of the EPDA. It will develop specific programs for the solution of pressing needs, solicit proposals, evaluate them, and monitor projects. The Teacher Corps program will also be an entity of this Bureau.

The 1968 estimate includes activities which were previously provided and funded in other Bureaus. In order to reflect comparability with the 1969 estimate, they are reflected in this activity.

The funds requested for Educational Personnel Development represent an increase of $627,000 and 49 positions over 1968.

COST TO FUND PRESENT AUTHORIZED LEVEL

The request first allows $201,000 which will fund the annualization of pay cost authorized in 1968, increases in costs of utilities, communications, printing, travel, etc., and in addition will fund 11 more man-years over the 1968 base of 140. The need for the man-years can be exemplified by a description of the positions to be filled with these funds.

In the Division of Program Resources, assistance of the highest professional order will be provided to the other parts of the Bureau of Educational Personnel Development in program development and project evaluation, as well as expert assistance to colleges and universities, State agencies, local education agencies, and other public and private organizations in the development of more effective and efficient ways of meeting critical educational personnel needs. One of its most important functions is providing assistance to the weaker institutions, agencies and organizations in the development of plans for the solution of educational personnel problems. It has no responsibilities for the line administration of Bureau programs, although it does provide the most important internal Office of Education resource for the professional evaluation of project proposals. The professional character and the real effectiveness of the Bureau of Educational Personnel Development in assisting colleges and universities, States, and local agencies depends upon this Division. Three professionals and three clerical positions are requested to be funded for this Division.

The Division of Assessment and Coordination has a responsibility to assess the needs for educational personnel both in quantitative and qualitative terms and develop general plans to be carried out under the EPDA for meeting those needs. Funds to fill two professional and three clerical positions are requested for this Division.

NEW POSITIONS AND RELATED COSTS

The second requested increment of $426,000 will support the following 49 new positions requested to implement new provisions of the Education Professions Development Act:

Section 504 of the Education Professions Development Act, a project grant and contract program for "attracting qualified persons to the field of education", authorizes both contracts and grants with States, local educational agencies, colleges and universities, and private organizations for publicizing careers in education, recruiting qualified personnel, and identifying capable students and encouraging them and other persons engaged in different fields to enter education. It is concerned with the entire range of education from pre-school through post-doctoral and adult. This type of activity is entirely new to the Office of Education. To develop and administer this $1,500,000 program the request for 1969 is for a Program Operations Section Chief, 2 Program Assistants and 2 clerical positions. The preparation of speeches, of informational releases for the professions, of news media releases, and of replies to congressional and public inquiries will require a Chief of Information Services Section and Secretary.

Authorized under Part B(2) of the EPDA is a new State grant program designed to attract and qualify teachers to meet the critical teacher shortages. A request for $15 million in program funds has been made for fiscal year 1969. Up to one-third of these funds may be used by local educational agencies to recruit and train teacher aides; the remainder of the funds will be used by those agencies to attract persons to the teaching professions. A formula allocation to the States, based on the number of pupils, is provided. However, the States must submit State plans for approval by the Commissioner of Education to establish eligibility. For the development of the program, for the processing of the State plans, and for furnishing consultative assistance to the States, three professional and two clerical positions are requested.

The Teacher Corps is requesting an increase in program funds for $13 million in fiscal year 1968 to $31 million in fiscal year 1969. The most critical function in accommodating this program increase is the review, negotiation and approval of Teacher Corps projects, not to mention the technical assistance, monitoring and leadership functions. Additionally, the Teacher Corps will graduate corps members for the first time in the latter part of 1968. A new cycle of activity will then be generated which includes assisting in job counseling and placement, monitoring termination conferences to learn from graduates the effectiveness of the program and statistical follow-up to see what happens to graduates. The request for fiscal year 1969 is for six program specialists and four secretaries.

Section 503 of the Education Professions Development Act calls for appraisals of "the Nation's existing and future personnel needs in the field of education, including preschool programs, elementary and secondary education, vocational and technical education, adult education, and higher education, and the adequacy of the Nation's efforts to meet those needs." In the development of this appraisal, consultation is required with other Federal agencies, State agencies, and other appropriate public and private agencies. In addition, the Commissioner is called on to prepare an annual report presenting in detail the state of the education professions, and to set forth his plans under the EPDA in relation to the plans of other Federal agencies under similar programs. To administer Section 503 of the EPDA, the following new positions are requested:

(1) A professional and two clericals will develop and administer a system for collection of information about Office of Education and other Federal Agency programs; develop a system for the assembly of educational personnel supply and demand information from public and private agencies, institutions and associations; identify data needs and negotiate with others for the collection of that data.

(2) A professional and two clericals will analyze information on the supply and demand of educational personnel; assess projects and analyze data necessary for the annual report of the Commissioner.

(3) A Writer-Editor and a secretary will be responsible for manuscript preparation, including writing and editing as well as a variety of special analyses of needs and programs for the education professions.

With the two new programs and expansions in the fellowship and institute programs, two professionals and two clericals will be required for the development of regulations and guidelines. They will also review the regulations and guidelines of all of the fourteen programs, or parts of programs, contributing to the development of educational personnel. They will also be responsible for detailed monitoring of the operations of all programs for consistency.

The Executive Staff provides budget, personnel, fiscal, and other administrative services for the Bureau. The budget and fiscal operations develop financial plans and records for programs authorized and funded under the Education Professions Development Act. These programs include a wide range of financial arrangements—State formula grants, project grants, and contracts. They also include a

wide range of recipients—States, local educational agencies, institutions of higher education, private profit and nonprofit agencies and organizations. The 1969 request provides two professionals and two clericals. The present staff of this new Bureau does not include any positions to deal with administrative services. In order to provide for the allocation of space, furniture, and supplies, and for the provision of other administrative services to a bureau, a professional and a secretary are requested.

Part C of the Education Professions Development Act authorizes graduate fellowships to prospective and experienced preschool, elementary, secondary, adult, and vocational school teachers to provide opportunities for advanced training particularly to strengthen preparation in the substantive courses. Previously this authority was limited to the elementary and secondary levels under Title V–C of the Higher Education Act.

Also provided under Part C are grants to strengthen graduate programs for elementary and secondary teachers. Under original legislation, only those institutions with approved fellowship programs were eligible for support. The Act has now made eligible other institutions if such grants will result in developing programs which will qualify for such assistance. This expanded program requires a program manager, two program specialists and a secretary position in 1969.

In fiscal year 1969, local educational agencies will be eligible for the first time to apply for inservice and preservice training programs. This factor could more than double the present number of project applications. To handle this increased workload, 3 professional and 2 clerical positions are requested.

NEW POSITIONS REQUESTED, FISCAL YEAR 1969

| | Grade | Annual salary |
|---|---|---|
| Educational personnel development: | | |
| Branch chief | GS–15 | $18,404 |
| Section chief (2) | GS–15 | 36,808 |
| Program manager | GS–15 | 18,404 |
| Grants management officer | GS–14 | 15,841 |
| Program officer | GS–14 | 15,841 |
| Program specialist (2) | GS–14 | 31,682 |
| Education specialist (4) | GS–14 | 63,364 |
| Reports officer | GS–13 | 13,507 |
| Program specialist (4) | GS–13 | 54,028 |
| Education specialist (4) | GS–13 | 54,028 |
| Personnel analyst (2) | GS–13 | 27,014 |
| Administrative officer | GS–13 | 13,507 |
| Program specialist (2) | GS–12 | 22,922 |
| Education specialist | GS–11 | 9,657 |
| Program assistant | GS–9 | 8,054 |
| Research assistant | GS–6 | 6,137 |
| Reports assistants (2) | GS–6 | 12,274 |
| Secretary (2) | GS–6 | 12,274 |
| Secretary (6) | GS–5 | 33,390 |
| Clerks (3) | GS–5 | 16,695 |
| Secretary | GS–4 | 4,995 |
| Clerks (6) | GS–4 | 29,970 |
| Total (49) | | 518,796 |

ALL ACTIVITIES

| | | |
|---|---|---|
| Executive direction and administration: | | |
| Program analyst | GS–15 | 18,404 |
| Contract specialist | GS–15 | 18,404 |
| Assistant branch chief | GS–14 | 15,841 |
| Contract specialist | GS–14 | 15,841 |
| Contract specialist | GS–13 | 13,507 |
| Mathematician | GS–13 | 13,507 |
| Budget analyst | GS–12 | 11,461 |
| Accountant | GS–11 | 9,657 |
| Research specialist | GS–11 | 9,657 |
| Management analyst (2) | GS–11 | 19,314 |
| Research assistant | GS–7 | 6,734 |
| Secretary | GS–7 | 6,734 |
| Secretary | GS–6 | 6,137 |
| Clerk-typist | GS–6 | 6,137 |
| Total (15) | | 171,335 |

NEW POSITIONS REQUESTED, FISCAL YEAR 1969—Continued

| | Grade | Annual salary |
|---|---|---|
| **ALL ACTIVITIES—Continued** | | |
| National Center for Educational Statistics: | | |
| Research analyst | GS–15 | $18,404 |
| Computer systems analyst (6) | GS–14 | 95,063 |
| Program officer (2) | GS–14 | 31,682 |
| Reports officer (2) | GS–13 | 27,014 |
| Program specialist (3) | GS–13 | 40,521 |
| Computer analyst | GS–13 | 13,507 |
| Information specialist | GS–13 | 13,507 |
| Education specialist (2) | GS–13 | 27,014 |
| Computer programer (3) | GS–12 | 34,383 |
| Information specialist | GS–12 | 11,461 |
| Statistician (2) | GS–12 | 22,922 |
| Reports officer | GS–12 | 11,461 |
| Computer system analyst (3) | GS–12 | 34,383 |
| Education specialist (3) | GS–12 | 34,383 |
| Statistician (2) | GS–11 | 19,314 |
| Reports analyst | GS–11 | 9,657 |
| Computer programer (3) | GS–11 | 28,971 |
| Information specialist | GS–11 | 9,657 |
| Computer systems analyst (3) | GS–9 | 24,162 |
| Computer programer | GS–9 | 8,054 |
| Computer programer (3) | GS–7 | 20,202 |
| Reports analyst | GS–7 | 6,734 |
| Secretary (2) | GS–5 | 11,130 |
| Program researcher | GS–5 | 5,565 |
| Clerk-typist (2) | GS–4 | 9,990 |
| Secretary-steno (2) | GS–4 | 9,990 |
| Clerk-typist (3) | GS–3 | 13,398 |
| Total (56) | | 592,529 |
| Elementary and secondary education activities: | | |
| Program officer | GS–15 | 18,404 |
| Education specialist (2) | GS–15 | 36,808 |
| Research analyst | GS–15 | 18,404 |
| Information officer | GS–15 | 18,404 |
| Program specialist | GS–15 | 18,404 |
| Education specialist (4) | GS–14 | 63,364 |
| Economist | GS–14 | 15,841 |
| Program specialist | GS–14 | 15,841 |
| Statistician | GS–14 | 15,841 |
| Education specialist (9) | GS–13 | 121,563 |
| Program manager (2) | GS–13 | 27,014 |
| Program specialist | GS–13 | 13,507 |
| Program manager | GS–12 | 11,461 |
| Education specialist (2) | GS–12 | 22,922 |
| Education specialist (6) | GS–11 | 57,942 |
| Education assistant | GS–11 | 9,657 |
| Mathematician | GS–11 | 9,657 |
| Education assistant | GS–9 | 8,054 |
| Secretary (7) | GS–6 | 42,959 |
| Secretary (3) | GS–5 | 16,695 |
| Clerk-typist (4) | GS–5 | 22,260 |
| Clerk (3) | GS–4 | 14,985 |
| Secretary-typist | GS–4 | 4,995 |
| Total (55) | | 604,982 |
| Adult, vocational, and library programs: | | |
| Branch chief (2) | GS–15 | 36,808 |
| Education specialist (2) | GS–14 | 31,682 |
| Library specialist | GS–14 | 15,841 |
| Education specialist (6) | GS–13 | 81,042 |
| Library specialist (3) | GS–13 | 40,521 |
| Education specialist | GS–11 | 9,657 |
| Program assistant | GS–11 | 9,657 |
| Grants management assistant (2) | GS–9 | 16,108 |
| Program assistant | GS–9 | 8,054 |
| Do | GS–7 | 6,734 |
| Administrative assistant | GS–7 | 6,734 |
| Secretary (2) | GS–5 | 11,130 |
| Secretary (3) | GS–4 | 14,985 |
| Clerk-typist (3) | GS–4 | 14,985 |
| Clerk-typist (4) | GS–3 | 17,864 |
| Total (33) | | 321,802 |

NEW POSITIONS REQUESTED, FISCAL YEAR 1969—Continued

| | Grade | Annual salary |
|---|---|---|
| **ALL ACTIVITIES—Continued** | | |
| Higher education: | | |
| Program officer (4) | GS–14 | $63,364 |
| Program specialist (5) | GS–14 | 79,205 |
| Education specialist (2) | GS–14 | 31,682 |
| Program manager | GS–14 | 15,841 |
| Program officer (12) | GS–13 | 162,084 |
| Program specialist (3) | GS–13 | 40,521 |
| Loan analyst | GS–13 | 13,507 |
| Program analyst | GS–13 | 13,507 |
| Program specialist | GS–12 | 11,461 |
| Program officer (2) | GS–12 | 22,922 |
| Program analyst | GS–11 | 9,657 |
| Program assistant | GS–11 | 9,657 |
| Education specialist | GS–11 | 9,657 |
| Program assistant (3) | GS–9 | 24,162 |
| Program analyst (4) | GS–7 | 26,936 |
| Program assistant (2) | GS–6 | 12,274 |
| Secretary | GS–6 | 6,137 |
| Secretary (14) | GS–5 | 77,910 |
| Clerk-typist (4) | GS–5 | 22,260 |
| Account maintenance clerk (6) | GS–5 | 33,390 |
| Clerk (8) | GS–4 | 39,960 |
| Clerk-typist (4) | GS–4 | 19,980 |
| Clerk (2) | GS–3 | 8,932 |
| Total (83) | | 755,006 |
| Research: | | |
| Research officer | GS–15 | 18,404 |
| Research associate (2) | GS–14 | 31,682 |
| Program officer | GS–14 | 15,841 |
| Educational specialist (6) | GS–14 | 95,046 |
| Research analyst (2) | GS–14 | 31,682 |
| Program manager | GS–13 | 13,507 |
| Administrative officer (2) | GS–13 | 27,014 |
| Research assistant (2) | GS–12 | 22,922 |
| Program officer | GS–12 | 11,461 |
| Research assistant (2) | GS–9 | 16,108 |
| Program specialist | GS–9 | 8,054 |
| Research assistant | GS–7 | 6,734 |
| Secretary (3) | GS–5 | 16,695 |
| Clerk | GS–5 | 5,565 |
| Total (26) | | 320,715 |
| Education for handicapped: | | |
| Branch chief (4) | GS–15 | 73,616 |
| Program specialist | GS–14 | 15,841 |
| Education specialist (3) | GS–14 | 47,523 |
| Section chief | GS–14 | 15,841 |
| Education specialist (13) | GS–13 | 175,591 |
| Education specialist (3) | GS–12 | 34,383 |
| Program assistant (7) | GS–9 | 56,378 |
| Program assistant | GS–7 | 6,734 |
| Administrative assistant | GS–7 | 6,734 |
| Secretary (2) | GS–6 | 12,274 |
| Secretary (13) | GS–5 | 72,345 |
| Clerk-typist (7) | GS–4 | 34,965 |
| Total (56) | | 552,225 |
| Educational personnel development: | | |
| Branch chief | GS–15 | 18,404 |
| Section chief (2) | GS–15 | 36,808 |
| Program manager | GS–15 | 18,404 |
| Grants management officer | GS–14 | 15,841 |
| Program officer | GS–14 | 15,841 |
| Program specialist (2) | GS–14 | 31,682 |
| Education Specialist (4) | GS–14 | 63,364 |
| Reports officer | GS–13 | 13,507 |
| Program specialist (4) | GS–13 | 54,028 |
| Education specialist (4) | GS–13 | 54,028 |
| Personnel analyst (2) | GS–13 | 27,014 |
| Administrative officer | GS–13 | 13,507 |
| Program specialist (2) | GS–12 | 22,922 |
| Education specialist | GS–11 | 9,657 |
| Program assistant | GS–9 | 8,054 |
| Research assistant | GS–6 | 6,137 |
| Reports assistant (2) | GS–6 | 12,274 |
| Secretary (2) | GS–6 | 12,274 |

NEW POSITIONS REQUESTED, FISCAL YEAR 1969—Continued

| | Grade | Annual salary |
|---|---|---|
| ALL ACTIVITIES—Continued | | |
| Educational personnel development—Continued | | |
| Secretary (6) | GS–5 | $33,390 |
| Clerks (3) | GS–5 | 16,695 |
| Secretary | GS–4 | 4,995 |
| Clerks (6) | GS–4 | 29,970 |
| Total (49) | | 518,796 |
| Total new positions, all activities (373) | | 3,837,390 |

BIOGRAPHICAL SKETCH

Name: Bernard Sisco.
Position: Assistant Commissioner for Administration.
Birthplace and date: Washington, D.C., September 24, 1926.
Education: Benjamin Franklin University—BCS Princeton University—Fellow in Public Affairs at Woodrow Wilson School of Public and International Affairs.
Experience:
Present: Assistant Commissioner for Administration.
1961–67: Deputy Assistant Director for Administration, Goddard Space Flight Center.
1959–61: Financial Management Officer, Goddard Space Flight Center.
1952–59: Accounting and Control Officer, Office of Naval Research.
1950–52: Agent, Internal Revenue Service.
1946–50: Budget Analyst, Naval Research Laboratory.

WITNESS FIRST APPEARANCE

Senator HILL. Mr. Bernard Sisco.

Mr. HOWE. I might say Mr. Sisco is also here for the first time testifying. He replaced Mr. Karsh, whom you may remember testified last year.

Senator HILL. Where did he go?

Mr. HOWE. He has gone into private business.

Senator HILL. Where there are larger salaries?

Mr. HOWE. That is what I hear.

Senator HILL. All right, Mr. Sisco.

ADMINISTRATION OF PROGRAMS

Mr. SISCO. Mr. Chairman, it is a pleasure to appear before you for the first time to discuss the Office of Education request for salaries and expenses for fiscal year 1969.

Our request will provide the funds needed to administer the broad programs that Congress has approved affecting every level and area of education.

Over the past several years these programs have grown from 37 in 1965, utilizing $1.5 billion in program funds, to approximately 100 authorized for fiscal year 1969, utilizing $4.1 billion as set forth in our program requirements.

The effective administration of these programs is dependent on the application of qualified manpower to plan and monitor the results of these expenditures.

NEW PROGRAMS

While much of our effort of the past few years has been devoted to developing guidelines and establishing the working relationships with

the education community to effectively implement these programs, the authorization of additional new programs to be implemented or expanded in fiscal year 1969, such as the Education Professions Development Act of 1967, will require more effort in this respect.

### MANPOWER INCREASE REQUISITE

The problem of effectively monitoring the results of our program expenditures represents a most critical area requiring additional manpower and salaries and expenses funding this year.

While we have critically evaluated the utilization of our currently available manpower in order to obtain the most effective utilization of this resource, the expanding requirements of such programs as the student financial aid area, the new thrust in education professions development, the increased emphasis on dropout prevention, education of the handicapped, and bilingual education requires the application of additional manpower in order to obtain the most effective utilization of the funds available for these programs.

### BUDGET REQUEST AND POSITIONS

Our request for $46.1 million and 2,918 positions represents, in addition to funds needed to support our currently approved level, 373 new positions to be dedicated to carrying out our expanded responsibilities and improving our ability to effectively monitor our programs.

### Travel Increase

This request includes not only the additional money needed to support our personnel needs but also an increase in travel funding to enable our staff to provide technical guidance and to monitor programs being carried on by all elements of the education community.

### Department Reduction

Senator Hill. The Department cut your request down some, didn't they?

Mr. Sisco. Yes.

Senator Hill. Some $8,983,000?

Mr. Sisco. That is correct, sir.

### Data Processing Capability Increase

We are also requesting additional funding to expand our data processing capability in order to better collect, monitor and disseminate the results of our program efforts.

The detailed justifications that have been submitted to the committee contain the specific requirements for funding in each program area together with workload statistics on which these needs are based.

### HOUSE COMMITTEE ON EDUCATION AND LABOR STUDY

We recognize that there have been some gaps in the administration of our programs in recent years due largely to the dramatic growth of our responsibilities and the necessarily constrained salaries and expenses funding.

The Office of Education study by the House Committee on Education and Labor highlighted many needed areas of improvement.

The funds that we have requested will go a long way toward closing these gaps as well as supporting new and expanded programs in fiscal year 1969.

In conclusion, let me assure you that in developing our requirements for fiscal year 1969 we have made every effort to keep our request ot a minimum consistent with our responsibilities.

My colleagues and I will be happy to answer any questions you may have.

PERSONNEL INCREASE

Senator HILL. You will have some 373 additional personnel, is that correct?

Mr. SISCO. Yes, sir; we are requesting 373 additional personnel which we feel are critically needed in order to carry out the programs for which Congress has given us responsibility.

Senator HILL. Fifty-six of this number go for the education of the handicapped; is that correct?

Mr. SISCO. That is correct.

Senator HILL. Higher education gets the larger number, 83; is that right?

Mr. SISCO. Yes, sir. The student financial aid programs have grown tremendously, as you know.

The sheer workload of processing the applications and carrying out these programs, particularly insured loans, is one of our most critical areas of need at this point.

EDUCATIONAL PROFESSIONS DEVELOPMENT PROGRAM

Senator HILL. What about your educational personnel professions development program? How is that proceeding?

Mr. SISCO. This is a new appropriation account, and includes two new programs as well as expansions of existing programs.

Senator HILL. I know it is. This is your first year.

Mr. SISCO. 1969 will be the first time that we have requested separate funding for this program. We have spent the past year planning. There was a commission that reviewed the implementation of the program. Perhaps the Commissioner can expand on this better than I can.

ADDITION OF TWO BUREAUS

Mr. HOWE. Perhaps I ought to add, Mr. Chairman, that we have added two new bureaus to the Office of Education within the last year. One was at the request of the Congress—the Bureau of Education for the Handicapped. That reflects the need for the positions you just pointed to in the area of the handicapped, to bring together all our legislative and administrative activities in behalf of handicapped persons.

In the education professions area we have launched a new bureau with an associate commissioner in charge, Mr. Davies, who testified before you 2 weeks ago. This new bureau has charge of all our training activities for people who serve as teachers, teacher aides, or administrators, or in a variety of other areas in the schools and colleges.

We so far have had to take out of our hide, so to speak, the staffing

of those two new bureaus. A major portion of our request for new personnel reflects this reorganization resulting from new programs that we have to administer.

NEW PROGRAMS

Senator HILL. Which you did not have in the past?

Mr. HOWE. Which we did not have in the past. We also have several other new programs—for example, the program added by the Murphy amendment of last year to the Elementary and Secondary Act, the dropout program; and the program added by the Yarborough amendment for the benefit of bilingual youngsters, primarily Mexican-American youngsters, but also others. These programs have placed on us additional administrative requirements.

PERSONNEL INCREASES

Senator HILL. You have additional personnel for those programs?

Mr. HOWE. No, sir. We have had to plan for those out of what we had. Now we are trying to make some adjustment in this request for additional personnel to help us in those areas.

Senator HILL. But no specific additions in this budget?

Mr. SISCO. We have requested additional. As an example, in the education professions development area, we are requesting 49 additional people. The 160 that we have this year we took out of our hides, as the Commissioner said, in order to get the program started.

Senator HILL. This year you will have the additional 49?

Mr. SISCO. That is correct, if the budget is approved.

Senator HILL. Is there anything else you would like to add?

Mr. CARDWELL. No, sir.

Senator HILL. Thank you very much.

Mr. HOWE. Thank you, Mr. Chairman.

## Public Health Service

**STATEMENT OF DR. WILLIAM H. STEWART, SURGEON GENERAL ACCOMPANIED BY:**

**DR. LEO J. GEHRIG, DEPUTY SURGEON GENERAL**
**JOHN H. KELSO, EXECUTIVE OFFICER**
**CHARLES MILLER, CHIEF FINANCE OFFICER**
**G. RICHARD CLAGUE, DEPUTY CHIEF FINANCE OFFICER**
**JAMES B. CARDWELL, DEPUTY ASSISTANT SECRETARY, BUDGET**

### Biographical Sketch

William H. Stewart, M.D., was named Surgeon General of the Public Health Service by President Lyndon B. Johnson on September 24, 1965. Six days later, the U.S. Senate confirmed his appointment as tenth Surgeon General in the 167-year history of the Service.

Born in Minneapolis, Minnesota, on May 19, 1921, he attended the University of Minnesota and Louisiana State University, and received his medical degree from Louisiana State University School of Medicine in 1945. His internship at Philadelphia General Hospital was followed by two years' duty with the U.S. Army Medical Corps. Upon completion of his residency in pediatrics at Charity Hospital, New Orleans, he was in private practice in Alexandria, Louisiana, until he entered the Public Health Service in 1951. He was certified by the American Board of Pediatrics in 1953.

His first two years as a Public Health Service career officer were spent in Thomasville, Georgia, where he headed the epidemiological unit of the Communicable Disease Center. He came to PHS headquarters in 1953 to serve the next four years with the National Heart Institute and the Heart Control Program of the Bureau of State Services. The next eight years, he spent in a staff capacity, first to the Surgeon General and, later, to the Secretary of Health, Education and Welfare.

In 1957, he became Assistant to the Surgeon General and the following year was named chief of the Division of Public Health Methods, major staff planning arm to the Surgeon General. During the three years he held that post, he also served as executive director of the Surgeon General's Committee on medical manpower which issued "Physicians for a Growing America." He was also a member of the Study Group on the Mission and Organization of the Public Health Service, and was staff director for the study of environmental health, conducted by the National Advisory Health Council and for the Special Report of the same Council on the role of the Service in medical care.

In early 1963, after organizing the new Division of Community Health Services, he was named to the Immediate Office of the Secretary of HEW as Assistant to the Special Assistant to the Secretary (Health and Medical Affairs). He left that post in August 1965 to become Director of the National Heart Institute, and was named Surgeon General the following month.

Dr. Stewart is author of scores of publications and presentations dealing with a wide range of public health issues including spread and control of various diseases, health status of the population, education for the medical and health professions and medical care administration.

He is a member of the American Academy of Pediatrics, the American Medical Association, the American Heart Association, and the American Public Health Association.

### Tribute to Senator Hill

Senator Hill. Dr. Stewart, you may proceed in your own way.

Dr. Stewart. Mr. Chairman, before I begin my testimony I would

like to spend a few minutes paying tribute to the magnificent contribution that you have made to the health of the American people.

Senator HILL. Thank you, sir.

Dr. STEWART. There are very few programs that I have dealt with over the years in which the seeds were not planted by you, and I imagine you had some chores of putting some fertilizer and water on them too, and maybe a little weeding along the way.

I think that we have always felt in the Public Health Service that we had a very loyal friend in the Congress who is dedicated to the same aims that we have.

Also for myself I would like to say it has been an honor and privilege to appear before you.

Senator HILL. Thank you, sir. I want to thank you for those very generous words and I assure you, sir, that you have been tremendously helpful in the success of these programs, in enacting them and carrying them out.

I am indebted to you for the very fine help and cooperation and the splendid work that you have done.

Dr. STEWART. Thank you, Mr. Chairman.

### STATE OF NATION'S HEALTH

Mr. Chairman, it is a pleasure for me to appear before you in support of the Public Health Service budget request for the 1969 fiscal year.

Since my associates will be presenting detailed accounts of many of the programs under our administration, I thought I would present to you a brief accounting of the state of the Nation's health, and a general review of the year just past.

This has been, as you know, a period of transition for the Public Health Service. It was also a year of progress—both in the discharge of the mandates given to us by the Congress and in the advancing level of health of the American people.

Health ranks very high on the list of priorities of our American society. We take pride in the health of the Nation, and the most recent statistics indicate that we have much to be proud of.

### LIFE EXPECTANCY

A child born in the United States has a life expectancy at birth of slightly more than 70 years. Our infant mortality rate declined substantially in 1967 to the lowest point we have ever recorded—about 23 deaths during the first year of age per 1,000 live births. Maternal deaths due to complications of pregnancy are also moving downward.

Senator HILL. A child born in 1900 had a life expectancy of about 47 years; didn't he?

Dr. STEWART. That is about right.

### DEATH RATES

Moreover, our death rate as a whole, while remaining substantially the same for the population between 15 and 55 years of age, shows a significant decline among the younger and older age groups.

In terms of specific diseases, deaths from cardiovascular disease were down 3.3 percent from 1966 figures; from diabetes about 6 percent; and from tuberculosis, 16 percent.

On the negative side of the ledger, the largest proportional increase in 1967 as compared with 1966 was the 10-percent rise in deaths due to homicide—a fact of grave concern to all agencies, including our own, which deal with the health of the American society. Cancer deaths increased about 3 percent over the previous year.

CHRONIC DISEASE PROBLEMS

Our estimates of the number of Americans afflicted to some degree by one or more chronic disease problems rose from 93.5 to over 96 million.

Senator HILL. To what do you ascribe this increase?

Dr. STEWART. This increase?

Senator HILL. Yes.

Dr. STEWART. In part I think it is due to the fact that we have more older people in our population. These are not rates but numbers.

Some of the chronic diseases are increasing in numbers, the chronic respiratory diseases, for example.

I think it is a mixture of that.

ACCIDENTS

Accidents are increasing, in the older age groups, particularly.

Senator HILL. We are getting more automobiles, too.

Dr. STEWART. That is right. Actually, the number of people injured in accidents of all kinds went up from 45 million in 1966 to almost 52 million in 1967.

Senator HILL. Quite an increase.

Dr. STEWART. Yes. Although, interestingly, the number injured in accidents involving moving motor vehicles declined by about 400,000 during the year, a decrease which we hope may reflect in part the increasing availability and use of safety devices in automobiles.

Senator HILL. That is encouraging; isn't it?

SERIOUS GROUP HEALTH PROBLEMS

Dr. STEWART. Yes, sir; very much so.

In general, this is the health record of a healthy Nation. Yet, as this committee is well aware, it is a record that leaves no room for complacency. National averages, reflecting the population as a whole, tend to mask very serious problems among certain groups of our people.

CANCER DEATHS

Senator HILL. Before you leave that subject, I may be wrong, but it seems to me the most discouraging thing is the deaths from cancer.

Dr. STEWART. I think this is probably correct, Mr. Chairman. Even though we have, and much through the efforts of you and this committee, put tremendous effort into work on cancer, the number of deaths still continues to increase.

I do think, though, that we can take some staisfaction in the fact that of all the cancers that occur, many more are cured now than used to be.

But we still have a way to go, a long way to go.

Senator HILL. We have a long way to go, don't we?

HEALTH CARE BARRIERS

Dr. STEWART. Yes, sir.

American medicine at its best is unsurpassed anywhere in the world. Unhappily, American health care at its best is still extremely difficult for millions of our people to obtain. They are still separated from it by economic, geographic and social barriers, by shortages of critical manpower and other resources, and by our lack of coordinated, comprehensive patterns of service designed to make the right care available to the right person at the right time.

DELIVERY OF HEALTH SERVICES

As you know, Mr. Chairman, we have embarked in the past 3 years on two major and highly significant new approaches to the delivery of care.

I refer to the regional medical programs authorized by Public Law 89–239, and the partnership for health program embodied in Public Law 89–749, as extended and amended last year by the 90th Congress. Both of these acts are based to an almost unique degree on local initiative.

They call for flexible Federal support of programs designed and developed in the regions, States, and communities to meet top priority needs as seen by local people—both the providers of services and those who need them.

I am happy to report that, although both programs are still in their early developmental stages, we are already finding across the Nation the creative and imaginative response on which their success depends.

Senator HILL. In other words, you think we are making a good start?

Dr. STEWART. I don't think there is any question about that, Mr. Chairman.

COMPREHENSIVE HEALTH PLANNING

Although the partnership for health program has been underway considerably less than a year, all of the 55 States and territories have now designated a single agency to administer their comprehensive health planning responsibility as required by the act, and 44 State plans have been approved.

The majority of these State planning agencies—33—are located with the State health department. Sixteen are located in the office of the Governor, and the remainder are of the interagency or commission type.

State advisory councils to these planning agencies, also required by the law, are now in process of formation. A majority of the members of these councils must represent consumers rather than providers of health services.

Meanwhile, regional advisory councils, which will advise our regional health directors in administering the programs, are already functioning in regions I, III, IV, V and VII.

Actually, this goes beyond that since this was written, Mr. Chairman.

Senator HILL. In other words, continued to increase?

Dr. STEWART. Well, region IX I know has a regional advisory council. I think all the regions have established councils now.

Of the professional planning staffs designated so far by the States, about half the members come from outside the traditional health professions.

Thus, the States are employing economists, public administrators, and others with the special competencies needed for the development of information systems and cost-benefit, cost-effectiveness analyses that will enable them to establish health priorities.

To create urgently needed expertise in the planning process, graduate curriculums in health planning are being developed in a number of universities, supported by Public Health Service grants.

This year, the larger part of the funds available for health services project grants will be used to continue support for projects already in operation.

But the requests for new projects which are coming in touch upon new areas—health counseling, family planning, information and referral services, alcoholism.

Many propose projects in connection with model cities demonstrations and neighborhood service centers and other federally assisted programs.

Our own priorities for the funding of project grants give primary consideration—within the context of the development of comprehensive health services—to these and all other projects intended to serve the urban and rural poor and to improve their health status. The Nation has no higher health priority.

REGIONAL MEDICAL PROGRAM

The national effort to improve the quality and accessibility of care for victims of heart disease, cancer, stroke, and related diseases through regional medical programs has progressed extremely well.

Active planning—by local health organizations, institutions, and practitioners, and by consumers of health services—is being supported in 54 regions which encompass our entire population. Five of the programs have received grants to begin operations.

In keeping with the original intent of the legislation to encourage local initiative, regional boundaries have been defined at the local levels to help assure that resources are logically grouped to meet regional needs.

As the planning proceeds and these needs and resources are more precisely identified, these boundaries are subject to change. At present 32 regions approximate State lines, 16 are parts of States, and six cover more than one State.

In 30 of the regions, the coordinating headquarters are medical schools and universities; in five others, medical societies. State and interstate agencies have primary responsibility in two regions.

In 15 of the regions, brandnew institutions have been created specifically for the purpose of carrying out the RMP's.

The operational phase of the RMP's has necessarily taken longer to get underway, but applications for operational grants have now been received from 15 RMP's, and by June of this year we expect to have received applications from 10 more. Five regions already have been awarded roughly $7.6 million.

We have been particularly pleased with the caliber of leadership attracted to this program. The regional coordinators include among

their number university vice presidents, deans, and other distinguished leaders in medicine, education, and public health.

The strength of this leadership and the progress of the program to date were clearly evident in a meeting held this past January here in Washington, in which the regional coordinators exchanged experiences and views with our staff.

Senator HILL. You are making definite progress.

Dr. STEWART. I believe that the meeting in January was a sort of benchmark for this program. We have been developing it. I think we now have indications that we are ready to go into the operational phase and go beyond that. It is a sort of maturing.

### HOSPITAL CONSTRUCTION

In fiscal year 1967, a total of 679 Hill-Burton construction projects were approved. When completed these projects will add over 30,000 hospital and nursing home beds to our national resource, serving many thousands more people in need of health care.

In its history which now spans 20 years, the Hill-Burton program has helped to provide more than 300,000 beds in medical facilities across the Nation and brought hospital care within convenient geographic reach of virtually every community.

### INCREASE IN MEDICAL COSTS

Senator HILL. In that connection, we have to give more thought and study in an effort to decrease medical costs; isn't that right?

Dr. STEWART. There is no question about that. The rising costs, particularly hospital costs, I think are the major worry right now.

Senator HILL. To what do you ascribe this great increase in cost?

Dr. STEWART. I don't think one can say primarily. I think it is a multiplicity of factors. Mainly it is an increasing demand. The number of people going to the hospital has increased. The technical services that one can give in a hospital are much more complicated and expensive than they used to be.

The length of stay is going up now. The impact of present payment, including medicare—these are all the factors which have led to the increase in cost.

Principally, the costs are reflected in wages and salaries since they make up about 70 percent of hospital costs. The wages and salaries of nurses and hospital workers were behind and they are catching up.

### DIRECT HEALTH SERVICES

Our hospital and clinic system, while continuing its basic mission of providing direct health services to designated beneficiaries, is also increasing its commitments to research, training, and community services.

We are using our direct health-care facilities as an important intramural setting for research in the delivery of health services. We have provided all or part of their training to more than 1,800 health workers in these facilities during fiscal year 1967.

Senator HILL. How many Public Health Service hospitals do you now have in operation?

Dr. STEWART. There are 10 general hospitals, the two narcotic hospitals at Fort Worth and Lexington, and the leprosarium in Carville.

In the Indian Service there are 52 hospitals which range from rather small to 400 or 500 beds.

In addition, there is a system of outpatient clinics which relate to these hospitals.

Senator HILL. They have not increased much in the last year?

Dr. STEWART. No. The number of hospitals has decreased. In fact, within the last week or so, the old Chicago Public Health Service hospital was donated to the city for an educational facility.

Senator HILL. Is that so? I knew there had been a decrease.

Dr. STEWART. The hospital system has also participated in community health projects in collaboration with Federal, State, local, and private agencies in all phases of the provision of direct health care.

INDIAN HEALTH

I bring this up before this committee, Mr. Chairman, because it gives an idea of the scope of activities that we have.

About 90,000 American Indians and Alaskan natives were admitted for treatment to our Indian Health program facilities and contract hospitals during fiscal year 1967.

Our hospitals and clinics also recorded more than 1½ million outpatient visits and services during the year. These services and others provided to these beneficiary groups since the PHS assumed responsibility for Indian health in 1955 have resulted in significant improvements in such critically important health indexes as infant and maternal mortality, incidence of tuberculosis and other diseases, and life expectancy.

Senator HILL. Before the Public Health Service took over this responsibility, the Interior Department had it; isn't that right?

Dr. STEWART. That is correct.

DEVELOPING HEALTH MANPOWER

Fiscal year 1967 brought the initiation of the varied programs of education assistance authorized by the Allied Health Professions Personnel Training Act.

One hundred and ninety-two training centers received grants to improve 395 allied health professions curriculums in which more than 11,000 students were enrolled.

More than 300 members of these professions will receive in 1968 traineeships for advanced study in preparation for positions as teachers, administrators, supervisors, and specialists.

With Federal grants, six institutions are developing and evaluating curriculums for training new types of health technologists.

Construction grants awarded through January 1, 1968, under the Health Professions Educational Assistance Act since its inception are adding 3,848 additional first-year student places.

These will expand our national educational capacity by more than 1,500 medical students, nearly 700 dental students and 800 nursing students, and smaller numbers in other health professions.

Also through January 1, 1968, construction projects in schools of nursing, aided by Federal grants authorized by the Nurse Training

Act, are providing nearly 3,000 new places for first-year students and maintaining over 12,000 places that might otherwise have been lost.

### Educational Improvement Awards, 1966 and 1967

Over the past 2 years, fiscal 1966 and 1967, over $40 million has been awarded to 170 professional schools for educational improvement.

In fiscal year 1967, approximately 3,800 students of the health professions held scholarships averaging about $800.

This year, some 7,600 nursing students of exceptional financial need will receive scholarship aid through Nursing Education Opportunity Grants awarded to the school.

More than 72,000 health professions students and 57,000 nursing students have received federally financed loans since September 1964.

### Recruiting Hospital Personnel

Senator Hill. To go back 1 minute to your hospitals, Do you have much difficulty today securing doctors, nurses, and paramedical personnel for the operation of your hospitals?

Dr. Stewart. We have great difficulty getting physicians for our hospital system. Of the physician manpower of the Public Health Service, about 62 percent are young men who are serving their draft obligation.

So, 38 percent is our permanent cadre.

### Physicians

Senator Hill. What is the highest salary you are able to pay a doctor now in these hospitals?

Dr. Stewart. Let us say he is chief of a service, chief of surgery. The medical director gets to be medical director in 15 years.

Dr. Gehrig. About 13 years. It will be in the vicinity of $16,000 and $17,000.

Dr. Stewart. That will be after 15 or 16 years of service. That, as you know, Mr. Chairman, is not competitive.

It is way out in left field. There is no competition whatsoever. Therefore, we are having great difficulty with senior personnel.

For many of our hospitals we wish we had more supervision than we have.

### Nurses

In nursing, most of the nurses in our hospitals are civil service. They do not wish to be moved. They are wives, and so forth.

We had difficulty for a while but the Civil Service Commission has allowed us to raise salaries to a competitive position within the market area that the hospital is located. When it lags behind we have trouble. When it catches up we share the shortage with everybody else.

As far as technicians are concerned, the same thing is true.

Senator Hill. The same thing is true there?

Dr. Stewart. Yes.

### Health Personnel

Senator Hill. We have a problem on this matter of health personnel, haven't we?

Dr. STEWART. I think it is the most serious problem that we have in the Government at the present time as far as health professions go. You have heard Dr. Shannon talk about the difficulty of the scientists in this field.

Senator HILL. I know that.

Dr. STEWART. We just are not competitive at all in any of these fields from the middle on up.

Senator HILL. It makes it pretty difficult, does it not?

Dr. STEWART. Yes, sir.

### PREVENTION AND DISEASE CONTROL

Last year's intensive immunization effort against measles has sharply reduced the incidence of this disease. The preliminary estimate is 62,232 cases in 1967, compared with 203,010 reported cases in 1966.

Senator HILL. That is quite a reduction, isn't it?

Dr. STEWART. Not only that, but the 62,000 cases is the lowest number of cases of measles we ever had in this country since measles was a reportable disease.

Senator HILL. Even when the population was much less than it is today.

### VACCINATION ASSISTANCE PROGRAM

Dr. STEWART. The vaccination assistance program, under which the measles immunization campaign was supported, last year awarded project grants to States that include over 90 percent of our total population.

Although the legislation authorizing vaccination assistance expires this year, we will continue to encourage the use of vaccines as a routine part of health care through the Partnership for Health authority and to maintain surveillance of immunization levels to assure that our high level of protection is maintained.

### MUMPS VACCINE

The recent licensure of a mumps vaccine represents an important addition to the health protection arsenal.

Senator HILL. How is this testing coming along?

Dr. STEWART. I think it is coming very well.

Senator HILL. Are we going to have that vaccine?

Dr. STEWART. In a couple of years. I am giving myself a little leeway, Mr. Chairman. But the people who have been immunized are maintaining their immune level.

Second, we had to find out how much spread of the virus occurred from a person who had been immunized—they do shed the virus, it is a live virus vaccine—and how much infection this would cause among the people.

We have found that it does shed but not very much. This is the kind of testing that is going on. We have continued to observe that first group of children. We have had no adverse experiences.

### RAPID BLOOD TEST TO DETERMINE RUBELLA IMMUNITY

The rapid blood test developed by the same scientists to determine rubella immunity is now in use in vaccine development centers,

hospitals, diagnostic laboratories, and doctors' offices in many countries.

The test is being used to identify candidates for the vaccine studies and to determine the immunity conferred. Large-scale field trials are anticipated in the near future.

### Poliomyelitis

In 1952, there were 57,879 cases of polio. In 1967, there were less than 40 cases in the entire Nation.

Senator Hill. That was some reduction, wasn't it?

Dr. Stewart. That was some reduction.

Senator Hill. I was at the Harvard University Dental School just about a year ago when the school celebrated its centennial. I was very much interested when my friend Dr. Sidney Farber who, of course, you know very well, took me in this laboratory. He said this is the laboratory where Dr. John Enders did the first work in the vaccine for polio. Of course it would not do to tell that to Mr. Basil O'Connor. Do you understand?

Dr. Stewart. That is right, I understand.

Under the vaccination assistance program which began in the spring of 1963, roughly 31 million children had been immunized against this disease by the end of 1967.

I would like to point out that the 40 cases are inexcusable. We should not have any in this country. It indicates we have to keep up constant surveillance as new children come along and need vaccination.

### Communicable Diseases

Vaccination assistance programs against other communicable diseases also continued through 1967, by which time about 25½ million children had been immunized against diphtheria; 30.5 million against tetanus; and 19.5 million against whooping cough.

In January, I witnessed the 25 millionth smallpox vaccination given in a program being conducted in 19 nations of west Africa by the Public Health Service in conjunction with the Agency for International Development.

Also in 1967, for the first time since records have been kept in this country, there were no human deaths due to rabies contracted within the United States.

Senator Hill. No deaths whatever?

Dr. Stewart. None at all.

### Chronic Diseases

In the field of the chronic diseases, the full application of known methods of prevention and detection continues to receive high priority. It is estimated that 190,000 cases of cancer are cured each year—and that 95,000 more could be cured.

Senator Hill. Could be? How?

Dr. Stewart. By earlier detection, earlier treatment.

Senator Hill. Isn't that the secret now, the detection?

Dr. Stewart. The detection is the major secret. Also important is getting the right form of treatment, but I think the major one is early detection.

### Cervical Cancer Detection Projects

Last year, 143 hospital-based cervical cancer detection demonstration projects were supported by the Public Health Service. Over 1 million women have been examined in this program, now in its fifth year, and more than 6,500 cervical cancers have been detected.

An additional 500,000 women have been examined in the cooperative program with the American Academy of General Practice, which now includes 4,000 physicians in 36 States. More than 1,000 carcinomas have been detected.

### Cytotechnology

Almost 550 students are being trained annually in cytotechnology—the technique of reading cell slides—in 71 schools aided by Federal grants.

### Artificial Kidney Projects

Public Health Service-supported projects have demonstrated that the artificial kidney can maintain useful life in persons with total kidney failure.

Last year, we began a study of the feasibility of artificial kidney dialysis in the patient's home, as opposed to the hospital.

It appears that, with available equipment, home dialysis may cost only half as much as institutional dialysis, once the patient is trained and the equipment provided.

This study, which is being conducted by 12 artificial kidney centers, will provide the comparative clinical and cost data which may permit the extension of artificial kidney therapy to more of the people who cannot live without it.

Senator Hill. It has been pretty expensive in the hospital; hasn't it?

Dr. Stewart. Yes; it has been very expensive. While this home dialysis is less expensive, there are limitations as to when you can use home dialysis. It takes a certain psychological attitude of the patient and family and a certain type of patient.

I don't know how widely we will be able to use it. It does have its place in the therapeutic program.

### Lung Cancer

At the direction of President Johnson, a task force on lung cancer has been established. The task force will devote primary attention to improved methods for detection and diagnosis of lung cancer, the development of a less hazardous cigarette, and environmental factors including atmospheric pollution, occupational exposures, and the like.

Meanwhile, we are proceeding with our educational programs designed to present the facts on the hazards of cigarette smoking to the American people, in the hope that young people may decide not to start smoking and adult smokers may decide to stop.

Senator Hill. I want to congratulate you on that. You have terrible competition with television.

Dr. Stewart. I am well aware of that, sir.

Senator Hill. You are well aware of that?

Dr. Stewart. Yes, sir.

Senator HILL. Every other advertisement over the television is a cigarette advertisement.

Dr. STEWART. And they have prettier faces than my face.

Senator HILL. They don't have to worry about their income as you have to worry about your appropriation; is that correct?

Dr. STEWART. That is correct.

### IMPROVING MENTAL HEALTH

Community mental health centers in 48 States, Puerto Rico, and the District of Columbia have been awarded grants to aid construction, staffing, or both. These 257 centers serve both urban and rural areas with a population totaling 42 million.

Eighteen percent of the centers are located in cities with populations of 500,000 or more; 36 percent in communities between 50,000 and 500,000; and the remaining 46 percent in communities with 50,000 people or less.

### REDUCTION IN HOSPITAL PATIENTS

Senator HILL. Speaking about that, in the last 10 years we have made a substantial reduction in the number of people in mental hospitals; haven't we?

Dr. STEWART. Yes, sir; we have. The number started dropping about 1956, if I remember rightly. Through the introduction of drugs and the changing attitude, the people can be cared for in the community. With the adjunction of drugs, this has dropped steadily, and we think, as we look at the curves, that the drop has been accelerated by the opening of the community health centers.

I think the saving has been around $4 billion in institutional care costs.

Senator HILL. On the other hand, at the time they established the first mental hospital at Williamsburg, Va., to about 1959, when we started our community mental health centers, there was this constant steady increase.

Dr. STEWART. That is correct. I don't know what we would have done if that curve had not changed in 1959. If we projected out the way it was going it would have been very high.

### PREVENTION AND CONTROL OF ALCOHOLISM

The National Center for Prevention and Control of Alcoholism, established late in 1966 in the National Institute of Mental Health, is now serving as the focal point for all our activities against this national problem.

The Center is assisting State and local governments and various organizations with the development of alcoholism programs, as well as conducting and supporting research.

A high priority has been assigned to the development in universities of multidisciplinary research centers in alcoholism; grants were awarded for the establishment of five such centers.

### SAINT ELIZABETHS HOSPITAL

This is the first year for which I have had responsibility for presenting the appropriation request of Saint Elizabeths Hospital. It is our

intention that this institution will develop into one of the finest mental clinical research centers in the world.

At the same time, we shall continue our efforts to improve the quality of treatment given to our patients, and the clinical training provided to professional and ancillary personnel.

Senator HILL. That institution has been separate from the very beginning, hasn't it?

Dr. STEWART. That is right.

### DRUGS

Several surveys of the patterns of drug use by high school and college age young people are nearing completion. In the field of opiate drug dependence, scientists are investigating the neurophysiological studies of the effects of such drugs in various portions of the central nervous system and other aspects of physical dependence and tolerance.

The possible biological hazards of LSD and other hallucinogenic drugs are being given high priority in the research effort.

Senator HILL. When you and I were boys we didn't have that problem.

Dr. STEWART. No, I guess it was cornsilk.

Senator HILL. We had discipline. Spare the rod and spoil the child. They didn't spare the rod, isn't that right?

Dr. STEWART. That is right.

### ENVIRONMENTAL PROTECTION

One measure of the progress which is being made in the control of air pollution is the growth in the number of control agencies and expenditures.

In 1961, there were 85 local and regional air pollution control programs—many of them inactive—in the United States.

In 1967, Federal program grants were awarded to 144 control agencies—regional, State, and municipal.

In 1961, the total expenditure for programs to control air pollution was $7.6 million—and almost half of that was spent in a single State, California.

In 1967, $26 million was spent for air pollution control programs.

Senator HILL. That is a good step up, isn't it?

Dr. STEWART. Yes, it is.

Senator HILL. And much needed?

Dr. STEWART. Yes, sir, and I think it is a reflection of the public awareness of this problem.

There are other measures. All 1968 model cars and light trucks are required to meet Federal standards for emission control.

Broader, more stringent standards have been proposed, to take effect with the 1970 model year.

Progress has been made toward abatement of air pollution in one intrastate and nine interstate cases under the Clean Air Act. In most cases in which recommendations have been made, compliance is on or ahead of schedule.

The 48 contiguous States have been divided into eight atmospheric areas. The definition of these areas, which is determined mainly by

meteorological data, is a step in the development of a system under which the States will be called upon to develop and apply air quality standards on a regional basis under the Air Quality Act of 1967.

### Solid Waste Program

Under the solid waste program, planning grants have now been awarded to 35 States and Puerto Rico. We are supporting demonstration projects in a variety of settings—in cities like Washington, D.C., where the site of the Kenilworth dump, a main source of air pollution, will be converted to recreation use; and in small towns, counties, and groups of small towns.

In a project being undertaken in Tacoma, Wash., demolition wastes are being shredded and compacted for use in sanitary landfills—instead of being burned.

In another project, wastes hauled by train from the urban area are being used to fill abandoned strip mines. The PHS–TVA Johnson City compost plant, which began operations on June 20, 1967, is studying the conversion of solid wastes into useable soil conditioners by creating conditions in which harmless bacteria consume the waste material.

Senator Hill. That is an interesting project; isn't it?

Dr. Stewart. Very interesting project. If we can recirculate the waste into useful products, this may answer our problem.

## ADVANCING MEDICAL KNOWLEDGE

The Nation's biomedical research effort, operating at the high level of capability which has been created over the past two decades and to which this committee has made such a distinguished contribution, continues to move forward with accelerating productivity.

It is almost gratuitous for me to add that the rapid advance of medical knowledge generated by this research effort is the basic source of present and future advances in the health of the Nation.

I have already alluded to two significant research achievements of the past year in the infectious disease field—the licensing of a vaccine against mumps and great progress with the experimental vaccine against rubella or German measles.

As I noted, we now have evidence that the attenuated virus vaccine may confer lasting immunity.

Additionally, the simple, precise, and quick blood test for rubella infection, developed only a year ago, is expected to advance the target date of final rubella vaccine by about 1 year, and to result in a saving of over a million dollars in Government expenditures for rubella vaccine research.

### DNA Molecule Synthesizing

The end of the year brought a history-making announcement in the field of biomedical research. Two grantees of the National Institutes of Health and the National Science Foundation, working at Stanford University, have succeeded in synthesizing a biologically active DNA molecule.

This synthetic molecule is actually a virus, complete with at least five or six genes which, like the natural virus from which it was copied, is able to produce exact replicas of itself in the infected bacterial host.

The implications of this achievement are awesome. One type of virus, for example, is known to cause a variety of cancers in many animals. If this virus can be synthesized with the same or similar methods developed by these grantees, we will be in an excellent position to determine precisely which of its genes are responsible for producing cancers.

And projecting ahead from that stage, we may one day be able to manipulate the laboratory synthesis of DNA in order to modify genes in a directed way.

### Dental Caries

Tooth decay costs Americans an estimated $1 billion each year. If all the dental caries which develop annually in this country were treated, moreover, the figure would rise to something like $10 billion.

A team of four scientists announced early this year that they had kept hamsters virtually free of tooth decay simply by giving them a particular enzyme in their drinking water.

Previous work at the National Institute of Dental Research had shown that some forms of bacteria normal to the human mouth, when introduced into the mouth of a cavity-free laboratory animal, will cause it to develop rampant tooth decay.

These bacteria are believed to be largely responsible for the formation of dental plaque, a tough, sticky film that is deposited on the teeth and, it is generally believed, is a precursor to tooth decay.

The recently discovered enzyme, when administered to hamsters, broke up dental plaque and prevented more from forming.

The results were so striking that plans are now underway to test the enzyme, possibly in ointment or mouthwash form, with humans.

This work—which may well prove to be a major breakthrough in the control of tooth decay—was carried out jointly by an investigator from Merck, Sharp & Dohme Research Laboratories and a team of scientists from our National Institute of Dental Research in Bethesda.

### National Health Effort

Mr. Chairman, I hope I have been able to communicate to you and to the committee the sense of purpose, direction, and progress which I feel in viewing the national health effort.

Our goals are high, for health stands very high on the list of our society's priorities. We still have far to go to achieve the best in health care and health protection, readily accessible to all Americans.

Yet I feel that we are moving forward and gaining momentum. New partnerships are being forged among governmental agencies at all levels, and between those agencies and the private and voluntary elements which play such a critical role in health.

New medical knowledge is constantly being brought into action. Stronger resources of manpower, facilities, and services are being developed.

I welcome this opportunity to discuss with this committee, from which we have gained so much guidance and leadership in the past, the role of the Public Health Service in helping to meet the national health challenge.

Senator Hill. Doctor, I want to thank you. I think you have brought us a fine, informative, and most challenging statement.

Certainly it is encouraging to see the progress that we have made in many cases and yet we have to realize that there is much more progress yet to be made.

Isn't that right?

Dr. STEWART. Yes, sir; very much so.

BIOGRAPHY OF DR. STEWART

Senator HILL. You have brought us a very fine summation here which is both encouraging and challenging. We appreciate it deeply. Mr. Downey calls my attention to one little matter. I know he took great pleasure in doing so, knowing him as I do. That is the fact that you were born—I spoke about when we were young we did not have these problems about drugs among young folks, we had discipline among our young people—you were born on May 19, 1921?

Dr. STEWART. That is correct.

Senator HILL. I came to Congress in 1923. I want to say this, though: That I was a baby Member when I came to the House of Representatives. I was a baby Member. I didn't come with an all-day sucker, but I was a baby Member.

Incidentally, you were born in Minnesota and attended the University of Minnesota. How did you happen to go from Minnesota to Louisiana State?

Dr. STEWART. My father went down to LSU to be professor and chairman of the Department of Pediatrics at LSU. I was about to go to medical school, so I moved down with the family.

Senator HILL. He was still young enough to be interested in pediatrics. Then you went down to LSU?

Dr. STEWART. Yes, sir.

Senator HILL. Then you came back and interned at Philadelphia General; is that correct?

Dr. STEWART. That is correct.

Senator HILL. You practiced in Alexandria, La., until you entered the Public Health Service in 1951. You have been in the Public Health Service since 1951?

Dr. STEWART. Yes, sir.

Senator HILL. You became Surgeon General in 1965, didn't you?

Dr. STEWART. That is right.

Senator HILL. You have been in the Public Health Service just about 14 years?

Dr. STEWART. That is right.

Senator HILL. That is a pretty good record; isn't it?

Dr. STEWART. I hope so.

Senator HILL. I want to congratulate you. That is fine. I certainly appreciate your very fine statement here this morning.

## Office of Surgeon General, Salaries and Expenses

**STATEMENT OF DR. LEO J. GEHRIG, DEPUTY SURGEON GENERAL ACCOMPANIED BY:**

**JOHN H. KELSO, EXECUTIVE OFFICER**
**DR. WILLIAM H. STEWART, SURGEON GENERAL**
**CHARLES MILLER, CHIEF, FINANCE OFFICER**
**JAMES B. CARDWELL, DEPUTY ASSISTANT SECRETARY, BUDGET**

### Appropriation Estimate

"OFFICE OF THE SURGEON GENERAL, SALARIES AND EXPENSES

"For the divisions and offices of the Office of the Surgeon General and for miscellaneous expenses of the Public Health Service not appropriated for elsewhere, including preparing information, articles, and publications related to public health; and conducting studies and demonstrations in public health methods, [$8,358,000] *$9,073,000.*"

AMOUNTS AVAILABLE FOR OBLIGATION

| | 1968 | 1969 |
|---|---|---|
| Appropriation | $8,358,000 | $9,073,000 |
| Actual transfer to "Operating expenses, Public Buildings Service," General Services Administration | −108,000 | |
| Actual transfer from— | | |
| "Comprehensive health planning and services" | 91,000 | |
| "National Heart Institute" | 163,000 | |
| Cutback from the 1968 President's budget required by H.J. Res. 888 | −262,000 | |
| Total currently authorized for obligation | 8,242,000 | 9,073,000 |
| Plus proposed release of reserves for increased pay and postal costs | 262,000 | |
| Proposed transfer of reserves created by H.J. Res. 888 from "Health manpower education and utilization" for increased pay and postal costs | 78,000 | |
| Total available for obligation | 8,582,000 | 9,073,000 |
| Disposition of cutback: To be used for pay and postal costs in this account | 262,000 | |

| | 1968 estimate | | 1969 estimate | | Increase or decrease | |
|---|---|---|---|---|---|---|
| | Positions | Amount | Positions | Amount | Positions | Amount |
| **OBLIGATIONS BY ACTIVITY** | | | | | | |
| Office of international health | 26 | $301,600 | 26 | $310,000 | | +$8,400 |
| Immediate office of the Surgeon General | 46 | 687,800 | 46 | 704,000 | | +16,200 |
| Office of program planning and evaluation | 53 | 579,000 | 53 | 582,000 | | +3,000 |
| Office of legislation | 12 | 115,400 | 12 | 125,000 | | +9,600 |
| Office of extramural programs | 22 | 302,000 | 22 | 304,000 | | +2,000 |
| Office of administrative management | 320 | 4,022,300 | 333 | 4,430,000 | +13 | +407,700 |
| Office of the executive officer | 16 | 332,300 | 16 | 334,800 | | +2,500 |
| Division of buildings and facilities | 54 | 702,900 | 54 | 716,900 | | +14,000 |
| Division of finance | 98 | 1,180,900 | 98 | 1,205,800 | | +24,900 |
| Division of grants and contracts | 30 | 340,800 | 30 | 355,800 | | +15,000 |
| Division of internal audit | 26 | 346,600 | 26 | 351,000 | | +4,400 |
| Division of procurement and materiel management | 80 | 915,500 | 80 | 926,700 | | +11,200 |
| Data systems development staff | 7 | 79,500 | 20 | 413,500 | +13 | +334,000 |
| Management policy staff | 9 | 123,800 | 9 | 125,500 | | +1,700 |
| Office of personnel | 181 | 1,888,200 | 181 | 1,925,000 | | +36,800 |
| Office of information | 59 | 685,700 | 59 | 693,000 | | +7,300 |
| Total obligations | 719 | 8,582,000 | 732 | 9,073,000 | +13 | +491,000 |

OBLIGATIONS BY OBJECT

| | 1968 estimate | 1969 estimate | Increase or decrease |
|---|---|---|---|
| Total number of permanent positions | 719 | 732 | +13 |
| Full-time equivalent of all other positions | 5 | 5 | |
| Average number of all employees | 634 | 647 | +13 |
| Personnel compensation: | | | |
| Permanent positions | $6,584,000 | $6,813,000 | +$229,000 |
| Positions other than permanent | 44,000 | 43,000 | −1,000 |
| Other personnel compensation | 4,000 | | −4,000 |
| Total personnel compensation | 6,632,000 | 6,856,000 | +224,000 |
| Personnel benefits | 562,000 | 629,000 | +67,000 |
| Travel and transportation of persons | 200,000 | 200,000 | |
| Transportation of things | 20,000 | 20,000 | |
| Rent, communications, and utilities | 398,000 | 498,000 | +100,000 |
| Printing and reproduction | 240,000 | 240,000 | |
| Other services | 250,000 | 350,000 | +100,000 |
| Services of other agencies | 200,000 | 200,000 | |
| Supplies and materials | 45,000 | 45,000 | |
| Equipment | 35,000 | 35,000 | |
| Total obligations by object | 8,582,000 | 9,073,000 | +491,000 |

SUMMARY OF CHANGES

| | |
|---|---|
| 1968 enacted appropriation | $8,358,000 |
| Transfers from: | |
| "Comprehensive Health Planning and Services" | 91,000 |
| "National Heart Institute" | 163,000 |
| Transferred to "Operating expenses, public buildings service," General Services Administration | −108,000 |
| Cutback required by House Joint Resolution 888 | −262,000 |
| Proposed release of reserves for increased pay and postal costs | 262,000 |
| Proposed transfer of reserves created by House Joint Resolution 888 from "Health manpower education and utilization" for increased pay and postal costs | 78,000 |
| 1968 estimated obligations | 8,582,000 |
| 1969 estimated obligations | 9,073,000 |
| Total change | +491,000 |

| | Base | | Change from base | |
|---|---|---|---|---|
| | Positions | Amount | Positions | Amount |
| Increases: | | | | |
| A. Built in: | | | | |
| 1. Annualization of new positions authorized in 1968 | | | | $91,400 |
| 2. Annualization cost of pay increase (Public Law 90–206 and Public Law 90–207) | | | | 55,500 |
| 3. 1 extra day of pay (260 days in 1968, 261 days in 1969) | | | | 36,100 |
| B. Program: 1. Data systems staff | 7 | $79,500 | 13 | 322,000 |
| Total increases | | | 13 | 505,000 |
| Decreases: 1. Nonrecurring items of equipment and rent | | | | −14,000 |
| Total decreases | | | | −14,000 |
| Total net changes requested | | | +13 | +491,000 |

EXPLANATION OF CHANGES

*Office of Administrative Management.*—An increase of 13 positions and $322,000 is requested to augment and expand the Office of the Surgeon General Management Information System that will be placed in operation in 1968 by the Data Systems Development Staff.

EXPLANATION OF TRANSFERS

| | 1968 estimate | Purpose |
|---|---|---|
| Transfer to "Operating expenses, Public Buildings Service," General Services Administration. | $108,000 | Rental of office space (81 Stat. 349). |
| Transfer from— | | |
| "Comprehensive health planning and services" | 91,000 | Transfer of certain grants management functions formerly performed in the Office of Comprehensive Health Planning to the Division of Grants and Contracts, Office of the Surgeon General. This transfer involves 9 positions and is made under authority of 42 U.S.C. 226. |
| "National Heart Institute" | 163,000 | Transfer involving 10 positions of grants policy and procedures functions formerly performed in the Division of Research Grants, NIH, to the Office of Extramural Programs and Division of Grants and Contract in the Office of the Surgeon General. Transfer of 2 positions and related funds to cover constructions projects and the servicing of facilities located off NIH ground from NIH to the Division of Buildings and Facilities, OSG (42 U.S.C.226). |
| Proposed transfer from "Health manpower education and utilization". | 78,000 | To cover increased pay costs resulting from Public Laws 90–206 and 90–207. |

JUSTIFICATION.—OFFICE OF THE SURGEON GENERAL, SALARIES AND EXPENSES

| | 1968 estimate | | 1969 estimate | | Increase or decrease | |
|---|---|---|---|---|---|---|
| | Positions | Amount | Positions | Amount | Positions | Amount |
| Personnel compensation and benefits | 719 | $7,194,000 | 732 | $7,485,000 | +13 | +$291,000 |
| Other expenses | | 1,388,000 | | 1,588,000 | | +200,000 |
| Total | 719 | 8,582,000 | 732 | 9,073,000 | +13 | +491,000 |

GENERAL STATEMENT

This appropriation provides funds necessary to the discharge of certain responsibilities within the Office of the Surgeon General. This Office provides overall administration, management, and direction of all programs and projects of the Public Health Service. It is organized for three principal purposes: (1) To interpret for the entire Service policies which emanate not only from the Surgeon General but also from the Department of Health, Education, and Welfare, the General Accounting Office, the Bureau of the Budget, the General Services Administration, the Civil Service Commission, and other government agencies having policy making powers; (2) To furnish staff services to the Surgeon General as bases for his decisions; and (3) To furnish services to the headquarters and field offices. The budget is presented under two activities, "International health activities," and "Management and central services."

This estimate provides for a program increase of 13 positions and $322,000 to support the Office of the Surgeon General Management Information System that will be placed in operation during fiscal year 1968, and to support related projects.

INTERNATIONAL HEALTH ACTIVITIES

| | 1968 estimate | | 1969 estimate | | Increase or decrease | |
|---|---|---|---|---|---|---|
| | Positions | Amount | Positions | Amount | Positions | Amount |
| Personnel compensation and benefits | 26 | $264,000 | 26 | $272,400 | | +$8,400 |
| Other expenses | | 37,600 | | 37,600 | | |
| Total | 26 | 301,600 | 26 | 310,000 | | +8,400 |

The Office of International Health will continue to serve as principal advisor to the Surgeon General on international health matters, and to overseeing all phases of PHS activities in the international field. This includes the development of policies covering all PHS relationships in international matters; direct staff assistance to the Surgeon General and to the heads of PHS Bureaus; developing and recommending United States and Service policy positions for health and related fields; and providing current information on health needs and conditions in foreign countries. The Office will continue to maintain PHS relationships with multilateral and bilateral health agencies and to serve as the liaison for the PHS with these health agencies and international agencies and international organizations.

We are requesting an increase of $6,800 representing annualization of positions new in 1968 and annualization of Increased Pay and related costs resulting from enactment of Public Law 90–206 and Public Law 90–207, and $1,600 for one extra day of pay.

MANAGEMENT AND CENTRAL SERVICES

| | 1968 estimate | | 1969 estimate | | Increase or decrease | |
|---|---|---|---|---|---|---|
| | Positions | Amount | Positions | Amount | Positions | Amount |
| Personnel compensation and benefits | 693 | $6,930,000 | 706 | $7,212,600 | +13 | +$282,600 |
| Other expenses | | 1,350,400 | | 1,550,400 | | +200,000 |
| Total | 693 | 8,280,400 | 706 | 8,763,000 | +13 | +482,600 |
| Subactivities: | | | | | | |
| Immediate Office of the Surgeon General | 46 | 687,800 | 46 | 704,000 | | +16,200 |
| Office of Program Planning and Evaluation | 53 | 579,000 | 53 | 582,000 | | +3,000 |
| Office of Legislation | 12 | 115,400 | 12 | 125,000 | | +9,600 |
| Office of Extramural Programs | 22 | 302,000 | 22 | 304,000 | | +2,000 |
| Office of Administrative Management | 320 | 4,022,300 | 333 | 4,430,000 | +13 | +407,700 |
| Office of Personnel | 181 | 1,888,200 | 181 | 1,925,000 | | +36,800 |
| Office of Information | 59 | 685,700 | 59 | 693,000 | | +7,300 |
| Total | 693 | 8,280,400 | 706 | 8,763,000 | +13 | +482,600 |

IMMEDIATE OFFICE OF THE SURGEON GENERAL

| | 1968 estimate | | 1969 estimate | | Increase or decrease | |
|---|---|---|---|---|---|---|
| | Positions | Amount | Positions | Amount | Positions | Amount |
| Personnel compensation and benefits | 46 | $602,600 | 46 | $618,800 | | +$16,200 |
| Other expenses | | 85,200 | | 85,200 | | |
| Total | 46 | 687,800 | 46 | 704,000 | | +16,200 |

The staff included within the Immediate Office will provide advisory services to the Surgeon General for such matters as coordinating the policy and procedural aspects of special projects and studies; carrying out fact-finding and evaluations in the areas of program review and intergovernmental relations; developing and maintaining close and effective liaison between the Public Health Service and professional associations, educational and research institutions, and other outside groups.

The requested increase for 1969 is to cover annualization of positions new in 1968 and annualization of increased pay and related costs resulting from enactment of Public Law 90–206 and Public Law 90–207 ($14,600) and $1,600 for one extra day of pay in 1969.

OFFICE OF PROGRAM PLANNING AND EVALUATION

| | 1968 estimate | | 1969 estimate | | Increase or decrease | |
|---|---|---|---|---|---|---|
| | Positions | Amount | Positions | Amount | Positions | Amount |
| Personnel compensation and benefits | 53 | $465,100 | 53 | $477,100 | ..... | +$12,000 |
| Other expenses | ..... | 113,900 | ..... | 104,900 | ..... | −9,000 |
| Total | 53 | 579,000 | 53 | 582,000 | ..... | +3,000 |

The Office of Program Planning and Evaluation is responsible in the areas of advanced health planning and evaluation as they relate to strategy development and implementation. The Office will continue to identify alternative means of achieving program goals and aid in translating strategy into program decisions. It will also cooperate with the Division of Finance to manage and improve the Service-wide Planning-Programming-Budgeting System. This responsibility will mean developing and communicating planning policies, procedures, and assumptions to the Bureaus and reviewing program plans submitted by the Bureaus for consistency with planning guidelines and practicality. The Office will undertake and direct studies leading to program memoranda covering possible alternative methods of approach in order to recommend to the Surgeon General long range plans which will result in the most effective allocation of the Service's resources to meet the Nation's health needs.

The conduct of in-depth system analysis-operations research studies to facilitate and enhance planning and programming will be a necessary in-put and follow up to the consideration of program plans. These studies will be designed to begin developing cost benefit criteria, such as in the areas of cost of quality medical care and the application of computer techniques to health activities, and to evaluate operations of special interest to the Surgeon General for performance and conformity to the approved plans.

A net increase of $3,000 is requested in 1969 representing an increase of $9,700 for annualization of positions new in 1968 and cost of pay increases resulting from enactment of Public Law 90–206 and Public Law 90–207, and $2,300 for one extra day of pay, offset by a decrease of $9,000 for non-recurring equipment and rental of office space.

OFFICE OF LEGISLATION

| | 1968 estimate | | 1969 estimate | | Increase or decrease | |
|---|---|---|---|---|---|---|
| | Positions | Amount | Positions | Amount | Positions | Amount |
| Personnel compensation and benefits | 12 | $111,800 | 12 | $121,400 | ..... | +$9,600 |
| Other expenses | ..... | 3,600 | ..... | 3,600 | ..... | ..... |
| Total | 12 | 115,400 | 12 | 125,000 | ..... | +9,600 |

One of the major responsibilities of the Office of Legislation is responding to Congressional requests for reports on legislation introduced each session. These requests range from informal calls for comments to formal committee reports. Another responsibility of the Office—perhaps the primary function—is the development of informational materials for use by the Congress. These materials may range from preparation of testimony and supporting data for hearings to speeches, and special reports for the use of individual members in explaining our programs to their constituents.

An increase of $9,600 of which $8,600 is for annualization of positions new in 1968 and cost of pay increases resulting from enactment of Public Law 90–206 and Public Law 90–207, and $1,000 for one extra day of pay.

OFFICE OF EXTRAMURAL PROGRAMS

| | 1968 estimate | | 1969 estimate | | Increase or decrease | |
|---|---|---|---|---|---|---|
| | Positions | Amount | Positions | Amount | Positions | Amount |
| Personnel compensation and benefits | 22 | $231,300 | 22 | $233,300 | ---- | +$2,000 |
| Other expenses | ---- | 70,700 | ---- | 70,700 | ---- | ---- |
| Total | 22 | 302,000 | 22 | 304,000 | ---- | +2,000 |

The distribution of authority for extramural awards into five bureaus and the National Library of Medicine with the consequent need for continuing leadership in the development of overall policies and operating guidelines requires the establishment of a focus of responsibility in the Office of the Surgeon General; i.e., in the Office of Extramural Programs. The Office will also provide centralized guidance for referral and review of all proposals for extramural support, determining the manner in which and the standards by which such proposals are evaluated.

An increase of $2,000 is requested to cover the annualization of increased pay and related costs resulting from the enactment of Public Law 90–206 and 90–207 ($1,000) and for one extra day of pay in 1969 ($1,000).

OFFICE OF ADMINISTRATIVE MANAGEMENT

| | 1968 estimate | | 1969 estimate | | Increase or decrease | |
|---|---|---|---|---|---|---|
| | Positions | Amount | Positions | Amount | Positions | Amount |
| Personnel compensation and benefits | 320 | $3,352,500 | 333 | $3,763,200 | +13 | +$410,700 |
| Other expenses | ---- | 669,800 | ---- | 666,800 | ---- | −3,000 |
| Total | 320 | 4,022,300 | 333 | 4,430,000 | +13 | +407,700 |

The Office of Administrative Management brings together the following Service-wide management support groups:

Office of the Executive Officer.
Division of Buildings and Facilities.
Division of Finance.
Division of Grants and Contracts.
Division of Internal Audit.
Division of Procurement and Materiel Management.
Data Systems Development Staff.
Management Policy Staff.

A discussion of each of the Division's funding requirements for 1969 follows:

OFF CE OF THE EXECUTIVE OFFICER

| | 1968 estimate | | 1969 estimate | | Increase or decrease | |
|---|---|---|---|---|---|---|
| | Positions | Amount | Positions | Amount | Positions | Amount |
| Total | 16 | $332,300 | 16 | $334,800 | ---- | +$2,500 |

The Executive Officer participates in executive policy formulation and serves as the principal advisor on management at the Service level. He exercises technical guidance and leadership, and reviews activities throughout the Service in all areas of administrative management. The Office is also responsible for coordinating the activities and providing guidance for the administration of the Office of the Surgeon General.

We are requesting an increase of $1,700 for annualization of cost of pay increases resulting from enactment of Public Law 90–206 and Public Law 90–207 and $800 for one extra day of pay.

DIVISION OF BUILDINGS AND FACILITIES

| | 1968 estimate | | 1969 estimate | | Increase or decrease | |
|---|---|---|---|---|---|---|
| | Positions | Amount | Positions | Amount | Positions | Amount |
| Total | 54 | $702,900 | 54 | $716,900 | ..... | +$14,000 |

The Division of Buildings and Facilities is the central resource for Public Health Service facility planning and is responsible for carrying out design, construction, renovation, repair and related real estate activities for all Service components other than NIH on-campus projects. In addition to the construction of PHS facilities, the Division of Buildings and Facilities has the responsibility for the planning and implementation of the design and construction requirements for Indian Health facilities. The annual construction budget for these Indian Health and related facilities is approximately $14,000,000 involving over 40 projects.

The Division of Buildings and Facilities is relatively new, having been established in October 1966. Its primary goals are to reduce the backlog of currently authorized design and construction projects and to provide for an effective capability for long-range PHS facility planning at the least possible cost. The Division is currently responsible for the design and construction of 33 new facilities costing over $240,000,000 and for the rehabilitation and repair of 250 existing facilities at a cost of over 3.5 million dollars. Projects include planning for the design of the National Center for Urban and Industrial Health, Cincinnati, Ohio; National Center for Air Pollution Control, North Carolina; and for 16 new Indian Health facilities. Work will continue on the design and/or construction of the Appalachian Laboratory, Morgantown, West Virginia; Indian Health Hospitals at Phoenix, Tuba City, and Chinle, Arizona; and the Pacific Northwest Marine Health Sciences Laboratory, Manchester, Washington.

Work will also continue on addition and extension projects including the Arctic Health Research Lab Animal Facility, College, Alaska; Dental Health Applied Research Facility, San Francisco; and the Northeast Marine Health Sciences Lab, Narragansett, Rhode Island. In addition, major emphasis will be given to the modernization and/or replacement of PHS hospitals at Carville, San Francisco, Galveston, New Orleans, Staten Island, Baltimore, Seattle, Boston, Norfolk, and Detroit. Eight Indian Health Hospitals are also scheduled for the modernization program.

An increase of $14,000 is requested to cover annualization of positions new in 1968 and annualization of increased pay and related costs resulting from the enactment of Public Law 90–206 and Public Law 90–207 ($11,400) and for one extra day of pay in 1969 ($2,600).

DIVISION OF FINANCE

| | 1968 estimate | | 1969 estimate | | Increase or decrease | |
|---|---|---|---|---|---|---|
| | Positions | Amount | Positions | Amount | Positions | Amount |
| Total | 98 | $1,180,900 | 98 | $1,205,800 | ..... | +$24,900 |

The Division of Finance will continue to provide leadership for the improvement of Service programing and financial management activities, including development of the five-year program and financial plan under the Planning, Programing, and Budgeting System. Moreover, the enormous impact of managerial needs in the accounting and contract areas will require increasing financial management attention.

The requested net increase for 1969 is $24,900 of which $24,100 is for annualization of positions new in 1968 and annualization of increased pay and related costs resulting from enactment of Public Law 90–206 and Public Law 90–207 and $3,800 for one extra day of pay in 1969. These increases are partially offset by non-recurring equipment purchases in 1968 in the amount of $3,000.

DIVISION OF GRANTS AND CONTRACTS

| | 1968 estimate | | 1969 estimate | | Increase or decrease | |
|---|---|---|---|---|---|---|
| | Positions | Amount | Positions | Amount | Positions | Amount |
| Total | 30 | $340,800 | 30 | $355,800 | ---- | +$15,000 |

The Division of Grants and Contracts was established to provide a focus for the coordination of Public Health Service activities which constitute the management processes of grant and contract administration. The mission of such a point of coordination is four-fold:

1. To ensure basic uniformity and consistency of policy implementation in those matters that are common to grant and contract administration; and to ensure the recognition among the awarding Institutes and Divisions of the very basic difference in the use of these two fiscal instruments.
2. To ensure basic uniformity and consistency in the Public Health Service approach to the solution of operating problems arising from grant and contract administrative processes in respect to relationships with the Department, other operating Agencies in the Department, other Federal agencies involved, and grantees and contractors themselves.
3. To provide a resource for working with grantees and contractors in solving institutional management problems involved in the processes of grant and contract administration.
4. To provide the Office of the Surgeon General with current and pertinent information in respect to Public Health Service grant and contract management problems and the measures being taken to solve them; to recommend policy and procedural changes when these are needed to solve problems; to implement changes; to coordinate decision making in respect to PHS-wide grant and contract management problem solving.

We are requesting an increase of $13,900 for annualization of positions new in 1968, and annualization of increased pay and related costs resulting from enactment of Public Law 90–206 and Public Law 90–207, and $1,100 for one extra day of pay.

DIVISION OF INTERNAL AUDIT

| | 1968 estimate | | 1969 estimate | | Increase or decrease | |
|---|---|---|---|---|---|---|
| | Positions | Amount | Positions | Amount | Positions | Amount |
| Total | 26 | $346,600 | 26 | $351,000 | ---- | +$4,400 |

This Division is responsible for management appraisal and review of Service operations (1) to assure fulfillment of the objectives and missions of the Service, (2) to achieve uniformity between Bureaus in basic management concepts, (3) to detect program and general management operating problems and recommend corrective action, (4) to assure the most effective administration of the programs charged to the Public Health Service, and (5) to evaluate Service accounting, financial and statistical data systems for proper accountability of assets. Other assigned responsibilities include direction of the investigative and security activities in connection with allegations of misconduct and possible violations of Federal statutes by Service personnel.

Increases of $3,300 for annualization of increased pay and related costs and $1,100 for one extra day of pay are requested.

DIVISION OF PROCUREMENT AND MATERIEL MANAGEMENT

| | 1968 estimate | | 1969 estimate | | Increase or decrease | |
|---|---|---|---|---|---|---|
| | Positions | Amount | Positions | Amount | Positions | Amount |
| Total | 80 | $915,500 | 80 | $926,700 | ---- | +$11,200 |

This Division provides leadership for the procurement and materiel management programs of the Service in the areas of procurement, supply, forms, records, and printing management and issuances, and provides technical assistance in these areas to all components of the Service. It is responsible for the issuance of all policies required to implement Federal and HEW Procurement and Property Management Regulations. A further responsibility requires formulation of Service-wide plans and policies applicable to the acquisition and utilization of automatic processing equipment.

Increases of $7,000 for annualization of increased pay and related costs and $4,200 for one extra day of pay are requested.

DATA SYSTEMS DEVELOPMENT STAFF

| | 1968 estimate | | 1969 estimate | | Increase or decrease | |
|---|---|---|---|---|---|---|
| | Positions | Amount | Positions | Amount | Positions | Amount |
| Total | 7 | $79,500 | 20 | $413,500 | +13 | +$334,000 |

The Data Systems Development Staff plans, develops the specifications for and implements (or coordinates implementation of service-wide systems for controlling, recording, processing, maintaining, and reporting of all data required for program planning, direction and control; determines the information requirements of the Surgeon General and Office of the Surgeon General staff activities; provides technical services to all elements of the OSG in data systems design; maintains the necessary liaison throughout the Service to insure that data needs are met and that appropriate adjustments in the data system are made to accommodate new areas of interest and changes in program emphasis or goals; and reviews all new data systems proposals for consistency with PHS information planning, direction, and management needs.

Thirteen additional positions (9 professional; 4 clerical) will be required in 1969 to support the OSG Management Information System that will be placed in operation during 1968, and to support the following new projects:

1. Provide systems design and programing support to the bureaus and NLM in improving the grants and contracts processing and information system.
2. Prepare and publish data systems standards for all OSG/MIS data elements.
3. Provide assistance to all areas of the OSG in the development of systems.
4. Develop internal controls for all items of input to the OSG/MIS.
5. Work with the bureaus, NCHS, and NLM in the development of output from OSG/MIS that may benefit the bureaus, NCHS, and NLM.
6. Expand the data base and system within the OSG to make it more responsive to the needs of OSG.
7. Install and supervise a computer facility within OSG to meet the needs of the Office in such areas as planning, programing, and budgeting; personnel information; committee management; accounting, property and supply, etc.

The estimate provides for $100,000 for six months rental of a computer and $100,000 for contract services in the areas of system design and feasibility studies, and for computer services pending establishment of the OSG facility. A summary of the requested increases follows:

| Title | Grade | Number of positions | Amount |
|---|---|---|---|
| Computer analyst | GS–15 | 1 | $18,404 |
| Do | GS–14 | 2 | 31,682 |
| Systems analyst | GS–13 | 2 | 27,014 |
| Do | GS–12 | 2 | 22,922 |
| Do | GS–11 | 2 | 18,314 |
| Secretary | GS–6 | 1 | 6,137 |
| Do | GS–5 | 1 | 5,565 |
| Clerk-typist | GS–4 | 2 | 9,990 |
| Total | | 13 | 140,028 |
| Lapse | | | 40,028 |
| Total compensation (new positions) | | | 100,000 |
| Pay for 1 extra day | | | 1,000 |
| Annualization of positions new in 1968 and cost of pay increase | | | 11,000 |
| Personnel benefits | | | 8,000 |
| Rent of office space, telephones, computer rental | | | 106,500 |
| Services of other agencies—Contract for computer program | | | 100,000 |
| Equipment | | | 7,500 |
| Net increase requested | | | 334,000 |

MANAGEMENT POLICY STAFF

| | 1968 estimate | | 1969 estimate | | Increase or decrease | |
|---|---|---|---|---|---|---|
| | Positions | Amount | Positions | Amount | Positions | Amount |
| Total | 9 | $123,800 | 9 | $125,500 | ..... | +$1,700 |

The Management Policy Staff is principally concerned with Service-wide management planning to assure clearcut assignments of functional responsibility, effective delegations of authority, consistent regulation, appropriate internal relationships, and viable management policies and procedures. This is accomplished through the assessment of the management implications of new legislation; the conduct of organizational studies and surveys; the review of all actions affecting organization structure, delegations of authority, and regulations; the negotiation of solutions to inter and intra Service relationship problems; the provision of management analysis services and consultation; and the conduct of other related staff work.

We are requesting an increase of $900 for annualization of increased pay and related costs and $800 for one extra day of pay.

OFFICE OF PERSONNEL

| | 1968 estimate | | 1969 estimate | | Increase or decrease | |
|---|---|---|---|---|---|---|
| | Positions | Amount | Positions | Amount | Positions | Amount |
| Personnel compensation and benefits | 181 | $1,666,500 | 181 | $1,705,300 | ..... | +$38,800 |
| Other expenses | ..... | 221,700 | ..... | 219,700 | ..... | −2,000 |
| Total | 181 | 1,888,200 | 181 | 1,925,000 | ..... | +36,800 |

The Office of Personnel meets the personnel management needs of the Service by formulating general personnel policies and plans and evaluating results. The Office acts for the Surgeon General on personnel management questions; advises top officials on all aspects of personnel management, such as recruitment, career development, policy development, and manpower planning; and represents the Service on personnel matters with the Department, the Civil Service Commission, the Congress, and the public.

We are requesting a net increase of $36,800 representing increases of $28,800 for annualization of positions new in 1968 and increased pay and related costs resulting from enactment of Public Law 90–206 and Public Law 90–207, and

$10,000 for one extra day of pay, offset by a decrease of $2,000 for non-recurring equipment and rental of office space.

OFFICE OF INFORMATION

| | 1968 estimate | | 1969 estimate | | Increase or decrease | |
|---|---|---|---|---|---|---|
| | Positions | Amount | Positions | Amount | Positions | Amount |
| Personnel compensation and benefits | 59 | $500,200 | 59 | $507,500 | ---- | +$7,300 |
| Other expenses | ---- | 185,500 | ---- | 185,500 | ---- | ---- |
| Total | 59 | 685,700 | 59 | 693,000 | ---- | +7,300 |

Planning, directing, and coordinating the information and publications programs of the Public Health Service are the responsibility of the Office of Information. The Office prepares articles, releases, publications, speeches, exhibits, motion pictures, and TV and radio productions which are of Service-wide or Department-wide significance. It will continue to provide guidance on the handling of public inquiries and produce and distribute the Service's official journal, technical public health monographs, and related scientific and professional publications. The Office uses all forms of media to communicate Service aims, policy and accomplishments to the health professions and the public.

We are requesting an increase of $4,100 for annualization of increased pay and related costs, and $3,200 for one extra day of pay.

NEW POSITIONS REQUESTED, FISCAL YEAR 1969

| | Grade | Annual salary |
|---|---|---|
| Data systems development staff: | | |
| Computer analyst | GS-15 | $18,404 |
| Computer analyst (2) | GS-14 | 31,682 |
| Systems analyst (2) | GS-13 | 27,014 |
| Systems analyst (2) | GS-12 | 22,922 |
| Systems analyst (2) | GS-11 | 18,314 |
| Secretary | GS-6 | 6,137 |
| Secretary | GS-5 | 5,565 |
| Clerk-typist (2) | GS-4 | 9,990 |
| Total (13) | | 140,028 |
| Total new positions, all activities | | 140,028 |

## Biographical Sketch

Name: Leo J. Gehrig, M.D.
Position: Deputy Surgeon General.
Birthplace and date: Mapleton, Minnesota, April 25, 1918.
Education:
University of Minnesota, B.S., B.M., M.D.
Internship: Salt Lake County General Hospital. University of Utah Medical School, 1944–45.
Residency:
Thoracic Surgery, Overhold Thoracic Clinic, 1947–50.
General Surgery, U.S. Public Health Service, Hospital, Staten Island, New York, 1952–55.
PHS Executive Career Development Program, 1960–61.
Experience:
Deputy Surgeon General, November 1965 to present.
Chief, Bureau of Medical Services, April 1964 to November 1965.
Deputy Chief, Bureau of Medical Services, U.S. Public Health Service, Washington, D.C., 1962 to April 1964.
Medical Director, U.S. Peace Corps, 1961–62.
Program Officer, Bureau of Medical Services, 1960–61.
Deputy Chief, Division of Hospitals, Bureau of Medical Services, U.S. Public Health Service, 1959–60.

Assistant Chief, Division of Hospitals, Bureau of Medical Services, U.S. Public Health Service, 1957–59.
Deputy Chief, Surgery, U.S. Public Health Service Hospital, Seattle, Washington, 1955–57.
Chief, Thoracic Surgery, U.S. Public Health Service Hospital, Staten Island, New York, 1950–52.
Acting Director, Tuberculosis Control, Territorial Department of Health, Juneau, Alaska, 1946–47.

Association memberships:
Diplomate, American Board of Surgery.
Diplomate, American Board of Thoracic Surgery.
Fellow, American College of Surgeons.
Alpha Omega Alpha Honorary Medical Society.

BUDGET REQUEST

Senator HILL. Dr. Gehrig, do you have something you are going to tell us?

Dr. GEHRIG. Yes, I would like to present the Office of the Surgeon General, salaries and expenses.

Mr. Chairman, I am pleased to appear before you to discuss the budget estimates for this appropriation, which finances the principal staff offices that coordinate the activities of the Service.

This appropriation also supports activities concerned with relationships with other agencies whose missions are related to health.

In addition, it provides for a number of functions which are operated on a centralized basis for the entire Service.

We are requesting an increase in 1969 of $491,000. Of this amount, we are proposing $322,000 to provide 13 positions and the computer capability necessary to support our management information system. Mandatory increases of $169,000 account for the remainder of the increase over our budget for fiscal year 1968.

As this committee is well aware, the activities of the Public Health Service are extremely diverse.

The number, scope, and complexity of Public Health Service programs have increased immensely in recent years—thereby creating an increased need for Public Health Service wide coordination and review.

BIOMEDICAL RESEARCH

In less than two decades the Public Health Service has become the world's foremost supporter of biomedical research. It plays a vital role in developing health manpower, facilities and services.

It stimulates and supports planning and demonstrations in States and communities designed to bring high quality health care within the reach of all of the American people.

GRANTS AND CONTRACTS

In all of these program areas, grants and contracts are the primary instruments for carrying out Public Health Service programs.

Approximately 40,000 individual grants and contracts distributed through 33 Public Health Service organizations responsible for 130 different programs are awarded each year. This represents 80 percent of the total Public Health Service budget.

In view of this, one of the most urgent needs in carrying out management responsibilities in Public Health is readily accessible data on

grant and contract expenditures. Limited funds were granted in the fiscal year 1968 budget to initiate the development of a computerized management information system.

Initial efforts of this small staff in fiscal year 1968 have placed priority on the identification of specific contract and grant information to be included in the system as well as the development of forms and procedures.

### Computer Capability and Staff

In fiscal year 1969, the only nonmandatory item of increase in this appropriation is our request for $322,000 to provide necessary computer capability and to support additional staff to carry out the operational work in the grant and contract system.

I shall be glad to answer any questions the committee may have.

Senator Hill. Outside of this $322,000, you have no discretion in the matter?

Dr. Gehrig. You are quite correct, sir. In viewing across the various areas of responsibility, personnel, finance, budget, and a host of other areas, the importance of this has been so keen the Surgeon General has literally made this a number one priority and requests of the committee the totality of this increase for this one single purpose.

Senator Hill. That is important, isn't it?

Dr. Gehrig. We feel it is extremely important, sir; not only for forward planning, monitoring, and control of activities in this tremendously important area, but we are frequently called upon to provide information regarding activities of the Public Health Service by type of activity, by grantee or contractor, and by geographical area. With the broad dispersement of grant and contract activity throughout the service, this is a difficult task and we have found ourselves unable to provide readily this sort of detailed information.

The management information system is planned to provide not only for our own management purposes but to put us in a position to promptly provide such information services.

Senator Hill. You need this computer capability to do the job?

Dr. Gehrig. Yes, sir. As a matter of fact, without a computer capability I doubt that one could get on top of this type of job.

Senator Hill. It is so big today; is that right?

Dr. Stewart. That is correct, Mr. Chairman. We studied where we kept information on grants in the 1965 and 1966 calendar years and found that we had some 30 or 40 different locations where for that program it was appropriate for them to keep that information.

But we could not add it into a whole to get some idea of what policy was, what direction we were going in.

In 1966 and 1967, we studied what is the information one needs as a manager. We designed a program. We have got it up to the design stage. Now we need these positions in order to implement it next year.

### University of Minnesota Graduates

Senator Hill. I notice you come from Minnesota, too, Dr. Gehrig.

Dr. Gehrig. Yes, sir.

Senator Hill. You were a little ahead of Dr. Christian Barnard, weren't you?

Dr. Gehrig. Yes; as a matter of fact, I was.

Senator HILL. Was Dr. Wagonsteen there?

Dr. GEHRIG. He was chief of surgery when I went through medical school.

Senator HILL. Was Dr. Lilliehei there, too?

Dr. GEHRIG. He was there in a training capacity while I was in school and, of course, became a very prominent and important cardiac surgeon there.

Senator HILL. Did you see Dr. Barnard when he was here?

Dr. GEHRIG. I only saw him on television, sir.

Senator HILL. Well, he is a very delightful gentleman, I tell you that. Of course, I think to a very definite degree we can say he is a product of American medicine. He went to your school, the University of Minnesota.

Dr. GEHRIG. In his comments I thought Dr. Barnard paid a very fine compliment to Dr. Wagonsteen for his surgical leadership. I believe he considers himself a product of American medicine in many ways.

Senator HILL. You have brought us a fine statement. I want to express our appreciation.

Dr. GEHRIG. Thank you.

Senator HILL. You Minnesotans do a good job.

We thank you gentlemen for this splendid testimony. We appreciate it.

## Comprehensive Health Planning and Services

**STATEMENT OF DR. JAMES H. CAVANAUGH, DIRECTOR**
**ACCOMPANIED BY:**
**JAMES L. WESSEL, ACTING EXECUTIVE OFFICER**
**MRS. DIANE H. CARVEY, FINANCIAL MANAGEMENT OFFICER**
**DR. WILLIAM H. STEWART, SURGEON GENERAL**
**CHARLES MILLER, CHIEF FINANCE OFFICER**
**JAMES B. CARDWELL, DEPUTY ASSISTANT SECRETARY, BUDGET**

### Appropriation Estimate

"COMPREHENSIVE HEALTH PLANNING AND SERVICES

"To carry out sections 314(a) through 314(e) of the Act, [$140,676,000] *$195,383,000*, of which [$5,000,000] *$9,750,000* shall be available until June 30, [1969] *1970*, for grants pursuant to such section 314(a)."

AMOUNTS AVAILABLE FOR OBLIGATION

| | 1968 | 1969 |
|---|---|---|
| Appropriation | $140,676,000 | $195,383,000 |
| Transfer to "Office of the Surgeon General, salaries and expenses" | −91,000 | |
| Comparative transfer to "Community health services" | −5,000,000 | |
| Unobligated balance brought forward | 2,500,000 | 5,000,000 |
| Cutback required by H.J. Res. 888: | | |
| Reduction below obligation level in the 1968 President's budget | −373,000 | |
| Reduction because of unanticipated carryover balances: | | |
| Unobligated balance lapsing | −2,500,000 | |
| Total cutback | −2,873,000 | |
| Total currently available for obligation | 135,212,000 | 200,383,000 |
| Proposed use of reserve resulting from H. J. Res. 888 | 2,873,000 | |
| Proposed supplemental appropriation | 17,240,000 | |
| Unobligated balance carried forward | −5,000,000 | |
| Total available for obligation | 150,325,000 | 200,383,000 |
| Disposition of cutback: | | |
| To be used for increased pay and postal costs | 113,000 | |
| To be used in the implementation of the Partnership for Health Amendments of 1967 | 2,760,000 | |
| Total cutback | 2,873,000 | |

OBLIGATIONS BY ACTIVITY

| | 1968 estimate | | 1969 estimate | | Increase or decrease | |
|---|---|---|---|---|---|---|
| | Position | Amount | Position | Amount | Position | Amount |
| Grants: | | | | | | |
| Planning | | $14,750,000 | | $24,750,000 | | +$10,000,000 |
| Formula | | 60,250,000 | | 76,032,000 | | +15,782,000 |
| Project | | 72,500,000 | | 94,100,000 | | +21,600,000 |
| Direct operations: | 180 | 2,825,000 | 233 | 5,501,000 | +53 | +2,676,000 |
| Review and approval | 77 | 1,260,000 | 90 | 1,830,000 | +13 | +570,000 |
| Program direction and technical assistance | 103 | 1,565,000 | 143 | 3,671,000 | +40 | +2,106,000 |
| Total obligations | 180 | 150,325,000 | 233 | 200,383,000 | +53 | +50,058,000 |

OBLIGATIONS BY OBJECT

| | 1968 estimate | 1969 estimate | Increase or decrease |
|---|---|---|---|
| Total number of permanent positions | 180 | 233 | +53 |
| Full-time equivalent of all other positions | 687 | 757 | +70 |
| Average number of all employees | 840 | 950 | +90 |
| Personnel compensation: | | | |
| Permanent positions | $1,712,000 | $2,206,000 | +$494,000 |
| Positions other than permanent | 4,787,000 | 5,265,000 | +478,000 |
| Other personnel compensation | 6,000 | 6,000 | |
| Total personnel compensation | 6,505,000 | 7,477,000 | +972,000 |
| Personnel benefits | 662,000 | 775,000 | +113,000 |
| Travel and transportation of persons | 423,000 | 577,000 | +154,000 |
| Transportation of things | 81,000 | 152,000 | +71,000 |
| Rent, communications, and utilities | 68,000 | 127,000 | +59,000 |
| Printing and reproduction | 54,000 | 157,000 | +103,000 |
| Other services | 78,000 | 284,000 | +206,000 |
| Project contracts | 30,000 | 1,308,000 | +1,278,000 |
| Supplies and materials | 32,000 | 78,000 | +46,000 |
| Equipment | 31,000 | 131,000 | +100,000 |
| Grants, subsidies, and contributions | 142,361,000 | 189,317,000 | +46,956,000 |
| Total obligations by object | 150,325,000 | 200,383,000 | +50,058,000 |

*Summary of changes*

| | |
|---|---|
| 1968 enacted appropriation | $140,676,000 |
| Transferred to "Office of the Surgeon General, salaries and expenses" | −91,000 |
| Comparative transfer to "Community health services" | −5,000,000 |
| Unobligated balance brought forward | 2,500,000 |
| Cutback required by H.J. Res. 888: | |
| Reduction below obligation level in the 1968 President's Budget | −373,000 |
| Reduction because of unanticipated carryover balances | −2,500,000 |
| Proposed use of reserve resulting from H.J. Res. 888: | |
| For increased pay and postal costs | 113,000 |
| For implementation of the Partnership for Health Amendments of 1967 | 2,760,000 |
| Proposed supplemental appropriation | 17,240,000 |
| Unobligated balance carried forward | −5,000,000 |
| 1968 estimated obligations | 150,325,000 |
| 1969 requested appropriation | 195,383,000 |
| Unobligated balance brought forward | 5,000,000 |
| 1969 estimated obligations | 200,383,000 |
| Total change | +50,058,000 |

| | Base | | Change from base | |
|---|---|---|---|---|
| | Positions | Amount | Positions | Amount |
| Increases: | | | | |
| A. Built-in: | | | | |
| 1. Annualization of new positions authorized in 1968 | | | | $78,000 |
| 2. Annualization of increased pay costs | | | | 29,000 |
| 3. 1 more day of pay in 1969 (260 days in 1968, 261 days in 1969) | | | | 7,000 |
| B. Program: | | | | |
| 1. Planning grants | | 14,750,000 | | 10,000,000 |
| 2. Formula grants | | 60,250,000 | | 15,782,000 |
| 3. Project grants | | 72,500,000 | | 21,600,000 |
| 4. Review and approval of grants | 77 | 1,260,000 | 13 | 496,000 |
| 5. Program direction and technical assistance | 103 | 1,565,000 | 40 | 2,076,000 |
| Subtotal, program increases | | | 53 | 49,954,000 |
| Total increases | | | 53 | 50,068,000 |
| Decreases: | | | | |
| A. Built-in: | | | | |
| 1. Nonrecurring items of equipment related to new staff in 1968 | | | | −10,000 |
| Total decreases | | | 53 | −10,000 |
| Total net changes requested | | | 53 | 50,058,000 |

EXPLANATION OF CHANGES

*Planning grants*

A net program increase of $10,000,000 is requested to be distributed among the following areas:

(1) Grants to States for comprehensive State health planning ($2,500,000);
(2) Project grants for areawide health planning ($5,000,000);
(3) Project grants for training, studies, and demonstrations for comprehensive health planning ($2,500,000).

*Formula grants*

An increase of $15,782,000 is requested to support grants to assist States financially in establishing and maintaining adequate public health services in a manner consistent with the State comprehensive health plan.

*Project grants*

An increase of $21,600,000, including $5,000,000 brought forward from the proposed supplemental in 1968, is requested to support grants to non-profit organizations and institutions, and State and local health agencies to cover part of the cost of providing services to meet health needs, such as rat control programs, and to stimulate and support new public health programs.

*Review and approval of grants*

An increase of 13 positions and $496,000 is requested to strengthen the review and approval activities of this program. Additional staff will be assigned to each regional office to meet the increased workload demands caused by the noncategorical nature of the formula and project grant programs. Headquarters staff will be increased by four positions.

*Program direction and technical assistance*

The key element of the "Partnership for Health," which is more efficient utilization of health resources, requires continuing improvement of the planning process and continuing evaluation of health services programs. An increase of 40 positions and $2,076,000 is requested to 1) provide expansion of technical planning assistance to States and communities, acceleration of the development of improved planning procedures and processes, and the collection of program information, and 2) accelerate the development of meaningful evaluation techniques with special emphais upon pertinent indicators of health status. Of the requested increase, 18 positions and $1,668,000 will support evaluation efforts.

EXPLANATION OF TRANSFERS

| | 1968 estimate | Purpose |
|---|---|---|
| Transfer to "Office of the Surgeon General, salaries and expenses." | $91,000 | Transfer of certain grants management functions formerly performed in the Office of Comprehensive Health Planning to the Division of Grants and Contracts, Office of the Surgeon General. This transfer involves 9 positions and is made under authority of 42 U.S.C. 226. |
| Comparative transfer to "Community health services." | 5,000,000 | Transfer of grants previously authorized under sec. 314(e)(3) to sec. 304 of the Public Health Service Act. Transfer authorized by Public Law 90–174. |

JUSTIFICATION—COMPREHENSIVE HEALTH PLANNING AND SERVICES

| | 1968 estimate | | 1969 estimate | | Increase or decrease | |
|---|---|---|---|---|---|---|
| | Position | Amount | Position | Amount | Position | Amount |
| Personnel compensation and benefits | 180 | $7,167,000 | 233 | $8,252,000 | +53 | +$1,085,000 |
| Other expenses | | 143,158,000 | | 192,131,000 | | +48,973,000 |
| Total | 180 | 150,325,000 | 233 | 200,383,000 | +53, | +50,058,000 |

GENERAL STATEMENT

The "Partnership for Health Program" authorized in 1966 and extended and strengthened by the 90th Congress, is designed to stimulate comprehensive health planning, to assist States and communities in the coordination of their

health programs, and to provide a flexible means of supporting improvement in the delivery of health services.

As a result of this Nation's scientific and technological advances in medicine, the means are available for greatly improving the health of all our people. Yet the health of this country, by any number of indices, lags behind that of many less prosperous countries. Because of imbalances in the delivery of health services and because of ever higher costs, complete medical care is enjoyed by few, and adequate care is, for all practical purposes, inaccessible to large segments of our population.

The aged, the poor, and those in remote regions are not the only ones who suffer. The cost of overlapping health organizations and fragmented services, like those of uncontrolled disease and our misused environment, are passed on to every citizen. With our national investment in health running at nearly $50 billion a year, it is imperative that maximum health service efficiency be achieved.

Public Law 89–749, the Comprehensive Health Planning and Public Services Act, created a Federal-State-local partnership for health that is now moving toward a maximum utilization of available health resources through rational planning to meet clearly identified health needs. Prior to enactment of this legislation, Federal support for health services had been provided through 16 categorical project and formula grants programs. Now the former categorical restrictions have been removed.

In order to help States and communities identify the most pressing health needs and to make prudent choices between alternate uses of limited resources, the Act also provides for formula grants to the States and project grants to areawide agencies for comprehensive health planning.

The comprehensive health planning and services program therefore is moving the decision-making process to the States and localities, closer to the people to be served, and closer to the organizations which are most familiar with existing health needs and available health resources.

The Partnership for Health program also aims at enlisting the cooperation and active involvement of all other health resources, whether public or private individual or institutional. By coordinating the multitude of health planning and action programs in a State or an area, a more efficient use of health resources can be achieved.

Comprehensive health planning neither negates nor diminishes the need for continued or expanded functional or specialized planning. Operating State agencies and other organizations are continuing to plan for specialized expansion of community mental health programs, regional medical programs, programs in environmental control, and services for the chronically ill and mentally retarded, and increasing the supply and effective utilization of trained health manpower. The comprehensive health planning legislation provides a framework for strengthening these efforts by relating objectives in these specialized areas to each other and to the overall needs and resources of the State or region.

Five separate grant-in-aid programs comprise the Partnership for Health: a) comprehensive State health planning formula grants; b) comprehensive areawide health planning project grants; c) studies, demonstrations, and training project grants for health planning; d) formula grants to States for health services, and e) project grants for health services development.

The Public Health Service is requesting $200,383,000 and 233 positions in 1969, an increase of $50,058,000 and 53 positions over the 1968 level, to carry out the provisions of the Comprehensive Health Planning and Public Health Services Act.

PLANNING GRANTS

| | 1968 estimate | 1969 estimate | Increase |
|---|---|---|---|
| Grants to States for comprehensive State health planning | $7,250,000 | $9,750,000 | +$2,500,000 |
| Project grants for areawide health planning | 5,000,000 | 10,000,000 | +5,000,000 |
| Project grants for training, studies, and demonstrations | 2,500,000 | 5,000,000 | +2,500,000 |
| Total | 14,750,000 | 24,750,000 | +10,000,000 |

*A. Formula grants for comprehensive State health planning*

To assist the States in comprehensive health planning, the Surgeon General is authorized to make formula grants to States on the basis of population and per capita income. To qualify for a comprehensive health planning grant, a State must designate a single agency for administering or supervising the administration of its health planning activities, establish a health planning council with

consumer representatives constituting a majority on the council, and develop a State plan for comprehensive health planning. Grants made under this section may cover up to 100 percent of the State's comprehensive health planning program costs.

This grant program supports the establishment and operation of the statewide agencies for health planning. The size of agency staff will vary according to the needs, the approach and the population of each State. At the proposed level of funding, staffs may be expected to range from 7 or 8 members for base level states to around 50 for the largest states as California or New York. These new planning agencies will provide the States, most for a first time, with a mechanism for determining health needs, setting priorities, and allocating resources to meet those needs. In addition, because of program requirements to involve all affected organizations, Federal support under this section is stimulating improved working relationships between governmental, private, and voluntary health agencies within the States.

State health planning agencies also serve as focal points within the States for relating comprehensive health plans to planning outside the field of health, in areas such as urban redevelopment and public housing.

By the close of 1967 official health planning agencies had been designated for 54 of the 55 eligible states and territories, and twenty-four State plans had been approved. While the State health department has been named as the responsible agency in 35 States, new units, directly responsible to the governor, have been designated by the other 19. Staffs will not be fully recruited, nor full operation begun by most States until the end of this fiscal year. However, early indications are that the planning supported by this program will be truly comprehensive and that it will have the hoped-for impact on future health activities within the States. Of planning directors appointed to date, one-third have been recruited from "out-of-State." Of the professional staff members designated so far, half are from outside the traditional health professions and represent management fields such as economics, planning, and public administration. Inclusion of professionals from these fields, coupled with indications that new management tools such as cost benefit analysis and data information systems will be employed, are encouraging signs of significantly improved planning in many States. These factors, together with the progress of plans now underway, strongly suggest that by the end of fiscal year 1968 most States will have made marked progress toward better coordinating the capacities of Federal, State, and local governmental and private agencies and organizations to meet the health needs of their citizens.

In 1969, $9,750,000 is requested for this formula grant program; this is a net increase of $2,500,000 over the 1968 level which includes $2,500,000 brought forward from the 1967 appropriation. This request will permit the States to continue throughout 1969 the full range of planning activities that will be supported under this program during the latter half of 1968.

B. *Project grants for areawide health planning*

Areawide comprehensive health planning, as created under Section 314(b), is a necessary complement to State-level health planning. The broader policy focus of the State health planning agency both contributes to and is supported by the more localized focus of areawide agencies. The areawide health planning activities concentrate on cross-service patterns, and promote a local involvement, grounded in knowledge of the area to be served that is not available at either the State or national levels.

The Surgeon General is authorized to make project grants to public or nonprofit agencies or organizations, with the Federal share being up to three-fourths of the costs of such projects. The P.L. 89–749 authorization for comprehensive planning grants replaces the more limited areawide facility planning grants previously supported under Section 318 of the Public Health Service Act.

Like the State health planning agency, the areawide health planning grant recipient will gather information and data, assess health needs and alternatives, determine gaps and overlaps in existing health programs, and recommend courses of action that may be taken to achieve the targeted priority health goals.

In 1969, all areawide agencies planning projects will require approval of the State health planning agency before being eligible for a grant under this program. In some instances, communities will be able to build upon the work of previously supported areawide facility planning groups. In other cases, entirely new organizations will have to be established to conduct community-level comprehensive health planning activities. In either case, truly effective planning will require the full participation of all interested groups. This will mean heightened cooperation between regional medical program grantees, private health practitioners, hospitals, medical schools, and their affiliates, and voluntary health agencies.

Of the funds to be awarded during fiscal year 1968, approximately two-thirds will be used to expand previously authorized Section 318 facility planning projects into truly comprehensive planning activities, and the remaining one-third will be awarded to new areawide planning agencies. Included in the comprehensive planning activities will be 12 projects designed to assist in urban ghetto rehabilitation.

There are wide differences among the various areawide agencies in the proposed size, composition, and approach to be taken. An Economic Development District of Arkansas has budgeted for only one professional while New York City's health facilities program has a staff of nearly 70. Since, grants are awarded for both agency organization and for program operation, they may range in amount from $15,000 to $500,000, depending on their purpose and on the size of the community served.

The funds authorized for 1969 would permit 1) continuation of some 33 areawide planning agencies initiated in 1968, 2) completion of organizational activities for some 45 new agencies supported in 1968, 3) initiation of 9 new areawide planning agencies, and 4) initiation of organizational activities in 48 other localities.

We therefore request appropriation of the full $10,000,000 authorized for these areawide planning grants for fiscal year 1969, an increase of $5,000,000 over the 1968 level.

*C. Project grants for training, studies, and demonstrations for comprehensive health planning.*

The comprehensive health planning activities envisioned by P.L. 89–749 call for fundamental changes in administration of health services. The Partnership for Health, therefore, is more than another program, it is a goal-setting objective-changing process. Systems analysis, automated data processing, objective evaluations of accomplishments, and careful monitoring of health systems are essential elements of the process.

Much of the long-term success of both the State and areawide comprehensive health planning agencies will hinge upon the availability of skilled, technically competent, planning personnel. The rapid retraining of present health planners to acquaint them with approaches that differ substantially from those traditionally employed will also be required.

In view of the extreme shortage of professional health planners, funding of training programs again is given highest priority this year. Ten second year students and 70 first year students are being supported with 1968 funds.

The 1969 request will provide for second year training of the 70 students beginning training in 1968, and the first year study for 80 additional students.

Grants also have been made to universities for development of curricula in comprehensive health planning, and a variety of approaches to training in this new field have been suggested. At the University of Cincinnati, for example, a grant made to the Graduate Division of Community Planning will draw upon other departments, colleges, community agencies, and organizations to provide broad health content in the health planning curriculum. At the University of California in Berkeley, where a grant was made to the School of Public Health, the plan is to join forces with the Department of City and Regional Planning on the same campus. In the Graduate School of Business at the University of Chicago, the Center for Health Administration Studies, a grant will support the efforts of an interdisciplinary faculty committee and staff to consider alternative possibilities for a health planning curriculum.

Until such time as universities begin to turn out graduates with special qualifications for comprehensive health planning, most of the work of health planning agencies will be conducted by health professionals. To provide some of these people with short-term training, a grant was made early this year to the Western Branch of the American Public Health Association. Through this grant, six one-week courses in planning currently are being offered to 400 leaders in the health fields in the Western States.

By the close of 1968, it is estimated that training will have been provided for more than 1,200 persons through similar short-term training courses, supported by these grants. It is anticipated that during 1969 this type of program will be provided to an additional 2,000 health planning trainees.

Although training will continue to have priority in the use of 314(c) funds, some study and demonstration projects will be supported in 1969. These will be concerned with the methodology of comprehensive health planning, and the study of both process and organization of health planning agencies.

In 1969, we are requesting $5,000,000 to carry out the training, study, and demonstration projects authorized under this Section, an increase of $2,500,000 over the level requested in 1968.

ALLOCATIONS OF GRANTS TO STATES FOR COMPREHENSIVE STATE HEALTH PLANNING

| State or territory | 1967 allocation | 1968 allocation | 1969 estimate |
|---|---|---|---|
| Alabama | $52,200 | $98,300 | $198,400 |
| Alaska | 25,000 | 47,500 | 97,500 |
| Arizona | 25,000 | 47,500 | 97,500 |
| Arkansas | 31,200 | 56,600 | 113,500 |
| California | 158,200 | 309,900 | 641,900 |
| Colorado | 25,000 | 47,500 | 97,500 |
| Connecticut | 25,000 | 47,500 | 97,500 |
| Delaware | 25,000 | 47,500 | 97,500 |
| District of Columbia | 25,000 | 47,500 | 97,500 |
| Florida | 68,000 | 130,900 | 265,600 |
| Georgia | 59,200 | 110,200 | 219,600 |
| Hawaii | 25,000 | 47,500 | 97,500 |
| Idaho | 25,000 | 47,500 | 97,500 |
| Illinois | 92,300 | 174,400 | 357,200 |
| Indiana | 50,700 | 92,200 | 188,200 |
| Iowa | 30,600 | 54,800 | 106,600 |
| Kansas | 25,100 | 47,500 | 97,500 |
| Kentucky | 45,800 | 83,100 | 164,500 |
| Louisiana | 49,700 | 93,000 | 186,100 |
| Maine | 25,000 | 47,500 | 97,500 |
| Maryland | 32,400 | 64,300 | 133,200 |
| Massachusetts | 47,600 | 94,200 | 191,900 |
| Michigan | 78,700 | 148,500 | 304,100 |
| Minnesota | 39,500 | 71,600 | 142,800 |
| Mississippi | 42,600 | 77,200 | 153,000 |
| Missouri | 45,600 | 90,300 | 189,300 |
| Montana | 25,000 | 47,500 | 97,500 |
| Nebraska | 25,000 | 47,500 | 97,500 |
| Nevada | 25,000 | 47,500 | 97,500 |
| New Hampshire | 25,000 | 47,500 | 97,500 |
| New Jersey | 59,500 | 113,700 | 235,400 |
| New Mexico | 25,000 | 47,500 | 97,500 |
| New York | 150,800 | 297,200 | 607,200 |
| North Carolina | 67,800 | 130,700 | 255,700 |
| North Dakota | 25,000 | 47,500 | 97,500 |
| Ohio | 102,200 | 194,400 | 396,500 |
| Oklahoma | 31,400 | 57,300 | 117,400 |
| Oregon | 25,000 | 47,500 | 97,500 |
| Pennsylvania | 116,900 | 225,000 | 453,600 |
| Rhode Island | 25,000 | 47,500 | 97,500 |
| South Carolina | 40,500 | 74,800 | 146,900 |
| South Dakota | 25,000 | 47,500 | 97,500 |
| Tennessee | 54,600 | 102,900 | 202,200 |
| Texas | 127,200 | 245,400 | 495,300 |
| Utah | 25,000 | 47,500 | 97,500 |
| Vermont | 25,000 | 47,500 | 97,500 |
| Virginia | 52,500 | 99,400 | 201,500 |
| Washington | 29,900 | 54,700 | 111,000 |
| West Virginia | 25,000 | 47,500 | 97,500 |
| Wisconsin | 43,900 | 81,500 | 163,100 |
| Wyoming | 25,000 | 47,500 | 97,500 |
| Guam | 25,000 | 47,500 | 97,500 |
| Puerto Rico | 48,400 | 88,500 | 175,800 |
| Virgin Islands | 25,000 | 47,500 | 97,500 |
| American Samoa | 25,000 | 47,500 | 97,500 |
| Trust Territory tof the Pacific Islands | | | 97,500 |
| Total | 2,500,000 | 4,750,000 | 9,750,000 |

FORMULA GRANTS

| | 1968 estimate | | 1969 estimate | | Increase or decrease | |
|---|---|---|---|---|---|---|
| | Positions | Amount | Positions | Amount | Positions | Amount |
| Personnel compensation and benefits | | $77,000 | | $77,000 | | |
| Other expenses | | 60,173,000 | | 75,955,000 | | +$15,782,000 |
| Total | | 60,250,000 | | 76,032,000 | | +15,782,000 |

Prior to passage of the Comprehensive Health Planning and Public Health Services Act, Federal assistance for health services was provided to the States through a complex variety of formula grants, each relating to a particular disease or other limited segment of public health. Much was accomplished under this pattern of Federal assistance, but the specific categories carried restrictions which often were poorly suited to the particular health needs of individual States and localities. The passage of P.L. 89–749 marked a turning from categorical support for dealing with specific and limited health problems. From the amount appropriated each year under Section 314(d), the Surgeon General now is authorized to make allotments to States, determined on the basis of their population and financial need, which may be used by the States for a full variety of health services.

Under current funding provisions:

(1) Each State will be paid from its annual allotment a Federal share of the expenditures incurred by the State in accordance with its approved plan. The level of Federal matching of State funds will vary from State to State ranging from one-third to two-thirds of the costs incurred, depending on each State's per capita income.

(2) Public health services supported by these grants must be in accordance with plans developed by the State health planning agency created under the provision of P.L. 89–749. The plan for administering these funds must also be approved by the Surgeon General.

(3) At least 15 per cent of a State's allotment must be available to the State mental health authority for the provision of mental health services.

(4) The State plan for health services must be administered by the State health authority (or, with respect to mental health, the State mental health authority), and must give assurances that the grants will promote public health services in localities and that there will be maximum local participation. Beginning in 1969, at least 70% of the State's allotment under this program must be available for use for the provision of public and mental health services at the local level under the State plan.

The formula grants made under this program will be the principal source of Federal assistance for most ongoing State and local public health projects. This single grant provides a flexible means for supporting services designed to meet the specific health needs of each State, according to priorities established by that State.

During 1968 Federal funds supported activities in a few new areas, but even though categorical restrictions were removed, a majority of the projects were the same as those supported under the former categorical grants programs. This was to be expected since 1968 State plans for using these funds were based on anticipated categorical support, and were largely completed prior to enactment of P.L. 89–749.

In 1968, as in previous years, Federal funds directed to the more traditional categories of health service were matched by State and local funds many times over. Federal, State and local, public and private funds, budgeted by the 55 States and Territories in their 1968 Section 314(d) plans for public health services, totaled $309,945,701 (including $87,337,066 for mental health activities). Of this total, only $60,250,000 was provided through grants awarded under this program. However, in an encouraging number of instances (most often where support for projects to attack newly defined health problems or to carry out innovative health service activities was not authorized by State and/or local line item budgets), new activities were initiated this year that would not have been possible under the former categorical programs or under State or local authorizations alone.

State planning for 1969, including broader use of these non-categorical formula grant funds, is now underway. Early indications are that a number of States are ready to promote additional programs this next year, and that most are interested in initiating a variety of new health service activities, if support is available.

Among the new kinds of health programs being planned by a number of States are:

(1) Smoking and Health: educational programs, directed at the general public and more often at students and educators, are being developed to communicate the dangers associated with smoking.

(2) Family planning: clinics are being established and staff trained under a variety of arrangements to provide genetic counseling and/or advice on family planning. Cervical cancer detection efforts are being planned to operate jointly with these family planning centers with increasing frequency.

(3) Alcoholism: educational programs and treatment centers are being established to reach and treat alcoholics, to disseminate information about the disease, and to foster its prevention.

The availability of adequate non-categorical funds under this program, therefore, will do much to help start these and a multiitude of other activities, to thereby reduce the time lag between the generation of new health knowledge and its application in service programs at the State and local levels and to speed the appropriation of matching funds in new areas.

A total of $76,032,000 is requested for this grant program in 1969, an increase of $15,782,000 over the 1968 level.

ALLOCATIONS OF GRANTS FOR COMPREHENSIVE PUBLIC HEALTH SERVICES

| State or territory | 1967 allocation [1] | 1968 allocation | 1969 estimate |
|---|---|---|---|
| Alabama | $1,192,500 | $1,279,400 | $1,743,400 |
| Alaska | 371,800 | 378,500 | 371,800 |
| Arizona | 550,500 | 590,500 | 854,100 |
| Arkansas | 799,200 | 847,500 | 1,124,800 |
| California | 3,651,100 | 4,118,800 | 4,972,200 |
| Colorado | 582,600 | 631,500 | 869,900 |
| Connecticut | 623,100 | 694,200 | 967,200 |
| Delaware | 364,900 | 377,600 | 423,900 |
| District of Columbia | 393,500 | 413,500 | 471,600 |
| Florida | 1,708,600 | 1,855,500 | 2,232,700 |
| Georgia | 1,301,000 | 1,411,200 | 1,897,600 |
| Hawaii | 393,500 | 411,300 | 498,900 |
| Idaho | 421,900 | 439,100 | 540,000 |
| Illinois | 2,282,100 | 2,547,200 | 2,899,200 |
| Indiana | 1,226,500 | 1,348,100 | 1,669,100 |
| Iowa | 816,900 | 884,800 | 1,074,700 |
| Kansas | 675,500 | 731,100 | 969,100 |
| Kentucky | 1,090,700 | 1,169,400 | 1,496,700 |
| Louisiana | 1,105,900 | 1,195,000 | 1,654,000 |
| Maine | 460,300 | 484,600 | 630,100 |
| Maryland | 804,000 | 893,300 | 1,268,500 |
| Massachusetts | 1,252,700 | 1,385,800 | 1,696,100 |
| Michigan | 1,879,500 | 2,086,500 | 2,512,700 |
| Minnesota | 989,600 | 1,078,000 | 1,338,900 |
| Mississippi | 971,300 | 1,028,800 | 1,412,900 |
| Missouri | 1,202,400 | 1,313,900 | 1,677,100 |
| Montana | 412,100 | 429,500 | 524,200 |
| Nebraska | 526,000 | 562,000 | 715,400 |
| Nevada | 379,000 | 390,200 | 406,000 |
| New Hampshire | 392,400 | 409,200 | 504,600 |
| New Jersey | 1,443,900 | 1,614,400 | 2,013,000 |
| New Mexico | 465,400 | 490,700 | 653,500 |
| New York | 3,802,500 | 4,253,900 | 4,719,200 |
| North Carolina | 1,464,700 | 1,588,300 | 2,160,200 |
| North Dakota | 410,500 | 426,600 | 524,900 |
| Ohio | 2,373,800 | 2,628,600 | 3,185,100 |
| Oklahoma | 804,500 | 865,300 | 1,153,600 |
| Oregon | 584,200 | 632,500 | 878,500 |
| Pennsylvania | 2,856,900 | 3,143,200 | 3,601,400 |
| Rhode Island | 406,000 | 428,200 | 548,300 |
| South Carolina | 874,600 | 938,500 | 1,368,400 |
| South Dakota | 417,400 | 434,300 | 533,800 |
| Tennessee | 1,275,300 | 1,371,300 | 1,770,800 |
| Texas | 2,747,000 | 3,012,800 | 3,905,000 |
| Utah | 444,500 | 469,400 | 645,600 |
| Vermont | 378,100 | 388,100 | 434,200 |
| Virginia | 1,196,300 | 1,307,700 | 1,765,900 |
| Washington | 773,400 | 847,100 | 1,107,200 |
| West Virginia | 650,500 | 694,900 | 995,600 |
| Wisconsin | 1,089,400 | 1,192,300 | 1,486,500 |
| Wyoming | 373,400 | 381,500 | 395,900 |
| Guam | 304,200 | 306,200 | 325,600 |
| Puerto Rico | 1,026,700 | 1,092,700 | 1,578,500 |
| Virgin Islands | 265,700 | 266,800 | 265,700 |
| American Samoa | | 88,700 | 265,700 |
| Trust Territory of the Pacific Islands | | | 332,500 |
| Total | 55,250,000 | 60,250,000 | 76,032,000 |

[1] Total shown represents a combination of grants for cancer control, chronic illness and aged, dental health, general health, heart disease control, home health services, mental health, radiological health, and tuberculosis control.

PROJECT GRANTS FOR HEALTH SERVICES DEVELOPMENT

| | 1968 estimate | | 1969 estimate | | Increase or decrease | |
|---|---|---|---|---|---|---|
| | Positions | Amount | Positions | Amount | Positions | Amount |
| Personnel compensation and benefits | | $4,940,000 | | $5,330,000 | | +$390,000 |
| Other expenses | | 67,560,000 | | 88,770,000 | | +21,210,000 |
| Total | | 72,500,000 | | 94,100,000 | | +21,600,000 |

The Surgeon General is authorized to award project grants for providing serv ices (including related training) to meet health needs of limited geographic scope or of specialized regional or national significance, and for developing and supporting new programs of health services (including related training). Health services project applications, to be supported under this program, must be reviewed by the designated State health planning agency.

In fulfilling its responsibilities under the Partnership for Health, the Federal government is expected to 1) support needed projects in areas unable to provide adequate support themselves, and 2) assist in the initiation of new and developmental projects, subsequently to be supported with State and local funds. As a supplement to State formula grants, project grants for health services development provide a national mechanism for directing funds to where they are most needed, to where they will be used most effectively, and to where they will develop those new and innovative public health programs which promise the most far reaching effects.

Most support provided under this section during early 1968 was used to complete programs initiated under previous categorical authority, and the effect of removing the categorical restrictions is only now beginning to be felt. However, encouraged by the new non-categorical authority of this Act, requests for initial support for a wide array of new activities are now being received. Representative of the new areas in which proposals have been received are: health counseling, family planning, comprehensive health information and referral services, alcoholism programs, dental health programs, and draft rejectee health referral programs. Of particular interest is the attention being directed to rodent control programs. By the close of calendar 1967, declarations of intent to submit proposals for development and support of rodent control projects had been received from 29 agencies. Additional communities are expected to submit proposals before the end of the fiscal year.

Of perhaps even greater consequence are the comprehensive public health service projects, now being planned for a number of areas with particularly high incidence of health problems. These are being designed to obtain for those segments of the population now receiving little if any health care a full continuum of service, including prevention, diagnosis, treatment, chronic care, and rehabilitation.

Typical of such projects to be started in 1968 and to be continued in 1969 are:

(1) A city health department will establish, as a component of the Pilot Neighborhood Service Program, a Comprehensive Family Health Center to serve 20,000 medically indigent. This project will allow for the integration of tuberculosis control activities, cancer control, immunization, school health, maternal and child health, and venereal disease control as well as all public health nursing activities into one program designed to serve the entire family.

(2) A city health department will establish, as a component of the Model Cities program, five neighborhood-based family health clinics. Each clinic will be staffed by an internist, a pediatrician, a public health nurse and health aides. These clinics will serve as a focus for the integration of all public health activities in the neighborhood.

(3) A volunteer organization will develop a project with a voluntary hospital to reorganize its outpatient and emergency services into a comprehensive family centered outpatient service, and in cooperation with the local medical society will develop two rural family health clinics linked to the hospital by an adequate transportation system.

(4) A medical society, in association with the local health department will develop as a component of the Model City effort, a group practice, extended care facility, and neighborhood service center in a major urban ghetto.

5. A neighborhood corporation, consisting of consumers and physicians, will develop a pre-paid group practice to serve 30,000 medically indigent in a

major urban ghetto. This project is being developed with the city health department which will coordinate and expand public health activities as part of the group practice and will contract with the neighborhood corporation on a per capita basis for payment of medical care services under Title IX (Medicaid).

Activities such as these, integrated with related programs for improving education, welfare, and employment, are essential for a comprehensive assault on the conditions and the consequences of poverty.

It is expected that initial support will be provided during 1968 for comprehensive public health projects in 14 cities. The $94,100,000 requested for 1969 would continue these projects, would continue support at the 1968 level for projects to develop new programs (to include rat control activities), and would permit initiation of 23 new comprehensive health projects. This request includes $5,000,000 brought forward from the proposed 1968 supplemental which will provide funds for expanded support for rat control and related project grants and will permit the availability of funds through December 31, 1968.

DIRECT OPERATIONS

| | 1968 estimate | | 1969 estimate | | Increase or decrease | |
|---|---|---|---|---|---|---|
| | Positions | Amount | Positions | Amount | Positions | Amount |
| Personnel compensation and benefits | 180 | $2,150,000 | 233 | $2,845,000 | +53 | +$695,000 |
| Other expenses | | 675,000 | | 2,656,900 | | +1,981,000 |
| Total | 180 | 2,825,000 | 233 | 5,501,000 | +53 | +2,676,000 |
| Subactivities: | | | | | | |
| Review and approval | 77 | 1,260,000 | 90 | 1,830,000 | +13 | +570,000 |
| Program direction and technical assistance | 103 | 1,565,000 | 143 | 3,671,000 | +40 | +2,106,000 |
| Total | 180 | 2,825,000 | 233 | 5,501,000 | +53 | +2,676,000 |

To provide the necessary direction and support for such activities as technical assistance, planning consultation, and program analysis and evaluation, a complete professional staff is essential. An increase of 53 positions and $2,676,000 is requested for 1969 to meet the increased demands of this rapidly developing program.

*Review and approval*

Responsibility for coordinating the "Partnership for Health" grant programs within each region has been assigned to the Regional Health Directors. Accordingly, applications for Section 314(a) and (d) formula grants and for Section (b) and (e) project grants are received, reviewed, and approved or disapproved in the Regional Health Offices. However, because their scope is national in nature, all applications under Section 314(c) are reviewed and rated at headquarters. Final funding decisions for all project grants for health services development, in which the priority determinations of the Regional Health Office are weighed against national priorities and needs, are also made at headquarters.

Both the volume and complexity of review and approval activities have increased significantly since the creation of the new comprehensive health planning grants programs. Increased numbers of applications for areawide health planning grants will be submitted in 1969. In addition, since the categorical limitations have been removed and the health areas which may receive support are considerably more inclusive, the number of applications for health services grant support are increasing correspondingly.

In order to provide a thorough review and evaluation of this growing number of complex applications, additional review and approval personnel are required. Accordingly, an increase of 13 positions, nine in the regional offices and four at headquarters, and $496,000 is requested to strengthen the review and approval activity.

An additional increase of $74,000 provides for built-in changes due to the annualization of nine positions new in 1968, annualization of increased pay costs, and one more day's pay in 1969.

*Program direction and technical assistance*

The need for skilled and experienced planning personnel has become increasingly apparent as the States and communities begin implementation of their compre-

hensive health planning programs. Since enactment of the Partnership for Health legislation, the Regional Health Directors have received requests at an accelerating rate to provide States and communities with technical planning assistance and guidance, particularly for the development of new and comprehensive health projects. In order to provide a portion of the help needed, 15 positions and $243,000 are required for assignment to the regional offices and for headquarters-based, Regional Health Office support.

A careful analysis of activities supported under both State formula grants and individual project grants is essential if we are to gain a clear picture of the status, scope and direction of the national health effort. As the number, variety, and complexity of projects increase under these new, non-categorical authorizations, so too does the difficulty of analysis. A computer based system for assembling and processing comprehensive data on these federally supported projects and activities now has been developed and is ready for implementation. Seven additional staff for coding data, for programming of the data, and for analyzing statistical outputs, and $165,000 are requested in 1969.

*Program evaluation*

Finally, there is need for initiating an activity for carrying out a thorough evaluation of comprehensive health activities. In enacting the 1967 Partnership for Health Amendments, the Congress gave special attention to the role evaluation must play in assuring the best possible use of Federal grant monies. In recognition of the scope of this undertaking, the Amendments provided that up to 1% of the funds appropriated under Section 314(d) and 314(e) of the Act would be available for program evaluation.

In authorizing evaluation funds, the Congress anticipated that the Public Health Service would be able to gather data required to:

(1) Assure that those activities supported fully accomplished their purposes;

(2) Assure that the best means for accomplishing stated objectives were employed;

(3) Identify strengths and weaknesses in methods applied and approaches taken under funded programs; and

(4) Assess and determine which approaches were most effective, most efficient, and most economical.

Plans are underway to establish an evaluation unit within the Office of Comprehensive Health Planning. This unit will conduct, both directly and through contracts, studies to (1) measure progress toward both national and project objectives, (2) assess the impact of both projects and programs on health service recipients, and (3) determine means for providing services more effectively and more efficiently. Activities will also be initiated on the development of evaluation model prototypes and the establishment of special health status indicators. A total of $1,668,000 and 18 positions is requested to support a combination of direct studies and contractual evaluations.

The formula and project grant programs were allowed $76,800,000 and $90,000,000, respectively. These allowances were reduced by 1%, $768,000 from formula and $900,000 from project grants, and the total amount is carried here in direct operations to support evaluation activities.

An additional increase of $40,000 provides for built-in changes due to annualization of six positions new in 1968, annualization of increased pay costs, and one more day's pay in 1969. This is partially offset by a decrease of $10,000 for nonrecurring program costs.

NEW POSITIONS REQUESTED, FISCAL YEAR 1969

| | Grade | Annual salary |
|---|---|---|
| Review and approval: | | |
| Public health program specialist | GS–13 | $13,507 |
| Do | GS–11 | 9,657 |
| 9 administrative staff assistants | GS–9 | 72,486 |
| Clerical assistant | GS–6 | 6,137 |
| Do | GS–5 | 5,565 |
| Total (13) | | 107,352 |
| Program direction and technical assistance: | | |
| Statistician | GS–15 | 18,404 |
| 3 public health program specialists | GS–15 | 55,212 |
| 2 public health program specialists | GS–14 | 31,682 |
| Statistician | GS–14 | 15,841 |
| 9 public health program specialists | GS–13 | 121,563 |
| Statistician | GS–13 | 13,507 |
| 9 public health program specialists | GS–12 | 103,149 |
| Statistician | GS–12 | 11,461 |
| 2 public health program specialists | GS–11 | 19,314 |
| Management analyst | GS–11 | 9,657 |
| Statistician | GS–9 | 8,054 |
| Do | GS–7 | 6,734 |
| Administrative staff assistant | GS–7 | 6,734 |
| 3 clerical assistants | GS–6 | 18,411 |
| 4 clerical assistants | GS–5 | 22,260 |
| Total (40) | | 461,983 |
| Total new positions, all activities (53) | | 569,335 |

## Biographical Sketch

Name: James H. Cavanaugh, Ph. D.

Position: Director, Office of Comprehensive Health Planning.

Birthplace and date: Orange, New Jersey: March 3, 1937.

Education: Fairleigh Dickinson University, B.S. 1959; University of Iowa, M.A. 1961; University of Iowa, Ph. D. 1964.

Experience: Jan. 6, 1967 to Present: Director, Office of Comprehensive Health Planning, Office of the Surgeon General, U.S. Public Health Service, Bethesda, Md.; Nov. 14, 1966, Special Assistant to the Surgeon General for Health Care, Office of the Surgeon General, U.S. Public Health Service, Bethesda, Md.; 1964–1966: Assistant Professor, Graduate Program of Hospital and Health Administration, College of Medicine, University of Iowa; Nov., 1964: Visiting Professor and Educational Consultant, College of Medicine, Central University of Venezuela, and Venezuelan Ministry of Health, Caracas; 1964–1966: Consultant to Minister of Health, Province of Saskatchewan, Canada; 1963–1964: Instructor, University of Iowa; 1962–1963: Research Associate, University of Iowa; 1960–1962: Administrative Assistant, Princeton Hospital, Princeton, New Jersey; 1961–Present: Commissioned Officer, U.S. Naval Reserve.

### PARTNERSHIP FOR HEALTH PROGRAM AND NATIONAL GOAL

Senator Hill. Doctor, it is nice to have you here.

You are a product of New Jersey, I believe.

Dr. Cavanaugh. Yes, sir. Just listening to the recent comments, I took a great deal of pride that I went to the school south of Minnesota in the State of Iowa.

Senator Hill. You mean where the tall corn grows, is that right?

Dr. Cavanaugh. Yes, sir.

Senator Hill. All right, we will be happy to have you proceed now, sir.

Dr. Cavanaugh. Mr. Chairman, I am pleased to have this opportunity to report to you on accomplishments as we near the end of the first year of the Partnership for Health and on our progress toward full implementation of the program since receiving our first regular appropriation in November 1967.

The Congress, in enacting this landmark legislation, clearly articulated its intent: to provide a mechanism through which the Federal Government, the States, and the communities, and all other official and voluntary health service providers can work together to attain the goal of assuring the highest level of health attainable for every person.

THE FEDERAL PROGRAM

To achieve this national goal, the Congress authorized five grant programs designed to assist the States and communities (1) in instituting comprehensive health planning, and (2) in providing improved health services to people.

The Partnership for Health provides formula grants to States for comprehensive health planning; project grants for comprehensive areawide or local health planning; project grants for training, studies, and demonstrations in health planning; formula grants to State health and mental health agencies for health services; and project grants to governmental agencies, voluntary health groups, universities and hospitals to support health services.

PROGRAM EXTENDED THROUGH 1970

The intent of this program was strengthened last year by enactment of Public Law 90–174, the Partnership for Health Amendments of 1967, which extended the program through 1970 and provided increased authorizations.

GOVERNORS SUPPORT PROGRAM

I believe that Gov. Hulett C. Smith, of West Virginia, in his assessment of the importance of this program, fairly stated the consensus of the other Governors when he testified before the House Interstate and Foreign Commerce Committee last year.

Governor Smith said:

> The States are increasingly aware of their own responsibilitites in development of new programs, and * * * the action of the Congress in the comprehensive health program legislation is one that is going to permit the States to take even more effective action in their quest for overcoming illnesses and disabilities of the citizens.

Gov. John A. Volpe, this year's chairman of the National Governor's Conference, gave particular emphasis to the program's provision of planning support, when, at the House hearing last May he said: "* * * in my opinion, planning is the key to the success of all our efforts. If we don't properly plan * * * we may well be spending for items which are not of the highest priority and not realize that perhaps there is an item of high priority."

Senator HILL. There is a lot of truth in what he said, isn't there?

Dr. CAVANAUGH. Yes, there is.

STATE'S ROLE IN HEALTH PLANNING

Mr. Chairman, a great deal has been accomplished in the past few months in translating our plans for the partnership program into action.

In the relatively short time since the program became operational, all 55 of the States and territories eligible to participate have initiated

action by designating their State agencies to administer their health planning activities.

In addition, the initial programs of 44 States for comprehensive health planning have been approved by the Surgeon General.

We feel that these measures of significant progress demonstrate the enthusiastic response of the States to a major aspect of this legislation—the new concept of comprehensive statewide health planning.

To promote more effective planning for health services in communities and to assure its relationship to State comprehensive health planning, Public Law 89–749 provides project grants for comprehensive areawide health planning. The first series of applications for these grants is now undergoing review.

### Augmented Manpower and Training Programs

At the same time, the Nation's pool of manpower to conduct and to participate in comprehensive health planning—a field of critical manpower shortage—is being augmented.

During fiscal year 1967, initial support was provided for both the development of course curricula and for academic-year, graduate training in comprehensive health planning.

During the same period, support was provided for short-term training and for orientation courses in health planning for over 5,000 individuals.

Senator Hill. We are very short in this area, aren't we?

Dr. Cavanaugh. Yes; we are. Before this program there were no formal training programs for health planners. What few there are have picked up there skills on their own.

The students currently supported will continue their training in 1969 and others will begin similar 2-year training programs in September.

Continuing efforts to prepare the many professionals and nonprofessionals who will be participating in and contributing to comprehensive health planning will provide short-term training to about 2,000 people under this year's program.

### State's Role in Health Services

A second major aspect of the partnership for health deals with health services provided through formula grants to State health and mental health departments. Prior to passage of Public Law 89–749, these State health programs were supported through nine narrow, disease-oriented categories.

Under the partnership for health, the categorical restrictions were removed, thus affording the States new flexibility in dealing with the health needs which they determine to be most pressing and to which they assign high priorities in their health planning.

Senator Hill. It gives them much more authority?

Dr. Cavanaugh. And much more flexibility in the use of these Federal funds.

As a result, a number of States have begun to promote and support health services in areas such as alcoholism and family planning, that previously were not supportable under the categorical approach.

This program focuses on the interrelation of activities supported by Federal, State, and local governments. We feel that the most

effective attack on local health needs can be made through localized identification of health needs and resources, planning, determination of priorities, and decision making.

The State of Kansas, for example, should not be required to spend the same portion of its Federal grants-in-aid for health for tuberculosis control as the State of Massachusetts, when in any given year the tuberculosis problem may be very different in Kansas than it is in Massachusetts, or Kansas may be solving its tuberculosis problem through the use of State or local or voluntary funds.

Senator HILL. You have different situations in different States?

Dr. CAVANAUGH. Yes, sir.

FEDERAL-STATE-LOCAL EFFORTS

In addition to State formula grants, the program provides project grants to support services to meet health needs of limited geographical scope or of special regional or national significance.

The elimination of categorical restrictions here, too, has encouraged the introduction of a wide array of new activities, including family planning, comprehensive health services development, alcoholism programs, encouragement of group practice, and health referral programs for military draft rejectees.

Basic sanitation and health education programs, directed primarily at slum area rodent control are also being given special emphasis.

A 1968 supplemental program request for $20 million has been submitted to the Congress by the President.

Senator HILL. Have you testified yet in behalf of that supplemental?

Dr. CAVANAUGH. We have not yet in the Senate.

Senator HILL. You have not been called to testify?

Dr. CAVANAUGH. No, Mr. Chairman; not in the Senate. We went before the House Committee on March 22, 1968.

In organizing to assist the States and communities in combating their health problems, the Public Health Service has placed responsibility for grants review and approval in its nine regional offices—closer to the States and local communities and closer to the people these programs are designed to serve.

Office of Comprehensive Health Planning staff in the regional offices are actively consulting with State and local agencies and prospective grant applicants within their regions.

As each level of Government becomes more involved in the partnership for health program, it has an obligation to assure the taxpayer that he is getting his money's worth.

Accordingly. plans are underway to provide continuing evaluation of these programs. By analyzing target problems, project objectives, and proposed methods, efforts will be evaluated and changes recommended to assure that the best interests and needs of the public are met and that the health services and related activities supported by this program accomplish their purposes.

PROGRAMS OF SPECIAL LOCAL INTEREST

In addition to the broad programs I have just mentioned, the Office of Comprehensive Health Planning is playing an active role in the development of a number of special interest programs, including

the model cities program, neighborhood health centers, and other neighborhood services.

Working closely with the Department of Housing and Urban Development, the Office of Economic Opportunity, and other elements of the Department of Health, Education, and Welfare, the partnership for health is coordinating its efforts with other Federal agencies, to assure that the planning and service developments in the partnership program contribute to meeting the national health needs as identified through State and local planning.

A typical project is one being planned by a local medical society in association with a city health department. It calls for development of a group practice plan, an extended-care facility, and a neighborhood health service center to be established in a major urban ghetto as a component of a model cities program.

This kind of facility will provide prevention, diagnosis, treatment, chronic care, and rehabilitation services to people who now receive little if any health care.

Senator HILL. This might be a very historic and important operation.

Dr. CAVANAUGH. We feel it is, Mr. Chairman. We are moving ahead quickly with it.

Thus, we are beginning to foresee dramatic changes in the way health services are provided at the State and local levels, and in the methods of planning, decision making, and allocation of health resources to meet health needs.

### NATIONAL IMPACT

Finally, Mr. Chairman, I think that we all recognize that the rising costs of medical care constitute a very serious national problem.

Sound planning is an important factor in minimizing this rise in cost.

Although the Partnership for Health program is not charged with the specific responsibility of reducing health care costs, it should serve as a brake on the rapid escalation of prices. Not only will comprehensive health planning help assure that all of our health facilities are being used efficiently and effectively and that our resources, which are not inexhaustible, are being applied to the health problems with the highest priorities, it will also serve to identify and promote alternatives to high-cost medical care services.

### BUDGET REQUEST

Our appropriation request for 1969 will permit Federal, State, and local agencies to move forward on the growing momentum of this program and to insure continuing progress toward the common goal of the highest level of health care available for every individual.

To meet the responsibilities on the Federal side of this new partnership, we are requesting an appropriation of $195,383,000 for 1969, an increase of $37,467,000 over the $157,916,000 recommended for appropriation in 1968.

Mr. Chairman, I shall be happy to answer any questions you or the committee may have.

### Budget Bureau Reductions

Senator Hill. The Budget Bureau gave you quite a slash too, didn't it?

Dr. Cavanaugh. I have the figures which they provided, Mr. Chairman.

Senator Hill. They reduced you some $19,112,600, didn't they?

Dr. Cavanaugh. Yes, sir.

Senator Hill. How much is that going to affect the program?

### Reductions in Mental Health Grants

Dr. Cavanaugh. Well, these reductions were primarily in the area of the formula grants to the State health and mental health authorities.

Of the $19 million, approximately $13 million was in that area. The effect of this will mean that the States will have $13 million less to allocate for State and local health services.

Senator Hill. Primarily in the mental health field, you said?

Dr. Cavanaugh. No, sir; proportionately over both the health and mental health fields.

Under the authorizing legislation, as you will recall, 15 percent of the State's formula grant for health services must be allocated to the State's mental health department.

The effect of the 1968 amendments to the program also requires that, beginning this year, fiscal year 1969, 70 percent of the States formula grant for health and mental health services must be spent for local health services. The impact of the reduction therefore will be felt primarily at the local level in the reduction of health and mental health services the States might otherwise have provided.

Senator Hill. You have brought us an informative and splendid statement. Thank you, sir.

Dr. Cavanaugh. It is a pleasure to appear before you, sir.

### Budget Officer

Senator Hill. We appreciate it deeply. I notice your chaperone—where are you from originally, young lady?

Mrs. Carvey. Monterey, Calif.

Dr. Cavanaugh. Mrs. Carvey is our Chief Budget Officer and she keeps all our figures in balance.

Senator Hill. That is a mighty important job.

Dr. Cavanaugh. Yes; it is a very important one for a program of this size.

Senator Hill. Sure it is, where you deal with so many States.

Dr. Cavanaugh. We are dealing with approximately 1,300 grantees in 55 States and territories and numerous local governments.

Senator Hill. We want to thank you, sir. You have brought us another splendid statement.

Dr. Cavanugh. Thank you, Mr. Chairman.

Senator Hill. We appreciate it. You keep your budget officer.

Dr. Cavanaugh. Yes, sir.

## Bureau of Disease Prevention and Environmental Control

**STATEMENT OF VERNON G. MacKENZIE, DEPUTY DIRECTOR**
**ACCOMPANIED BY:**
**LYMAN MOORE, EXECUTIVE OFFICER**
**PETER J. BERSANO, FINANCIAL MANAGEMENT OFFICER**
**DR. WILLIAM STEWART, SURGEON GENERAL**
**CHARLES MILLER, CHIEF FINANCE OFFICER**
**JAMES B. CARDWELL, DEPUTY ASSISTANT SECRETARY, BUDGET**

### Biographical Sketch

Vernon G. MacKenzie, Deputy Director, Bureau of Disease Prevention and Environmental Control, Public Health Service, U.S. Department of Health, Education, and Welfare, was born July 19, 1906. He was graduated from Massachusetts Institute of Technology in 1927, where he majored in Sanitary Engineering, and later completed the Advanced Management Program of the Harvard Graduate School of Business Administration.

Prior to entering the Public Health Service, Mr. MacKenzie was employed as a Sanitary Engineer—from July 1927 to June 1936 with the Sanitary District of Chicago, and from 1936 until January 1939, with the Department of Public Works of Detroit.

He joined the Public Health Service in February 1939. During World War II, he was assigned to the National Defense Sanitation Facilities Program of the Service and them, as Deputy Director, to the Public Health Division of the American Mission for Aid to Greece, with headquarters in Athens. For his work there, in planning emergency housing, feeding, medical care, and epidemic control for some 700,000 war refugees, the Greek Government awarded him the Gold Cross of the Royal Order of Phoenix.

During Mr. MacKenzie's tenure, from 1948 to 1954, as Officer-in-Charge of what was at first the Water and Sanitation Investigation Station in Cincinnati, a new organization was planned and water research facilities were constructed, under his personal supervision. This Public Health Service workshop, which is now internationally famous as the Robert A. Taft Sanitary Engineering Center, was one of the first tangible responses to the growing challenge of environmental contamination.

His two immediate previous posts were Assistant Chief for Research and Development in the Division of Engineering Services, 1954–1960, and Chief, Division of Air Pollution, 1960–1966, both headquartered in Washington, D.C.

The Division of Air Pollution, under Mr. MacKenzie's leadership, had an outstanding record of growth, accomplishment, and professional and public acceptance. In the field of air pollution—considering its overall aspects rather than any of its many specialties—Mr. MacKenzie is widely regarded as the top authority in the Nation.

In January 1964, he was advanced in grade to the rank of Assistant Surgeon General. In 1964, Mr. MacKenzie received the Distinguished Service Medal, the Public Health Service's highest award, for outstanding accomplishments and leadership.

He is a member of the American Society of Civil Engineers, the American Public Health Association, the American Water Works Association, the Federation of Sewage and Industrial Wastes Association, the Air Pollution Control Association, and the Conference of Federal Sanitary Engineers.

### HEALTH PROTECTION

Senator Hill. Mr. MacKenzie, we are glad to have you back with us, sir.

Dr. STEWART. Mr. Chairman, the reason that Dr. Prindle, the Director of the Bureau is not here this morning is that he is substituting for me on a speech on the west coast at the National Industrial Health Conference which I was supposed to give.

Senator HILL. Which one of your speeches did you let him use?

Dr. STEWART. He knows more about the subject that I do. He wrote his own speech.

Senator HILL. All right; you tell him we are sorry he is not here but we are glad to have Mr. MacKenzie here representing him.

Dr. STEWART. Yes, sir.

Mr. MACKENZIE. Mr. Chairman, it is a distinct pleasure for me to appear before you to present our appropriation request.

This Bureau provides direction and coordination of the activities of the Service described by the term "health protection."

The philosophy underlying our concern with the protective aspects of public health is summed up in the homely old phrase, "an ounce of prevention is worth a pound of cure."

And let me emphasize here that the savings effected by preventive medicine include private and public dollars in the multimillion range.

More important, even, are the savings in scarce hospital beds and in the time of overworked physicians and nurses. Most important of all are the savings in human life, happiness, and productivity.

### PREVENTIVE PUBLIC HEALTH MEASURES

I et me give you a few examples of the dollar, hospital bed, and medical manpower savings resulting from preventive public health measures.

### MEASLES ERADICATION

You know that we are conducting a campaign to eradicate measles in this country. Let us examine the savings that would follow the eradication of measles among the children in a typical big city.

If the city has a total population of 1 million, it would have about 50,000 children aged 1 to 12 susceptible to an epidemic of measles every 2 or 3 years.

Not giving the vaccine would result in about 20,000 cases of measles from each such epidemic, of which 120 cases would require hospital treatment.

Of these hospital cases, two would die; and 10 others would suffer the complication of encephalitis.

Of the 10 encephalitis cases, a conservative estimate is that two would become severely and permanently retarded to the extent they would require custodial care for the rest of their lives—an estimated 40 years.

Such care would cost $3,000 annually per child or $240,000 during the expected lifetime of both children. To this figure must be added the medical costs for home and hospital treatment for all of the other victims—about $247,000 every 2 or 3 years.

By contrast, the annual cost of preventing measles in that city would be about $100,000; or $300,000 for a 3-year period in which—without a preventive program—there would probably be an epidemic.

Future epidemics could be completely eliminated by an annual expenditure of about $40,000 to immunize the newborn children.

Senator HILL. It could be completely prevented?

Mr. MacKenzie. I think we are well on the track, Mr. Chairman, toward essentially eradicating measles in this country.

The reductions that have occurred to date in measles incidence is reaching the 90 percent or greater figure.

### Burn Injuries

Each year in this country we have about 3,000 deaths and 150,000 burn injuries resulting from clothing fires. Serious, nonfatal burns cause an estimated 75,000 persons to be hospitalized. The average hospital stay for each of these cases is 20 days, or a total of 1.5 million hospital bed-days annually.

The Flammable Fabrics Act Amendments of 1967 require the Department to determine the causes and recommend changes in standards of flammability to reduce injury and death from clothing burns.

We are organizing an accelerated program of research to establish causal factors, and to analyze case management data from a number of burn treatment centers. This will be combined with an intensive public information program.

Over the next 5 years we believe that a successful program of research and prevention will save an estimated 1,850 lives and prevent 116,000 injuries from clothing burns.

During this 5-year period an estimated 1.2 million hospital bed-days would be conserved. The savings in hospital costs would be an estimated $90 million.

### Poliomyelitis

As a third example of savings in medical care costs and scarce health manpower achieved through preventive measures let us consider poliomyelitis.

The average annual number of polio cases reported in the 5 years immediately preceding the 1955 introduction of an effective vaccine was 38,727.

We estimate if that number of cases had occurred in 1967 the medical costs would be approximately $40 million.

But, because of widespread use of polio vaccine by private physicians and public health agencies, only 51 cases of polio occurred in 1967. The estimated medical cost was about $50,000 instead of $40 million.

Senator Hill. That was great progress, was it not?

Mr. MacKenzie. I think it was spectacular, Mr. Chairman.

Senator Hill. Magnificent.

Mr. MacKenzie. Last year, some 3 million children were vaccinated against polio under federally sponsored immunization programs administered by our National Communicable Disease Center. The Federal cost was about $1 million.

### Organization and Responsibilities of the Bureau

The job of our Bureau is to focus more attention and more action on health protection. To accomplish this we are organized into five national centers: air pollution control, urban and industrial health, radiological health, chronic disease control, and communicable disease control.

Since the directors of these national centers will provide details on their operating programs, the progress made during the past year, and their future objectives, I will confine my remarks to a brief statement of the prevention and control strategy which ties those centers together.

### PROTECTION AGAINST DISEASE AND ENVIRONMENTAL HAZARDS

The programs of this Bureau are seeking to prevent or stay the progress of scores of different diseases and environmental hazards. All follow one or more of three avenues of approach.

### CONTROL OR ALLEVIATION OF EVIRONMENTAL FACTORS

The first avenue is the control or alleviation of environmental factors which are threats to health or the deterioration of the quality of life.

Program examples here are air pollution, solid waste disposal, and certain radiation hazards. The common thread in this group is that all are the responsibility of the community since they are not amenable to individual control—and most are contributed to or adversely affected by man himself.

Senator HILL. As you say here, the individual cannot control it.

Mr. MACKENZIE. The individual, Mr. Chairman, is pretty powerless to do anything about community air pollution. It takes concerted action on an organized community basis to attack a problem of this kind.

Senator HILL. Certainly.

### INDIVIDUALS EXPOSED TO ENVIRONMENTAL HAZARDS

Mr. MACKENZIE. The second approach is protection of the individual from hazards in the environment to which he may be exposed by his own actions of choices or the actions of others, and where control can be achieved by education or restriction of the individual.

The examples here are cigarette smoking, improperly manufactured or poorly safeguarded products of various kinds, such as highly inflammable night clothes for children, and many different kinds of occupational hazards.

### PREVENTIVE MEDICINE

The third method is what is traditionally termed preventive medicine; the methods which seek to either prevent the onset of illness or alleviate the further process of a disease already present in an individual.

We do this by immunization, by modifying the human responses to disease, or by removing or changing the causative agent.

We immunize against a growing number of diseases—polio, measles and diphtheria are good examples.

In the preventive approach, we also include screening for early diagnosis of chronic diseases, when further progress of the disease often can be stopped; the developing of specialized therapy for some of the chronic diseases; and nutrition programs.

This Bureau is working where the people and the problems are—whether in the city, the small towns or the country. We are testing,

and helping others to test, better ways of applying existing knowledge of health protection.

We are searching for, finding and testing new methods. If applied widely and vigorously, the old and the new together constitute a formidable weapon against preventable disease and injury.

I shall be happy to answer any questions.

Senator HILL. But you have to have this theme, don't you?

Mr. MACKENZIE. We surely do.

Senator HILL. I think you have emphasized that matter well for us. That was a very good statement which we appreciate very much.

Mr. MACKENZIE. Thank you, sir. I appreciate the opportunity of being here.

### DEPUTY DIRECTOR

Senator HILL. It is nice to have you back with us. Where did you come from originally?

Mr. MACKENZIE. I was originally born in Massachusetts and grew up there until I got through school at the Massachusetts Institute of Technology but I have been away from there ever since.

Dr. STEWART. I might mention Mr. MacKenzie is planning to retire this fall and this will be his last appearance before this committee.

Senator HILL. He is too young for that.

Mr. MACKENZIE. I wonder about that.

Senator HILL. How long have you been in the Public Health Service?

Mr. MACKENZIE. Something over 29 years, Mr. Chairman.

Senator HILL. You have always made a very fine, most helpful, constructive presentation here and we are deeply grateful to you.

Mr. MACKENZIE. I must say, Mr. Chairman, that I have enjoyed every one of my appearances before your committee here.

Senator HILL. We certainly have benefited greatly from your appearances here. I have always been very proud and happy to have you here. We are proud of the work you have done. You have set a fine example to all those who serve the people. I congratulate you. I wish you the best of everything.

### TRIBUTE TO SENATOR HILL

Mr. MACKENZIE. I understand that this may be your last year also, Mr. Chairman.

Senator HILL. It is so scheduled.

Mr. MACKENZIE. I would only like to reciprocate your kind words and congratulate you on the many contributions that you have made to the field in which we are all interested, namely, the health protection of our people.

Senator HILL. Thank you, sir. You are mighty kind. We wish you the best of everything. Do you have plans for the future?

Mr. MACKENZIE. I have no definite plans. I intend to continue to do some work but not on a full-time basis, Mr. Chairman.

Senator HILL. Well, you have done a fine job up to date and we are deeply grateful to you.

Thank you very much.

STATEMENT OF DR. DONALD R. CHADWICK, DIRECTOR, NATIONAL CENTER FOR CHRONIC DISEASE CONTROL

ACCOMPANIED BY:

DONALD G. RIEDESEL, EXECUTIVE OFFICER

DR. RICHARD A. PRINDLE, DIRECTOR, BUREAU OF DISEASE PREVENTION AND ENVIRONMENTAL CONTROL

VERNON G. MacKENZIE, DEPUTY DIRECTOR, BUREAU OF DISEASE PREVENTION AND ENVIRONMENTAL CONTROL

PETER J. BERSANO, FINANCIAL MANAGEMENT OFFICER, BUREAU OF DISEASE PREVENTION AND ENVIRONMENTAL CONTROL

DR. WILLIAM H. STEWART, SURGEON GENERAL

CHARLES MILLER, CHIEF FINANCE OFFICER

JAMES B. CARDWELL, DEPUTY ASSISTANT SECRETARY, BUDGET

## Appropriation Estimate

"chronic diseases

"To carry out sections 301, 311, 402(g), and 403(a)(1) of the Act, with respect to chronic diseases, [$27,942,000] *($29,779,000.*"

AMOUNTS AVAILABLE FOR OBLIGATION

| | 1968 | 1969 |
|---|---|---|
| Appropriation | $27,942,000 | $29,779,000 |
| Comparative transfer to "Mental retardation," Social and Rehabilitation Services | −1,857,000 | |
| Unobligated balance for mental retardation grants brought forward | 1,857,000 | |
| Cutback from the 1968 President's budget required by H.J. Res. 888 | −498,000 | |
| Total currently authorized for obligation | 27,444,000 | 29,779,000 |
| Plus proposed release of reserves for increased pay and postal costs | 393,000 | |
| Total available for obligation | 27,837,000 | 29,779,000 |
| Disposition of cutback: | | |
| To be used for pay and postal costs in this account | 393,000 | |
| To be returned to the Treasury | 105,000 | |
| Total cutback | 498,000 | |

OBLIGATIONS BY ACTIVITY

| | 1968 estimate | | 1969 estimate | | Increase or decrease | |
|---|---|---|---|---|---|---|
| | Positions | Amount | Positions | Amount | Positions | Amount |
| 1. Grants | | $4,052,000 | | $4,193,000 | | +$141,000 |
| (a) Research | | 3,752,000 | | 3,893,000 | | +141,000 |
| (b) Training | | 300,000 | | 300,000 | | |
| 2. Direct operations | 944 | 23,785,000 | 979 | 25,586,000 | +35 | +1,801,000 |
| (a) Cancer control | 222 | 3,160,000 | 222 | 3,160,000 | | |
| (b) Smoking and health | 37 | 2,075,000 | 42 | 2,575,000 | +5 | +500,000 |
| (c) Diabetes and arthritis control | 90 | 1,720,000 | 94 | 2,187,000 | +4 | +467,000 |
| (d) Heart disease control | 400 | 6,976,000 | 400 | 6,976,000 | | |
| (e) Respiratory disease control | 32 | 1,584,000 | 42 | 2,168,000 | +10 | +584,000 |
| (f) Neurological and sensory disease control | 90 | 1,660,000 | 90 | 1,660,000 | | |
| (g) Preventive services | 18 | 665,000 | 18 | 665,000 | | |
| (h) Kidney disease control | 55 | 5,945,000 | 55 | 5,945,000 | | |
| (i) Nutrition | | | 16 | 250,000 | +16 | +250,000 |
| Total obligations | 944 | 27,837,000 | 979 | 29,779,000 | +35 | +1,942,000 |

OBLIGATIONS BY OBJECT

| | 1968 estimate | 1969 estimate | Increase or decrease |
|---|---|---|---|
| Total number of permanent positions | 944 | 979 | +35 |
| Full-time equivalent of all other positions | 64 | 69 | +5 |
| Average number of all employees | 845 | 882 | +37 |
| Personnel compensation: | | | |
| Permanent positions | $7,862,000 | $8,163,000 | +$301,000 |
| Positions other than permanent | 362,000 | 395,000 | +33,000 |
| Other personnel compensation | 34,000 | 34,000 | |
| Total personnel compensation | 8,258,000 | 8,592,000 | 334,000 |
| Personnel benefits | 1,116,000 | 1,145,000 | +29,000 |
| Travel and transportation of persons | 845,000 | 945,000 | +100,000 |
| Transportation of things | 99,000 | 149,000 | +50,000 |
| Rent, communications, and utilities | 395,000 | 425,000 | +30,000 |
| Printing and reproduction | 70,000 | 90,000 | +20,000 |
| Other services | 400,000 | 450,000 | +50,000 |
| Project contracts | 11,461,000 | 12,728,000 | +1,267,000 |
| Services of other agencies | 584,000 | 610,000 | +26,000 |
| Payments to: | | | |
| Public Health Service management fund | 128,000 | | −128,000 |
| National Institutes of Health management fund | 22,000 | | −22,000 |
| Supplies and materials | 186,000 | 196,000 | +10,000 |
| Equipment | 221,000 | 256,000 | +35,000 |
| Grants, subsidies, and contributions | 4,052,000 | 4,193,000 | +141,000 |
| Total obligations by object | 27,837,000 | 29,779,000 | +1,942,000 |

*Summary of changes*

| | |
|---|---|
| 1968 enacted appropriation | $27,942,000 |
| Comparative transfer to "Mental retardation," Social and Rehabilitation Service | −1,857,000 |
| Unobligated balance for mental retardation grants brought forward | 1,857,000 |
| Cutback required by H. J. Res. 888 | −498,000 |
| Proposed release of reserves for increased pay and postal costs | 393,000 |
| 1968 total estimated obligations | 27,837,000 |
| 1969 estimated obligations | 29,779,000 |
| Total change | +1,942,000 |

| | Base | | Change from base | |
|---|---|---|---|---|
| | Positions | Amount | Positions | Amount |
| Increases | | | | |
| A. Built in: | | | | |
| 1. Annualization of civilian and military pay raises | | | | $98,000 |
| 2. 1 extra day of pay in 1969 | | | | 25,000 |
| B. Program: | | | | |
| 1. Research grants | | $3,752,000 | | 141,000 |
| 2. Expansion of smoking and health program | 37 | 2,075,000 | 5 | 500,000 |
| 3. Expansion of diabetes and arthritis program | 90 | 1,720,000 | 4 | 470,000 |
| 4. Expansion of respiratory disease program | 32 | 1,584,000 | 10 | 586,000 |
| 5. Initiation of nutrition program | | | 16 | 250,000 |
| Total program increases | | | 35 | 1,947,000 |
| Decreases | | | | |
| A. Built in: Nonrecurring contribution to the Public Health Service management fund | | 128,000 | | −128,000 |
| Total net changes requested | | | +35 | +1,942,000 |

EXPLANATION OF CHANGES

*Research grants*

An increase of $141,000 will provide for a total of 47 grants to be supported in 1969, the same number as in 1968. The major emphasis will continue to be in applied research directed toward the development of new preventive measures for the control of chronic diseases.

*Smoking and health*

A program increase of $500,000 and 5 positions is requested to improve the informational materials for use with children and meet the increasing demand for information and consultative services from the news media and public. Research will also be supported to determine what can be done by physicians and other health professionals to help patients who wish to give up smoking.

*Diabetes and arthritis*

A program increase of $470,000 and 4 positions will permit initiation of an arthritis center which will determine what can be accomplished with an aggressive therapeutic program started early in the disease process. The hypothesis to be tested is that one to five productive years can be added to the lives of people suffering from arthritis.

*Respiratory disease control*

A program increase of $586,000 and 10 positions is requested for the full-year operation of the pediatric pulmonary disease control programs, and for projects which will provide multi-disciplinary approaches to applied research, development and training for control of chronic adult respiratory diseases.

*Nutrition*

A program increase of $250,000 and 16 positions will support the initiation of domestic nutrition program which will plan projects aimed at assessing the prevalence and causes of malnutrition and stimulate additional research.

*Contribution to the Public Health Service management fund*

The $128,000 decrease for the nonrecurring contribution to the management fund is due to a change in the method of funding. In 1969, it is proposed to fund Office of the Bureau Director costs directly in the activity, "Bureau program direction and management services", in the Radiological Health appropriation rather than through contribution to the Public Health Service management fund.

EXPLANATION OF TRANSFERS

| | 1968 estimate | 1969 estimate | Purpose |
|---|---|---|---|
| Comparative transfer to: "Mental retardation," Social and Rehabilitation Services. | $1,857,000 | ---------- | These functions were transferred due to agency reorganization. |

INTRODUCTION

The National Center for Chronic Disease Control provides for the advancement of the Nation's health by preventing and controlling chronic diseases such as cardiovascular diseases, chronic respiratory diseases, cancer, diabetes, arthritis, chronic kidney diseases, and neurological and sensory disorders. Other programs are directed at prevention of chronic diseases by assisting those who wish to stop smoking, and through the development of good health practices such as periodic physical examinations and improved nutrition. The Center is concerned with diseases which include seven of the ten leading causes of death and 12 of the 25 leading causes of disability.

Through applied research, new and improved methods will be developed aimed at the prevention and control of chronic diseases. New technology, as it is developed, is used to adapt specialized processes or procedures so that their application can be made available in communities throughout the United States. Specialized training of health professionals and technical personnel, the establishment of standards and guidelines for the operation of programs, and the provision of services are necessary to accomplish the Center's goals.

A major area of responsibility is the provision of technical assistance, professional consultation and information to States and localities on the conduct of their programs which are financed in part through grants from the Comprehensive Health Planning and Services program.

1. GRANTS

| | 1968 estimate | | 1969 estimate | | Increase or decrease | |
|---|---|---|---|---|---|---|
| | Number | Amount | Number | Amount | Number | Amount |
| (a) Research | 47 | $3,752,000 | 47 | $3,893,000 | ---- | +$141,000 |
| (b) Training | 8 | 300,000 | 8 | 300,000 | ---- | ---- |
| Total | 55 | 4,052,000 | 55 | 4,193,000 | ---- | +141,000 |
| (a) Research grants: | | | | | | |
| (1) Noncompeting continuations | 39 | 3,225,000 | 27 | 2,651,000 | −12 | −574,000 |
| (2) New grants | 8 | 504,000 | 20 | 1,197,000 | +12 | +693,000 |
| (3) Supplementals | (3) | 23,000 | (5) | 45,000 | (+2) | +22,000 |
| Total | 47 | 3,752,000 | 47 | 3,893,000 | ---- | +141,000 |

The research program of the National Center for Chronic Disease Control has two major thrusts. First, epidemiological studies are required to clarify and describe the extent and nature of chronic disease as it exists throughout the United States. Studies will be supported to learn the number of cases and newly developing cases of such chronic diseases as heart disease, arthritis, cancer, cystic fibrosis, diabetes, epilepsy, emphysema and kidney diseases. Basic information which shows the distribution of chronic diseases in relation to geographic, environmental, social and economic factors is needed so that programs to solve the attendant problrms can be developed and scientifically planned. Behavioral or habit patterns of individuals in relation to the development of disease will be studied. Experimental epidemiological studies to prevent or control chronic diseases through changes in health related behavior or patterns of daily living will be planned and evaluated. The second major thrust requires studies to develop disease detection systems which can screen and diagnose most disease problems in masses of populations on an efficient and economical basis. The approach, of course, allows the people of the United States to avoid the full scale cost of disabling chronic diseases. Studies are planned to use automated systems to screen for and diagnose disease. New efforts will also be made to develop medical instruments suitable for integration into comprehensive disease detection programs.

Projects supported through this program are beginning to report significant findings which will have a major impact on health. Examples of these achievements are in the following areas: better understanding of the effects on health of stressful situations and better methods of measuring and standardizing blood pressure measurements by having subjects wear a blood pressure measurement device during the day in which the changes in blood pressure are automatically recorded and later correlated with the information the subject records in his diary as to his feelings or situation at the time.

The increase of $141,000 requested will allow the Center to support 47 projects, the same number as was supported in 1968.

| | 1968 estimate | | 1969 estimate | | Increase or decrease | |
|---|---|---|---|---|---|---|
| | Number | Amount | Number | Amount | Number | Amount |
| (b) Training grants | 8 | $300,000 | 8 | $300,000 | ---- | ---- |

The National Center for Chronic Disease Control will continue to support the training of investigators for research activities concerned with the application of epidemiologic methods to the prevention and control of chronic diseases, and study of the relationship of social problems to the development and treatment of chronic illness.

Eight projects and 31 students are currently supported in the Center Research Training Program. Many more students who are not directly supported receive training from the projects by taking essentially the same curriculum or some portion of it. Research investigations have been started on chronic disease problems such as the extent and nature of the occurrence of leukemia, a comparison of the sick role in chronic and acute disease patients, and the social and psychological

attributes associated with obesity. These investigations will be reported in the dissertations of the students. The eight projects will be continued with the funds requested.

2. DIRECT OPERATIONS

| | 1968 estimate | | 1969 estimate | | Increase or decrease | |
|---|---|---|---|---|---|---|
| | Positions | Amount | Positions | Amount | Positions | Amount |
| Personnel compensation and benefits | 944 | $9,374,000 | 979 | $9,737,000 | +35 | +$363,000 |
| Other expenses | | 14,411,000 | | 15,849,000 | | +1,438,000 |
| Total | 944 | 23,785,000 | 979 | 25,586,000 | +35 | +1,801,000 |

SUMMARY OF PROGRAM

| | | | | | | |
|---|---|---|---|---|---|---|
| a. Cancer control | 222 | 3,160,000 | 222 | 3,160,000 | | |
| b. Smoking and health | 37 | 2,075,000 | 42 | 2,575,000 | +5 | +500,000 |
| c. Diabetes and arthritis control | 90 | 1,720,000 | 94 | 2,187,000 | +4 | +467,000 |
| d. Heart disease control | 400 | 6,976,000 | 400 | 6,976,000 | | |
| e. Respiratory disease control | 32 | 1,584,000 | 42 | 2,168,000 | +10 | +584,000 |
| f. Neurological and sensory disease control | 90 | 1,660,000 | 90 | 1,660,000 | | |
| g. Preventive services | 18 | 665,000 | 18 | 665,000 | | |
| h. Kidney disease control | 55 | 5,945,000 | 55 | 5,945,000 | | |
| i. Nutrition | | | 16 | 250,000 | +16 | +250,000 |
| Total | 944 | 23,785,000 | 979 | 25,586,000 | +35 | +1,801,000 |

| | 1968 estimate | | 1969 estimate | | Increase or decrease | |
|---|---|---|---|---|---|---|
| | Positions | Amount | Positions | Amount | Positions | Amount |
| a. Cancer control | 222 | $3,160,000 | 222 | $3,160,000 | | |

It has been estimated that about 190,000 cases of cancer are cured annually, and that an increase of 95,000 cases could be cured if existing knowledge and skill were optimally utilized. To do this it will be necessary to continue systematic programs of action against obstacles that have impeded progress in the fight against cancers of specific forms and body sites. These include programs to: (1) improve early detection, diagnosis, and prevention of cancer; (2) find and demonstrate ways of integrating these procedures into all our systems of medical care; (3) improve the cancer awareness of the health professions, and disseminate the most effective cancer knowledges and skills throughout the Nation; and (4) develop a hopeful and positive attitude toward the care and prevention of cancer in the general public.

The major effort of the Public Health Service and others toward the control of cancer of the lung is preventive. Meanwhile, cancer of the lung continues to exact a growing toll. It is feasible to detect cancer of the lung through sputum cytology and it may be feasible to improve diagnosis of suspected early lung cancer through the use of an improved bronchoscope that cancer control began to develop in 1968. In 1969, it is planned to initiate testing of these concepts in cooperation with selected institutions.

The cancer control program for development of X-ray mammography and of training in this procedure for diagnosis of breast disease already is well established. In 1968, evaluations of radiation dosage, of the use of xerographic instead of film X-ray images and of cost reduction proposals will continue. Thermographic mammography—detection of morbidity by heat-mapping of the skin—and application of ultra-sonics to this problem also will come under exploration in contractual projects. Problems of cost and skilled time requirements in all these techniques, and technical uncertainties in the newer modes have as yet prevented these concepts from developing into true initial screening techniques for detecting breast cancer in asymptomatic women. By 1969, the emphasis will shift to field-testing to compare these different techniques as a backup of conventional physical examinations. In 1969, a national conference on control of breast cancer is to be convened under joint sponsorship of the Cancer Control Program, the American Cancer Society, and medical specialty societies to develop agreement on concepts of early detection.

For control of leukemia, the program will emphasize widespread adoption of techniques of blood fraction management that have been demonstrated to be helpful in the care of patients.

Toward the control of cancers of the head and neck, the program is pressing for the integration of proven examination techniques into routine medical practice.

Improvement in control of cancer of the colon and rectum is being sought through promotion of conventional examination techniques, and through evaluation and improvement of the flexible proctosigmoidoscope which has been developed under the guidance of the Cancer Control Program. Evaluation of the prototype instruments in selected medical centers is underway. Simultaneously, engineering studies are being conducted to develop a plastic fiber optical component to replace the glass fiber element in this and other endoscopes. The plastic fibers are expected to have superior flexibility and durability, which will reduce the cost and increase the utility of these instruments.

The feasibility of control of cancer of the uterus through cytological examination already has been demonstrated. In 1968 and continuing into 1969, the continuing work in this area includes extensive public education, work with health professionals to integrate cytological examinations and preventive measures into regular medical practice, and exploration of various means of reducing the cost of examination procedures. Opportunities for reducing these costs may be found, first in improved identification of individuals who are at high risk of the disease, and secondly in reducing the costs of identifying negative cytological test specimens. Both these avenues will be explored further during 1969.

In 1969 also the study of leads to early detection procedures for other cancers will continue. These include cancers of the prostate, the urinary tract and the stomach. Detection of these cancers in asymptomatic stages now occurs largely during examinations for other purposes. The rates of early detection and cure cannot be improved until relatively simple test procedures of known reliability and better definition of high risk groups can be developed. At the same time, the public education program, newly intensified in 1968, will be continued. Progress in the control of cancer will not accelerate rapidly until everyone understands that the hope of cure is strong enough to justify public cooperation in programs of routine examination.

There is no change to this activity because the built-in decrease of $26,000 due to the change in financing of the management fund is offset by built-in increases for the extra day of pay in 1969 and the annualization of civilian and military pay raises.

| | 1968 estimate | | 1969 estimate | | Increase or decrease | |
|---|---|---|---|---|---|---|
| | Positions | Amount | Positions | Amount | Positions | Amount |
| b. Smoking and health | 37 | $2,075,000 | 42 | $2,575,000 | +5 | +$500,000 |

Cigarette smoking exacts a large toll of death and disability in the U.S. population. Yet despite its association with lung cancer, heart disease, chronic respiratory diseases and such other conditions as ulcers and sinusitis, one-half the adult male population and one-third the adult female population continue to smoke. At the same time thousands of youngsters take up smoking each day.

A report recently issued by the National Center for Health Statistics shows that higher rates of disability exists among cigarette smokers as compared with people who have never smoked. They account for 10% of the 853 million beds days spent each year by those aged 17 and over, 13% of the 2,369 million days of restricted activity, and 19% of the 399 million workdays lost per year.

If the death and disability rates associated with cigarette smoking are to be reduced and if cigarette-related disease is to be checked, we must reduce the number of persons now smoking, a number which amounts to 50 million adults; encourage young people not to take up smoking (at present almost half the boys and girls in this country have become cigarette smokers by the time they are 18) and we must develop less hazardous smoking. Concurrently, we must help develop a climate of opinion so that as less hazardous smoking is achieved, smokers will accept it.

The National Clearinghouse for Smoking and Health is currently carrying on a program in four major areas. These areas are behavioral research, community program development, work with health professionals, and health information

services. All segments of the population—physicians, other health professionals, teachers, civic groups and the general public—are involved.

Continued research into smoking behavior is necessary. It is difficult for people to give up smoking and apparently very easy for young people to begin. We need to know much more about these two processes. A systematic investigation into smoking behaviour is now under way by the Clearinghouse.

We will continue to develop better ways to carry out smoking and health programs in the States and in the communities. Today school systems everywhere are busy with teacher training, curriculum revisions and classroom experiences to educate young people to the hazards of smoking. Youth groups, through the cooperative support of the Children's Bureau, are building smoking education into their programs. Community groups are functioning in virtually every city and county, supported by medical societies, local school systems, health departments, parent groups and voluntary health agencies.

Two community laboratories are now under way to test out various methods and techniques which other communities may be able to adopt later on. One of these, in Syracuse, is new; the other, in San Diego, has been in existence for approximately a year. It was begun under the sponsorship of the San Diego County Medical Society, and now encompasses groups and agencies from throughout the area, including health agencies, school systems, parent groups, industrial organizations, and labor groups.

Work is being initiated to develop an intensified program to increase the influence of physicians, other health professionals and educators on the smoking behavior of their patients and clients. Seventy percent of adult cigarette smokers say they have never talked to a physician about smoking, yet there is evidence that among smokers who have discussed smoking with a physician, the number who give up smoking is significantly higher than among those who have not.

A basic health information program is being carried out by the Clearinghouse involving a continuing surveillance and dissemination of information on the results of medical, behavioral, educational, and program research. The recent FCC ruling, requiring radio and TV to provide more time to information on the hazards of cigarette smoking makes necessary further development of this program immediately.

The increase of 5 positions and $500,000 will be used to augment programs in four areas. In order to contain the pressures on youth to take up smoking we need to prepare additional educational material utilizing the results of ongoing research. We must increase our efforts to develop better methods to assist adults who need to give up smoking cigarettes. We need to work with physicians and other health professionals to improve their effectiveness in helping people to give up smoking. Finally, we need an increased capability to provide the public with the information, educational materials, and consultative services which they demand.

The net budget increase of $500,000 results from a program increase of $500,000 offset by a built-in decrease of $6,000 due to the change in financing of the management fund and $6,000 for other built-in items of increase. These items include the additional day of pay in 1969 and the annualization of military and civilian pay raises.

| | 1968 estimate | | 1969 estimate | | Increase or decrease | |
|---|---|---|---|---|---|---|
| | Positions | Amount | Positions | Amount | Positions | Amount |
| c. Diabetes and arthritis control | 90 | $1,720,000 | 94 | $2,187,000 | +4 | +$467,000 |

(1) *Arthritis*

Arthritis is the Nation's number one crippler. It costs the United States' economy more than 3½ billion dollars a year. Gradually, it withdraws from active productivity large numbers of otherwise capable people. Conservative estimates indicate that proper application of currently available knowledge can delay onset of disability from this disease by at least five years. Investigation will be continued to improve treatment methods, physician and public knowledge of available resources and understanding of the natural history of the disease.

Major effort will be devoted to the initiation of an arthritis center program which will show what can be accomplished with an aggressive therapeutic program started early in the disease process in the delay or prevention of disability in the

arthritic. The central purpose of the program is the development and evaluation of means for providing exemplary care for arthritics; training and clinical research elements are essential to the accomplishment of that goal. In the first year the operational plan of the center will be finalized, staffing will be undertaken, training programs delineated, and patient care instituted. A center will process three to four thousand patients per year. The physicians trained in the center will initiate clinics that will treat additional patients in surrounding communities. The program is based on the hypothesis that one to five productive years can be added to the lives of people suffering from arthritis, and that such an increase will return about forty dollars to the economy for each dollar spent.

The increase of $470,000 and four positions will provide for the initiation of one arthritis center during the year.

(2) *Diabetes*

Diabetes is the eighth leading cause of death in the United States. Each year more than 32,000 persons die from diabetes. Additional thousands of diabetics die prematurely from other conditions such as cardiovascular and renal disease caused or aggravated by diabetes. Diabetes in some way limits the activity of nearly half a million Americans. It is, for example, the third leading cause of blindness. There are approximately 1.6 million diabetics in the nation who are unaware they have the disease. An additional 2.8 million persons have medically attended diabetes.

During 1969, major emphasis will continue to be on the improvement of methods for the early detection of individuals with diabetes and on the improvement of the diabetic's knowledge of how to maintain the regime his physician has established for him. Effort will be devoted to the continuing investigation of the epidemiology and natural history of the disease.

The net budget increase of $467,000 results from a program increase of $470,000 offset by a built-in decrease of $10,000 due to the change in financing of the management fund, and $7,000 for other built-in items of increase. These items include the additional day of pay in 1969 and the annualization of military and civilian pay raises.

| | 1968 estimate | | 1969 estimate | | Increase or decrease | |
|---|---|---|---|---|---|---|
| | Positions | Amount | Positions | Amount | Positions | Amount |
| d. Heart disease control | 400 | $6,976,000 | 400 | $6,976,000 | ---------- | ---------- |

The cardiovascular diseases, which include stroke, are the leading causes of death and disability in the United States. In 1966, some 1,017,550 people or about half of all those who died that year, did so because of these diseases. More than an estimated 1,000,000 man years of restricted activity result from the cardiovascular diseases, and the annual national economic loss from these diseases is estimated to be in excess of $25 billion. Our present state of knowledge does not yet permit effective measures at the community level to prevent all of the cardiovascular diseases but a number of potentially fruitful areas are being investigated, particularly with respect to the prevention of coronary heart disease or heart attacks. This disease is the single greatest cause of death in the United States and is responsible for one-third of all deaths among men between the ages of 35 and 64.

One of these areas which shows promise has to do with the fact that increased amounts of habitual physical activity are associated with a less severe incidence of coronary artery disease. Three physical activity studies, begun in 1967 at the University of Wisconsin, the University of Minnesota and Penn State University, will be continued in 1969 to learn how to motivate high risk individuals to accept planned programs of increased physical activity.

Coronary care unit techniques are essentially based on the monitoring of electro-physiological signals from the hearts of patients during that most crucial period just following a heart attack so that immediate, vigorous treatment such as re-starting the heart, may be begun by trained individuals who are always in attendance. During 1968, in the 13 training centers funded, over 1,000 nurses will be trained in the care of patients with acute myocardial infarction in coronary care units. A similar number will be trained during 1969. Although this number is less than 10 per cent of the trained personnel needed to staff the number of coronary care units that appears desirable in this country, the experience gained

in these initial efforts will be invaluable in guiding other training courses in the future.

There are many opportunities to conserve scarce professional time and actually improve the quality of care patients receive by adapting modern computer data processing techniques to coronary care units. By constantly monitoring and analyzing vital patient data, computers can often alert physicians well in advance of cardiac arrest or a life threatening dysrhythmia. Prototype, automated, coronary care units will be supported in two hospitals. One of these will incorporate a constant automatic computer analysis of patient electrocardiograms, as an integral part of the system.

Efforts will also continue to assist small hospitals to adapt proven life-saving coronary care concepts to their resources and modes of operation. These activities are being supported in four hospitals of less than 200 beds in various parts of the country. Methods and techniques developed in these units will be invaluable for the some 1,500 hospitals throughout the country with fewer than 100 beds, where a large number of heart attack victims are cared for.

The effectiveness of coronary care units could be increased significantly if more pateints who need this type of care could be brought to them sooner. During 1969 two coronary reception areas will be set up adjacent to already established coronary care units to develop and evaluate procedures to identify, admit, and monitor heart attacks much earlier in the course of the event.

Hypertension is the most frequentily found condition of all the cardiovascular disorders and is itself a significant cause of death and disability as well as being heavily incriminated in the causation of coronary disease and stroke. The detection, diagnosis and management of people with high blood pressure in the community represents a continuing and increasing need. Particularly important is the need to understand the mechanisms of elevated blood pressure so that patients can be effectively treated. The program will continue to support expert medical committees to define the criteria to be applied to those who have elevated blood pressure levels, relative to their management by medical and surgical techniques. The evaluation of different types of community programs to support the continuing therapy and management of the hypertensive patient will be continued.

Cerebrovascular disease, frequently a result of high blood pressure, is a condition which occurs so frequently that few families escape its impact. Statistics indicate that there are over 400,000 new stroke patients each year, yet little is available in most communities for the prevention of the disease or the care of victims of this third most frequent cause of death. Research will continue in acute care techniques for stroke victims—similar in some respects to the techniques which have improved the outlook for heart attack patients. The evaluation of different forms and schedules of stroke rehabilitation will also continue.

The introduction of the fluorescent anti-body technique for rapid identification of streptococcal infection has provided a powerful tool for the eventual control of rheumatic fever and rheumatic heart disease, but the need for this service has already exceeded the ability of most communities and institutions to provide it. Fortunately the procedure is one which appears to lend itself well to automation. During 1968 and 1969, a prototype automatic device will be assembled and subjected to laboratory testing. If successful, this could result in a marked reduction in the unit cost of each test and significantly increase the availability of the service to persons in far more varied circumstances throughout the country than is possible today.

Activities will continue to attempt to identify new risk factors associated with stroke and coronary heart disease. During 1969, investigations will continue into the impressive differences in cardiovascular death rates which have been observed between different geographical areas in this country. New techniques such as analysis by neutron activation will permit definition of contributing factors previously not within reach. Methodological research in identifying and defining the social and psychological factors that influence the utilization of knowledge to prevent and control the incidence of cardiovascular diseases will be advanced.

These is no change to this activity because the built-in decrease of $55,000 due to the change in financing of the management fund is offset by built-in increases for the extra day of pay in 1969 and the annualization of civilian and military pay raises.

| | 1968 estimate | | 1969 estimate | | Increase or decrease | |
|---|---|---|---|---|---|---|
| | Positions | Amount | Positions | Amount | Positions | Amount |
| e. Respiratory disease control | 32 | $1,584,000 | 42 | $2,168,000 | 10 | $584,000 |

The number of deaths attributed to emphysema and chronic bronchitis rose from 3,157 in 1950 to 23,432 in 1965. The number of deaths has been doubling every five years. This rate of increase is greater than for any other cause of death and is four time the rate for lung cancer. This high rate of increase has been going on since 1950 for males and since about 1956 for females. It is happening in nearly all of the 50 states and there are no signs of any modernization in the upward trend.

How much of this increase is a result of a real change in causes of death and how much represents changes in the assignment of the cause of death remains unknown. It does, however, signal a major health problem, the ultimate magnitude of which also remains unknown.

Limited data available on illness and disability from these diseases also confirm the need for effective control programs. During 1967, 250 million man-hours were lost from work and 14,000 persons under the age of 65 were certified as permanently disabled from emphysema and chronic bronchitis, requiring a total of $90 million in Social Security disability payments. Nevertheless, the known size of the problem necessitates a major effort to determine relevant facts about chronic respiratory diseases so that further steps can be taken to reverse this trend.

It is with this in mind that statistical and epidemiologic studies have been initiated to enable the program to define the nature of the problem both quantitatively and qualititatively. Epidemiologic studies, in cooperation with other HEW programs and private agencies, and specialized training programs to be carried out in major medical schools are in the process of activation. The National Tuberculosis Association-Public Health Service Task Force on Emphysema which convened in October, 1966, and a committee composed of curriculum planning officers of Southern California schools of medicine (Dr. Charles T. Carman, Chairman) have both stressed the present lack of capability for pulmonary disease teaching in medical schools. Because these diseases have only recently emerged as important causes of death and disability, medical school training programs have been unable to adjust their curricula to meet the need. Certain types of therapy which are available need to be administered or supervised by skilled paramedical staff, who are also limited in number. Services to patients with chronic respiratory conditions are, therefore, non-existent in many areas of the country.

Asthma, bronchitis, bronchiectasis and cystic fibrosis represent major chronic respiratory diseases of infants and children. The immediate problem, however, in pediatric pulmonary diseases lies in the lack of adequate treatment facilities and in the shortage of specially trained physicians who are competent to diagnose these conditions and institute appropriate regimens of therapy.

In 1968, the chronic respiratory diseases have been attacked on a broad front. Programs for the encouragement of specialized training have included the development of course content and short-term training curricula and the preparation of training aids. Projects for the development and evaluation of rehabilitative measures; the operational requirements for long-term community programs; the immediate and long-term benefits of acute intensive care for respiratory failure, have sought improvement in patient care. Definition of the public health problem in terms of economic burden, standardization of data reporting, detection and classification of the diseases, the determination of national needs and resources are examples of epidemiologic studies which have also been initiated this year. Public information activities have made a heretofore little known disease a household word—emphysema. Physicians and public alike have been awakened to the growing threat this disease holds for them and their families.

The most practical solution to the problem of pediatric pulmonary disease would appear to be the establishment of strategically located programs of clinical research, service and training. The development of such competence within established schools of medicine would provide sources of well trained pediatricians for service in special pediatric clinics, to which cases could be referred for study and treatment. Private physicians attending short courses at pediatric pulmonary disease centers would return to their communities with an improved capability for diagnosis and treatment. Funds in 1968 will permit the establishment and

first-year support of at least two centers for the control of pediatric pulmonary diseases.

Of the increase for 1969, $164,000 and six positions is requested for the full-year operation of pediatric pulmonary disease control programs, including those center based projects initiated in 1968. The facilities, treatment and staff associated with pulmonary diseases of children and infants (asthma, bronchitis, bronchiectasis, cystic fibrosis) are, of necessity, significantly different from those used in the management of diseases of adults.

Two other medical center-based programs for the control of adult respiratory diseases (emphysema, chronic bronchitis, asthma, chronic interstitial pneumonia and bronchiectasis) provide multi-disciplinary approaches to applied research, development and training. These include projects to find better methods for casefinding, diagnosis, acute and long-term management, and short-term training of practicing physicians. In order to carry out these projects planned and initiated in 1968, an increase of $422,000 and four positions is requested in 1969. These projects will investigate the reasons why certain patients with emphysema show only mild symptoms and little impairment of day-to-day activities while others follow a more rapid deterioration of function and die at a relatively early age; the number and distribution of effective facilities for treating patients with these diseases; the role of various agents in causing these diseases or in precipitating acutely debilitating episodes of illness; and the pattern of psychological, social and economic burdens these diseases create in the patient, his family and the response of the community which must, in most cases, eventually bear the cost of his illness. This increase will also permit the presentation of demonstration courses for the continuing education of private physicians in several selected geographic areas.

The net budget increase of $584,000 results from a program increase of $586,000 offset by a built-in decrease of $8,000 due to the change in financing of the management fund and $6,000 for other built-in items of increase. These items include the additional day of pay in 1969 and the annualization of military and civilian pay raises.

| | 1968 estimate | | 1969 estimate | | Increase or decrease | |
|---|---|---|---|---|---|---|
| | Positions | Amount | Positions | Amount | Positions | Amount |
| f. Neurological and sensory disease control | 90 | $1,660,000 | 90 | $1,660,000 | | |

This program provides for the development of new methods and techniques for prevention, early detection and diagnosis, and improved treatment to control visual, communicative, and neurological disorders.

Over 16,000,000 people in the United States have neurosensory disorders. The methods used by this program to control these disorders in this country are the support of studies and applied research; the provision of specialized consultation to officials of State, local, academic and related agencies and institutions; the development of public information programs; dissemination of promising research results to professionals; and technical assistance to training and service programs.

Program emphasis will continue on early detection of glaucoma. Public and professional information programs will stress the importance of tonometry as a routine part of a physical examination. Epidemiologic data on glaucoma will be gathered and analyzed. A study to aid in the prediction of chronic simple glaucoma will be continued.

Early detection of pre-school visual disorders will also be emphasized. The public will be informed of the importance of having the child's eyes checked. Communities will be advised of the effectiveness of pre-school tests to be used in screening programs.

In 1969, the program will continue efforts to improve the quality of eye care services available, e.g. use of the ocular fundus photograph for screening and diagnosing for eye pathology will be evaluated; an International Symposium on the Treatment of Proliferative Diabetic Retinopathy will be sponsored and the resulting monograph edited and distributed to professionals.

In 1969, the results of a National Conference on Noise as a Public Health Hazard, sponsored jointly with the National Center for Urban and Industrial Health, will be distributed. This conference will have defined the noise hazard

problem and formed specific recommendations for control and minimization of this hazard.

Investigation will continue into the clinical usefulness of evoked response audiometry, a technique which permits the audiologist, by observing brain waves, to determine hearing loss in people too young or too physically or mentally impaired to offer verbal response. Another study, to determine selected speech and neurological characteristics of dysarthria (imperfect articulation in speech due to neurological lesions), will also continue in 1969. The program will continue the evaluation of pitch perturbation as a diagnostic and screening tool for laryngeal pathology, both benign and malignant.

Evidence is available that current audiometers have a tendency to drift out of adequate calibration without the fact being known to the user of the equipment. The development of an audiometer which has self-calibrating features as well as methods for determining the instrument's level of calibration will be supported.

The computerization of EEG interpretation offers promise of improving the diagnosis of neurological disorders and the saving of neurologists' time. A project directed toward this end will be continued.

The program will continue its training activities, stimulating and aiding in the implementation of programs to train medical and allied health personnel and programs to provide continuing education to those already providing services to persons with neurosensory disorders. Persons trained include speech patholoigsts, audiologists, EEG technicians, neurologists, ophthalmologists, otolaryngologists, general practitioners, social workers, and nurses.

There is no change to this activity because the built-in decrease of $12,000 due to the change in financing of the management fund is offset by built-in increases for the extra day of pay in 1969 and the annualization of civilian and military pay raises.

| | 1968 estimate | | 1969 estimate | | Increase or decrease | |
|---|---|---|---|---|---|---|
| | Positions | Amount | Positions | Amount | Positions | Amount |
| g. Preventive services | 18 | $665,000 | 18 | $665,000 | | |

Treatment of chronic disease, important as it is, generally focuses on the late stages of the disease process rather than on prevention. Comparatively little attention is devoted to the early or developmental aspects, before symptoms appear, and to the risk factors or precursors of disease and the borderline or prediagnostic stages.

Prototype chronic disease detection laboratory systems which utilize highly automated testing procedures at relatively low cost have been demonstrated. These systems, further developed and widely adopted, can help provide the capability of quality periodic health examinations for the people of this nation by virtue of their proven effectiveness when used as a mechanism for doing the routine, nonmedical procedures of a health checkup.

When so used, these laboratory systems can produce, for the doctor, a wealth of basic information about his patient, derived from blood and urine tests, physical measurements, and the patient's medical and psychological history. Prepared with this information when he sees his patient for the scheduled health examination, the physician can then do those things for which he has been uniquely trained—verifying the patient's response to the history items that are particularly significant or questioning in more depth the nature of reported symptoms.

The extensive laboratory work-up can provide the doctor with clues to developing disease which might not bring the patient to his office with a complaint for many years.

The objective is to give the doctor a chance to incorporate preventive medicine into his practice without becoming bogged down with the details of scheduling laboratory appointments, coordinating test results, making routine measurements, and all the other minutiae that deter patient and physician alike from a positive approach to routine health examinations.

A pediatric screening study is now underway in an effort to determine whether the system which so well serves the adult preventive medicine program is also feasible for children. The goal is a preventive medicine system for the entire family.

Despite all the progress that can be reported, additional experimental and developmental work is needed before this concept can be widely and routinely

incorporated into the practice of medicine. During 1969, the activities of this program will be directed toward evaluating and improving this technique. Studies are now underway to develop optimal methods for the detection of asymptomatic and early disease, vigorous intervention in the control of the disease at this stage, and evaluation of results.

There is no change to this activity because the built-in decrease of $5,000 due to the change in financing of the management fund is offset by built-in increases for the extra day of pay in 1969 and the annualization of civilian and military pay raises.

| | 1968 estimate | | 1969 estimate | | Increase or decrease | |
|---|---|---|---|---|---|---|
| | Positions | Amount | Positions | Amount | Positions | Amount |
| h. Kidney disease control | 55 | $5,945,000 | 55 | $5,945,000 | | |

Each year, an estimated 9,000 persons who are medically suitable candidates for artificial kidney therapy die of kidney disease. These persons, most of whom are in the prime of life, could be kept alive and productive through the use of artificial kidney therapy. Kidney diseases occur in all age groups, but unlike the majority of chronic diseases, they are particularly likely to cause death during the middle, productive years.

The latest available data derived from the Public Health Service's National Center for Health Statistics indicates that 57,144 persons died of kidney-related diseases in 1965. This figure includes nearly 20,000 deaths attributed to hypertensive renal cardiovascular diseases. Infectious and hypersensitivity diseases led to 42 million days of restricted activity for 7.6 million individuals during 1965. There were 19 million days of bed disability, and 5 million work days lost by these individuals.

For 1968, the Congress provided an increase of $2,137,000, which is being used to increase home patient capacity in the 12 centers established in 1967 to develop and evaluate artificial kidney therapy in the home environment. The hypotheses is that artificial kidney treatment, properly administered and controlled in the home, can substantially reduce the cost of artificial kidney therapy without sacrificing quality of patient care. As a result of two factors—well-planned, staffed and equipped training centers, plus a statistically significant patient population—the developmental home artificial kidney programs will be able to: (1) test the feasibility of widespread and prolonged home treatment with the artificial kidney and various methods of providing it; (2) generate and evaluate cost data on patients in both the training center program started earlier, and the new home treatment program; (3) generate and evaluate uniform patient and medical data; and (4) determine the extent to which other sources of funds can be stimulated to support hemodialysis. Information and data derived from these programs over the next several years will help the Public Health Service in determining requirements, and developing guidelines, criteria and plans for efficient and effective ways to curtail needless loss of life resulting from kidney failure.

Work underway toward developing new methods for prevention of renal diseases is continuing. Sixteen contracts are currently in effect. Half are directed toward development and evaluation of improved screening and diagnostic measures for pertinent kidney diseases, as well as the definition of the natural history of bacteriuria and its response to treatment. The remainder support studies of acute and chronic glomerulonephritis to identify points at which intervention may prevent progression of the disease process. Increasing attention is being concentrated on the broad scale application techniques which have been shown already to be effective in treating renal disease, while concurrently pursuing better treatment techniques. In developing the mechanisms required for community application of recently developed, acceptable techniques, pathways are built for speeding the application of new findings currently under development.

Inquiry is being made into factors involved in combining kidney transplantation with dialysis services in the treatment of end-stage kidney disease. Existing hemodialysis facilities in hospital centers, and in patients' homes treat less than 1,000 patients with end-stage kidney disease. While renal transplantation cannot meet the needs of all the remaining untreated uremic patients, the contribution of active clinical transplantation units toward reducing the total number of those untreated and reducing end-stage treatment costs could be significant

There is no change to this activity because the built-in decrease of $6,000 due to the change in financing of the management fund is offset by built-in increases for the extra day of pay in 1969 and the annualization of civilian and military pay raises.

| | 1968 estimate | | 1969 estimate | | Increase or decrease | |
|---|---|---|---|---|---|---|
| | Positions | Amount | Positions | Amount | Positions | Amount |
| i. Nutrition | | | 16 | $250,000 | +16 | +$250,000 |

The suddenness with which this country has become aware of its serious nutrition problems is matched by the complexity of these problems. Although there have not been comprehensive evaluations of the nutritional health status of major segments of the U.S. population, the existing scattered surveys and other clinical and observational evidence indicates that serious problems do exist, especially in certain vulnerable groups including persons living in poverty, adolescents, pregnant women, and the aged. Conditions related to inadequate or improper nutrient intakes reported in the United States include underweight, retarded physical growth, anemia, increased susceptibility to infectious diseases, higher incidence of certain chronic diseases related to obesity, goiter, impaired learning ability, reduced work capacity, and increased mortality in pregnancy and childbirth. Retarded mental ability to children known to have suffered malnutrition in the first two years of life has been reported.

During 1969, the requested 16 positions and $250,000 will provide for the planning of future programs aimed at identifying and assessing the prevalence, location, and causes of malnutrition, including undernutrition, i.e. caloric and nutrient insufficiency, goiter, anemia, and overnutrition, i.e. obesity. Major emphasis initially will be directed toward planning for programs aimed at the vulnerable population groups—poverty families, preschool children, obese adolescents, pregnant and lactating women, and the aged. These programs will be conducted in collaboration with state and local institutions, and other federal agencies, and will include the identification of federal and local resources available for assisting in immediate and long range remedial action.

These funds and positions will also provide for planning the development of demonstration, testing, and evaluation projects to formulate guidelines for overcoming and preventing the nutritional problems found in the identification and assessment phase; planning the surveillance and evaluation activities to assure the rapid identification of nutritional problems and the evaluation of existing preventative programs; planning educational programs to update and train medical and allied health personnel, and information programs for the general public that will be based on guidelines developed on nutrition requirements as related to environmental and physiological conditions; and planning programs to stimulate additional research in nutrition, as specific problems are discovered, and to apply new knowledge as rapidly as possible.

Expert advisory committees will be convened to develop guidelines on nutrient requirements and recommendations for remedying any inadequacies that may exist.

NEW POSITIONS REQUESTED, FISCAL YEAR 1969

| | Grade | Annual salary |
|---|---|---|
| Direct operations: | | |
| 2 medical officers | GS–15 | $38,034 |
| 4 public health program specialists | GS–14 | 63,364 |
| 3 medical officers | GS–13 | 40,521 |
| 5 public health advisers | GS–13 | 67,535 |
| 2 statisticians | GS–12 | 22,922 |
| 3 Public health advisers | GS–12 | 34,383 |
| Do | GS–11 | 28,971 |
| 2 Public health advisers | GS–9 | 16,108 |
| 2 staff assistants | GS–7 | 13,468 |
| 7 clerical assistants | GS–5 | 38,955 |
| 2 clerk-typists | GS–4 | 9,990 |
| Total new positions (35) | | 374,251 |

BIOGRAPHICAL SKETCH

Name: Donald R. Chadwick.
Position: Director, National Center for Chronic Disease Control.
Date of Birth: August 16, 1925.
Place of Birth: Boston, Massachusetts.
Father: Chester Robert Chadwick.
Mother: Fay Billings Chadwick.
Wife: Elizabeth Ann Hulburt Chadwick.
Children: Deborah and Douglas.
Education: Undergraduate—Harvard College; Graduate—Harvard Medical School, Reed College, Oregon, and Oak Ridge National Laboratories (special training in radiological health).
Military service: U.S. Navy.
Career: 1951—Local health officer in North Carolina; 1953—Commissioned Officer in the Public Health Service; 1954–1957—Several assignments in radiological health; 1957—Liaison Officer for Radiation, Office of the Surgeon General; 1958—Chief, Program Operations Branch, Division of Radiological Health; 1959—Secretary, Federal Radiation Council; 1961—Chief, Division of Radiological Health; 1967—Director, National Center for Chronic Disease Control.
Awards & honors: Arthur S. Fleming Award, 1963; Meritorious Service Medal, USPHS, 1966.
Affiliations & memberships: Member of the National Council on Radiation Protection, 1963; Advisor to the U.S. Representative on the United Nations Scientific Committee on the Effects of Atomic Radiation; American Medical Association; American Public Health Association; Health Physics Society; Commissioned officers' Association; World Health Organization's Expert Advisory Panel on Radiation.

NATIONAL CENTER

Senator HILL. Dr. Chadwick, you may proceed.

Dr. CHADWICK. Mr. Chairman and members of the committee, last year in appearing before this committee I presented data on the mortality and disability resulting from the principal chronic diseases.

This year, the continued and persistent annual increases in these diseases coupled with the soaring costs of hospital and medical care, and the scarcity of trained medical and health manpower are the basis for training our sights on the need for more effective preventive action—to use the best tools we have available now and to develop new and better methods for making the benefits of research available to everyone.

While researchers generally continue to look for ways of preventing specific diseases, the National Center for Chronic Disease Control strives to make the most extensive use of available techniques and develop improved methods for preventing or postponing the end results of these diseases once they have been discovered.

The Center thus serves as an essential link between the community of investigators producing new knowledge of prevention from basic research and those who promote and support programs of proven value in community service.

PROGRESS ITEMS

We are encouraged by the progress we are making in different areas through bringing a variety of approaches to bear on individual disease and disability problems.

### Cancer

In cancer our optimism stems from a continuing reduction in the death rates from cervical cancer. This declining rate attests to the effectiveness of early detection techniques tested and tailored for application in our current national effort.

This initial major success in preventing deaths from cancer is providing a sharpened focus to our continuing investigations and developments in the early detection of cancers of other major sites.

This year we are field testing the flexible proctosigmoidoscope which I showed you last year. This instrument we feel will greatly improve the early detection of colon rectal cancer.

We are developing plastic fibers to replace the more expensive and breakable glass fibers in the present instrument. We are also developing other flexible endoscopes for detecting cancers and other disorders of the lung, larynx, esophagus, and stomach. In 1968, the deaths from cancers within the range of these endoscopes will total 125,000.

Senator Hill. That is most important; isn't it?

Dr. Chadwick. Yes, sir; it is. We are hoping that we can get more cancers within the range of early detection and thus effective treatment.

In breast cancer, from which 28,000 women will die this year, we are stimulating the use of mamography as an adjunct to early detection efforts, and at the same time we are testing and developing various applications of thermography and xerography to improve the early detection of breast cancer.

Senator Hill. Before you leave cancer, let me ask you about cancer of the brain. Have you made any progress there?

Dr. Chadwick. Not a great deal. Most of those when diagnosed are at such a stage that very little can be done about them.

Dr. Stewart. There have been some advances in localizing the tumor in the brain through radiography or radioactive materials and they map the area. But the prognoses of the operations haven't changed a great deal.

Senator Hill. Nothing very hopeful about it?

Dr. Stewart. No. The hope depends on the type of brain tumor that one has and where it is located.

Senator Hill. And that is something you can't control?

Dr. Stewart. That is correct.

Dr. Chadwick. We would like to be able to look for preventive opportunities, obviously. Of course, lung cancer is one of our serious cancers. The smoking program is one that should have a significant impact on this disease if our efforts are fruitful.

### Health Diseases

In heart disease, coronary intensive-care units in over 400 major hospitals are proving their lifesaving potential, and we are currently testing methods for providing similar services in small hospitals.

Studies to determine if increased physical activity will help reduce the frequency and severity of cardiovascular disease are being conducted at Pennsylvania State University and the Universities of Minnesota and Wisconsin.

Out of 3,000 men examined at these centers, 400 who were considered more likely to develop heart disease in the future are participating in a supervised physical activity intervention study.

Senator HILL. That is an interesting thing; isn't it?

Dr. CHADWICK. Yes; it is. It seems quite clear that people who are more active have less of a chance of getting these diseases.

If we could develop a program that would be practicable, it might cut down the terrible death rate that we have now.

### KIDNEY DISEASES

In kidney disease, the expansion of 12 home dialysis centers is extending this lifesaving procedure to more patients in their own homes at lower costs. These centers are also looking for ways to improve home dialysis.

### NEUROLOGICAL AND SENSORY DISEASE

In the area of neurological and sensory disease, we are studying ways of evaluating voice sound patterns as a diagnostic and early detection tool for benign and malignant tumors of the larynx.

### DISEASE DETECTION

While working to improve individual disease detection procedures' we are also concerned with bringing these procedures together in multitesting systems to expedite early detection in group practice, in clinics, and in hospitals.

Over the past several years, we have achieved successful automation of a battery of test procedures for adults which are already saving hours of scarce physician time. This year we are testing and evaluating automated procedures for detecting diseases in younger age groups.

## BUDGET INCREASES REQUESTED

The increases we are seeking this year will expedite our preventive efforts in specific areas as follows:

### ARTHRITIS

The consensus of leading experts in the field fully supports the results of our cost-benefits analyses described last year.

As you may recall, these studies show that intensive application of the best of what is now known about treating this disease can delay crippling for periods up to 5 years.

With public apathy as the apparent primary deterrent to effective programs we are seeking an increase of four positions and $467,000 to show what can be done utilizing this approach.

Senator HILL. Did the Bureau of the Budget allow you that?

Dr. CHADWICK. Yes, sir; the $467,000.

Senator HILL. But they cut you quite a bit on the overall?

Dr. CHADWICK. Yes, sir; the arthritis program is one which was cut.

Senator HILL. In fact, the Department cut you quite a bit and then the Budget Bureau cut you even more?

Dr. CHADWICK. Yes, sir.
Senator HILL. Is that right?
Dr. CHADWICK. Yes, sir.
Senator HILL. Nobody in the Department suffers from arthritis?
Dr. CHADWICK. I guess it was the overall need for economy. There was a great deal of interest, however, in the cost-benefit study that was done because it did indicate that this was a program that could quite literally pay for itself in tax receipts.

### RESPIRATORY DISEASES

In respiratory diseases gratifying results from intensive early treatment of children with cystic fibrosis have convinced leading researchers that applications of like procedures to children's pulmonary disorders will be equally productive in preventing serious pulmonary complications from occurring when they reach adulthood.

Ten positions and $584,000 are requested for the continuation of this program initiated in 1968 and for intensification of our developmental efforts in adult respiratory diseases.

Senator HILL. Those 10 positions, is that an increase or is that just a continuation of what you now have?

Dr. CHADWICK. That is an increase over what we have now.

### SMOKING AND HEALTH

In smoking and health we are continuing to work to develop better ways of helping people who wish to give up smoking.

We in the Public Health Service are convinced that the potentially most effective preventive effort for several of our major killers and disablers would be a reduction in the use of cigarettes by the public.

We are requesting an increase of five positions and $500,000 in order to augment activities in smoking and health in four areas.

In order to counteract pressures on youth to take up smoking we need to prepare additional educational material utilizing the results of ongoing research.

We must increase our efforts to develop better methods to assist adults who need to give up smoking cigarettes.

We need to work with physicians and other health professionals to improve their effectiveness in helping people to give up smoking.

Finally, we need an increased capability to provide the public with the information, educational materials, and consultative services which they demand.

Senator HILL. There is a very compelling need, it seems to me, for this work.

Dr. CHADWICK. Yes, sir. I feel that very strongly. This is the most important preventive measure available to us today.

### NUTRITION ACTION PROGRAM

We are also requesting 16 positions and $250,000 for planning and initiating a nutrition action program in the Public Health Service.

The initial thrust of this program will be to investigate the nutritional status and problems of the poor and recommend appropriate corrective action.

We feel that these increases are necessary to permit continued progress in the development of public health programs for preventing early death and disability for chronic diseases.

I will be happy to answer any questions you may have.

Senator HILL. You have brought us another splendid statement.

Dr. CHADWICK. Thank you, sir.

Senator HILL. We very much appreciate your statement and the work you are doing.

I think it comes home to us that we started so late on many of these programs. Is that right?

Dr. CHADWICK. Yes, I think that is quite true.

Senator HILL. We certainly appreciate your fine statement you brought us this morning. I want to thank you. We appreciate it very deeply.

Dr. CHADWICK. Thank you, sir.

SUBCOMMITTEE RECESS

Senator HILL. We are going to have to take a recess now. We won't be able to meet tomorrow because the legislative committee on Labor and Public Welfare is meeting. I hope we can continue right away the next day or two and we will advise you.

Dr. STEWART. Thank you.

Senator HILL. We thank all of you very, very much for this fine testimony.

The subcommittee now stands in recess.

(Whereupon, at 12:10 a.m., Tuesday, April 23, the subcommittee was recessed, to reconvene at the call of the Chair.)

# DEPARTMENTS OF LABOR, AND HEALTH, EDUCATION, AND WELFARE, AND RELATED AGENCIES APPROPRIATIONS FOR FISCAL YEAR 1969

FRIDAY, APRIL 26, 1968

U.S. SENATE,
SUBCOMMITTEE OF THE COMMITTEE ON APPROPRIATIONS,
*Washington, D.C.*

The subcommittee met at 10 a.m., in room 1224, New Senate Office Building, Hon. Lister Hill (chairman) presiding.

Present: Senators Hill and Bartlett.

## DEPARTMENT OF HEALTH, EDUCATION, AND WELFARE

### PUBLIC HEALTH SERVICE

### COMMUNICABLE DISEASES

**STATEMENT OF DR. DAVID J. SENCER, DIRECTOR, NATIONAL COMMUNICABLE DISEASE CENTER**

**ACCOMPANIED BY:**

**JAMES D. BLOOM, ASSISTANT EXECUTIVE OFFICER**
**LELAND W. SMITH, FINANCIAL MANAGEMENT OFFICER**
**DR. RICHARD A. PRINDLE, DIRECTOR, BUREAU OF DISEASE PREVENTION AND ENVIRONMENTAL CONTROL**
**VERNON G. MacKENZIE, DEPUTY DIRECTOR, BUREAU OF DISEASE PREVENTION AND ENVIRONMENTAL CONTROL**
**PETER J. BERSANO, FINANCIAL MANAGEMENT OFFICER, BUREAU OF DISEASE PREVENTION AND ENVIRONMENTAL CONTROL**
**DR. WILLIAM H. STEWART, SURGEON GENERAL**
**CHARLES MILLER, CHIEF FINANCE OFFICER**
**JAMES B. CARDWELL, DEPUTY ASSISTANT SECRETARY, BUDGET**

APPROPRIATION ESTIMATE

"COMMUNICABLE DISEASES

"To carry out, except as otherwise provided for, those provisions of sections 301, 311, [317,] *353*, and 361 to 369 of the Act relating to the prevention and suppression of communicable and preventable diseases and the introduction from foreign countries, and the interstate transmission and spread thereof; including medical examination of aliens in accordance with section 325 of the Act, care and treatment of quarantine detainees pursuant to section 322 (e) of the Act in private or other public hospitals when facilities of the Public Health Service are not available, insurance of official motor vehicles in foreign countries when required by the law of such countries; *licensing of laboratories; purchase of not to exceed one passenger motor vehicle for replacement only;* and *purchase*, hire, maintenance and operation of aircraft; [$72,109,000, of which $9,100,000 shall



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be available through June 30, 1969, to carry out section 317 of the Act] *$63,407,000.*"

APPROPRIATION LANGUAGE CHANGES

The first change in language deletes reference to Section 317 of the PHS Act which specifically authorized appropriations for community immunization grants commencing with the fiscal year ending June 30, 1963. This section does not provide for new obligation authority beyond 1968. Extension of this legislation will not be sought.

The second and third changes in language reflect amendments to the PHS Act contained in the Clinical Laboratories Improvement Act of 1967, Public Law 90–174, which authorizes the Secretary of Health, Education, and Welfare to establish standards for, and license clinical laboratories engaged in interstate commerce.

The fourth change in language provides authorization to replace one passenger motor vehicle for the Foreign Quarantine program.

VEHICLE TO BE REPLACED IN 1969

| Number | Year | Location | Mileage June 30, 1967 | Purpose for which used |
|---|---|---|---|---|
| 6CD96 | 1963 | Paris, France | 26,380 | For official travel in Paris and field stations located throughout Europe. |

Although this sedan does not meet replacement standards, the cost of operation, maintenance and repairs has increased beyond the point where continued operation is economical.

The fifth change in language provides authority to obtain a Department of Defense surplus aircraft to accomplish research on the use of the ultra-low volume (ULV) aerial application of insecticides.

AMOUNTS AVAILABLE FOR OBLIGATION

| | 1968 | 1969 |
|---|---|---|
| Appropriation | $72,109,000 | $63,407,000 |
| Transfer to "National Library of Medicine" | −1,762,000 | |
| Unobligated balance brought forward for community immunization grants | 2,609,996 | 2,609,996 |
| Cutback required by H.J. Res. 888: | | |
| Reduction below obligation level in 1968 President's budget | −1,569,000 | |
| Reduction because of unanticipated carryover balance; Unobligated balance carried forward | −2,609,996 | |
| Total cutback | −4,178,996 | |
| Total currently authorized for obligation | 68,778,000 | 66,016,996 |
| Plus proposed release of reserves for increased pay and postal costs | 1,150,000 | |
| Total available for obligation | 69,928,000 | 66,016,996 |
| Disposition of cutback: | | |
| To be used for pay and postal costs in this account | 1,150,000 | |
| To be returned to the Treasury | 419,000 | |
| To be carried forward for obligation in 1969 | 2,609,996 | |
| Total cutback | 4,178,996 | |

OBLIGATIONS BY ACTIVITY

| | 1968 estimate | | 1969 estimate | | Increase or decrease | |
|---|---|---|---|---|---|---|
| | Positions | Amount | Positions | Amount | Positions | Amount |
| 1. Grants: | | | | | | |
| (a) Research | | $3,791,000 | | $3,875,000 | | +$84,000 |
| (b) Community immunization | | 9,100,000 | | 2,609,996 | | −6,490,004 |
| 2. Direct operations | 3,067 | 57,037,000 | 3,226 | 59,532,000 | +159 | +2,495,000 |
| (a) Communicable diseases | 1,430 | 16,495,000 | 1,576 | 19,138,000 | +146 | +2,643,000 |
| (b) Tuberculosis | 210 | 3,659,000 | 210 | 3,616,000 | | −43,000 |
| (c) Venereal diseases | 333 | 4,881,000 | 346 | 4,952,000 | +13 | +71,000 |
| (d) Pesticides | 137 | 7,145,000 | 137 | 7,087,000 | | −58,000 |
| (e) Foreign quarantine | 608 | 8,199,000 | 608 | 8,245,000 | | +46,000 |
| (f) Aedes aegypti eradication | 349 | 16,658,000 | 349 | 16,494,000 | | −164,000 |
| Total obligations | 3,067 | 69,928,000 | 3,226 | 66,016,996 | +159 | −3,911,004 |

OBLIGATIONS BY OBJECT

| | 1968 estimate | 1969 estimate | Increase or decrease |
|---|---|---|---|
| Total number of permanent positions | 3,067 | 3,226 | +159 |
| Full-time equivalent of all other positions | 324 | 222 | −102 |
| Average number of all employees | 3,101 | 3,133 | +32 |
| Personnel compensation: | | | |
| Permanent positions | $24,300,000 | $26,251,000 | +$1,951,000 |
| Positions other than permanent | 2,336,000 | 1,331,000 | −1,005,000 |
| Other personnel compensation | 622,000 | 644,000 | +22,000 |
| Total personnel compensation | 27,258,000 | 28,226,000 | +968,000 |
| Personnel benefits | 3,043,000 | 3,119,000 | +76,000 |
| Travel and transportation of persons | 2,280,000 | 2,463,000 | +183,000 |
| Transportation of things | 1,100,000 | 1,109,000 | +9,000 |
| Rent, communications, and utilities | 1,549,000 | 1,702,000 | +153,000 |
| Printing and reproduction | 379,000 | 389,000 | +10,000 |
| Other services | 2,295,000 | 2,468,000 | +173,000 |
| Project contracts | 15,049,000 | 15,046,000 | −3,000 |
| Services of other agencies | 424,000 | 438,000 | +14,000 |
| Payments to: | | | |
| Public Health Service management fund | 900,000 | | −900,000 |
| National Institutes of Health management fund | 27,000 | | −27,000 |
| Supplies and materials | 5,765,000 | 3,165,000 | −2,600,000 |
| Equipment | 1,138,000 | 1,433,000 | +295,000 |
| Grants, subsidies, and contributions | 8,747,000 | 6,484,996 | −2,262,004 |
| Subtotal | 69,954,000 | 66,042,996 | −3,911,004 |
| Deduct quarters and subsistence | −26,000 | −26,000 | |
| Total obligations by object | 69,928,000 | 66,016,996 | −3,911,004 |

## Summary of Changes

| | |
|---|---|
| 1968 enacted appropriztion | $72,109,000 |
| Transfer to "National Library of Medicine" | −1,762,000 |
| Unobligated balance for community immunization grants brought forward | 2,609,996 |
| Cutback required by H.J. Res. 888: | |
| Reduction below obligation level in 1968 President's budget | −1,569,000 |
| Reduction because of unanticipated carryover balance: | −2,609,996 |
| Proposed release of reserves for increased pay and postal costs | 1,150,000 |
| 1968 estimated obligations | 69,928,000 |
| 1969 estimated obligations | 66,016,996 |
| Total change | 3,911,004 |

| | Base | | Change from base | |
|---|---|---|---|---|
| | Positions | Amount | Positions | Amount |
| **INCREASES** | | | | |
| A. Built-in: | | | | |
| 1. Annualization of civilian and military pay raises | | | | $329,000 |
| 2. 1 extra day of pay in 1969 | | | | 93,000 |
| B. Program: | | | | |
| 1. Research grants | | $3,791,000 | | 84,000 |
| 2. Expansion of communicable diseases—viral, bacterial, and fungal program | 492 | 4,575,000 | 59 | 729,000 |
| 3. Expansion of communicable diseases—epidemic services program | 86 | 1,520,000 | 36 | 450,000 |
| 4. Expansion of communicable diseases—national laboratory improvement program | 365 | 4,606,000 | 51 | 1,637,000 |
| 5. Expansion of venereal diseases program | 333 | 4,881,000 | 13 | 157,000 |
| Total program increases | | | 159 | 3,057,000 |
| **DECREASES** | | | | |
| A. Built-in: 1. Nonrecurring contribution to the Public Health Service management fund | | 900,000 | | −900,000 |
| B. Program: 1. Community immunization grants | | 9,100,000 | | −6,490,004 |
| Total decreases | | | | −7,390,004 |
| Total net changes requested | | | +159 | −3,911,004 |

EXPLANATION OF CHANGES

*Research grants*

An increase of $84,000 will provide support for a total of 102 projects, the same number supported in 1968. The grants program supports extramural research projects with practical objectives related to complex problems of disease control on a community-wide basis and delineations of health hazards of pesticides. Among these are epidemiological field studies, evaluation of immunization techniques, and evaluation and development of laboratory diagnostic procedures.

*Community immunization grants*

The decrease of $6,491,004 results from the termination in 1968 of specific legislative authority for community immunization grants. However, an unobligated balance of $2,609,996 in prior year funds will be available for obligation in 1969. After 1968, funds appropriated under the Partnership for Health Amendments to the PHS Act, P.L. 89–749, in "Comprehensive health planning and services" are available to fund community immunization projects.

*Communicable diseases: Viral, bacterial, and fungal diseases*

An increase of $729,000 and 59 positions will provide for an expansion of studies in five major areas: (a) respiratory diseases, with emphasis on influenza and the evaluation of vaccines; (b) encephalitis, including the development of prevention and control measures such as the aerial application of insecticides at an ultra low-volume dosage; (c) streptococcal infections, including field studies on prevalence rates, host susceptibility, dissemination mechanisms, and immunological response; (d) central nervous system diseases caused by over 50 different types of coxsackie and echoviruses, for which no vaccines are available; and (e) smallpox with emphasis on the adequacy of immunization levels among high risk groups and the improvement of vaccines and vaccination techniques.

*Communicable diseases: Epidemic services*

An increase of $450,000 and 36 positions will permit the training of additional Epidemic Intelligence Service officers to help relieve the shortage of qualified epidemiologists and to provide active surveillance of communicable diseases.

*Communicable diseases: National laboratory improvement program*

An increase of $1,637,000 and 51 positions will provide for implementation of a program authorized in the Clinical Laboratories Improvement Act of 1967, for licensure of clinical laboratories involved in interstate commerce. The increase will provide for an intensive program to develop, promulgate and enforce standards relating to the quality and accuracy of laboratory performance, and license such laboratories that meet the standards. Efforts to improve and upgrade the

quality of laboratory service including the training and experience of the laboratory's director and staff, proficiency testing, and quality of reagents used by the laboratory will be coordinated with the enforcement of standards.

*Venereal diseases*

An increase of $157,000 and 13 positions will support the expansion of a program to develop effective gonorrhea control measures. Current pilot programs which include studies to determine the effectiveness of various epidemiologic approaches and to detect the asymptomatic female carrier will be expanded to validate early finding and to develop more effective control measures.

*Contribution to the Public Health Service management fund*

The $900,000 decrease for the nonrecurring contribution to the management fund is due to a change in the method of funding. In 1969, it is proposed to fund the Office of the Bureau Director costs directly in the activity, "Bureau program direction and management services," in the Radiological Health appropriation rather than through contributions to the Public Health Service management fund.

EXPLANATION OF TRANSFERS

| | 1968 estimate | Purpose |
|---|---|---|
| Transfer to National Library of Medicine | −$1,762,000 | Transfers funding of the National Medical Audio visual Center to the National Library of Medicine. |

*Introduction*

The Communicable Diseases appropriation provides funds to plan, conduct, and coordinate (1) a national program, including research, investigations, epidemiological services, epidemic aid, consultation, and surveillance activities, for the prevention and control of communicable and certain other preventable diseases; (2) a national program for the detection, assessment, control, and reduction of potential and harmful exposure of man to pesticides and other chemical agents; (3) a comprehensive national laboratory improvement program, including the provision of laboratory technical support for other segments of the Public Health Service, and for State, local and other groups engaged in medical laboratory practice or administration, and including licensure of clinical laboratories in interstate commerce; (4) a program of continuing education for the practicing health professions on methods and tecniques of disease prevention and control; (5) a program to eradicate the yellow fever (aedes aegypti) mosquito from the United States, Puerto Rico and the Virgin Islands in cooperation with Federal, State, local and other appropriate authorities; (6) a national program to protect the United States against the introduction of communicable diseases from foreign countries; and (7) a research grants program which includes stimulation of research in neglected or under-emphasized fields.

A major area of responsibility is the provision of technical assistance, professional consultation and information to States and localities on the conduct of their programs which are financed in part through grants from the Comprehensive Health Planning and Services program.

Additional funds requested in 1969 will provide for implementation of a program for licensure of clinical laboratories in interstate commerce, as authorized in the Clinical Laboratories Improvement Act of 1967. In addition, funds are requested for the expansion of epidemiologic and laboratory service for the investigation, surveillance and control of certain communicable diseases. A small increase to expand the pilot study in gonorrhea control is also requested.

1. GRANTS

| | 1968 estimate | 1969 estimate | Increase or decrease |
|---|---|---|---|
| (a) Research | $3,791,000 | $3,875,000 | $84,000 |
| (b) Community immunization | 9,100,000 | 2,609,996 | −6,490,000 |
| Total | 12,891,000 | 6,484,996 | −6,406,004 |

| | 1968 estimate | | 1969 estimate | | Increase or decrease | |
|---|---|---|---|---|---|---|
| | Number | Amount | Number | Amount | Number | Amount |
| (a) Research grants: | | | | | | |
| (1) Noncompeting continuations | 71 | $2,762,000 | 85 | $3,477,000 | +14 | +$715,000 |
| (2) New grants | 31 | 944,000 | 17 | 398,000 | −14 | −546,000 |
| (3) Supplementals | (10) | 85,000 | | | (−10) | −85,000 |
| Total | 102 | 3,791,000 | 102 | 3,875,000 | | +84,000 |

The growth of our population, the change to predominately urban living and new patterns of disease, as well as the persistence of unanswered questions demand that efforts to apply known control measures be supplemented by efforts to increase our knowledge of disease control. The research grants program of the Communicable Disease Center supports extramural research projects with practical objectives related to the complex problems of disease control on a community wide basis.

In 1969, the Communicable Disease Center will continue to award research grants for projects which support its major program objectives—the eventual control of communicable and certain preventable or transmissible diseases, and reduction of the health hazards of pesticides. Examples of projects which will be supported are: (1) evaluation of immunization techniques and their effects on population immunity; (2) development and evaluation of laboratory diagnostic procedures; (3) field studies related to the epidemiology and control of salmonellosis and arboencephalitis; and (4) delineation of health hazards of pesticides.

The total amount of $3,875,000 requested, an increase of $84,000, will support 102 projects in 1969, the same number as in 1968.

| | 1968 estimate | 1969 estimate | Increase or decrease |
|---|---|---|---|
| (b) Community immunization grants | $9,100,000 | [1] $2,609,996 | −$6,490,004 |

[1] Unobligated balance to be brought forward from 1968.

Section 317(a) of the Public Health Service Act authorized the Surgeon General to make grants to States during the period beginning with 1963 and ending in 1968 for immunization programs against poliomyelitis, diphtheria, whooping cough, tetanus, measles and any other disease of an infectious nature which represents a major public health problem and is susceptible to practical elimination through immunization. Amounts appropriated pursuant to this section were specifically made available during the year for which appropriated and the succeeding year.

In 1968, a total of 90 grants were awarded to States that comprise 91% of the U.S. population. In 1969, carry-over funds will provide for directing program activities toward strengthening ongoing immunization maintenance programs and developing much needed immunization surveillance systems. In addition, under the Partnership for Health Amendments to the PHS Act, P.L. 89–749, community immunization project grants become eligible for support under the appropriation "Comprehensive health planning and services."

2. DIRECT OPERATIONS

| | 1968 estimate | | 1969 estimate | | Increase or decrease | |
|---|---|---|---|---|---|---|
| | Positions | Amount | Positions | Amount | Positions | Amount |
| Personnel compensation and benefits | 3,067 | $29,156,000 | 3,226 | $31,319,000 | +159 | +$2,163,000 |
| Other expenses | | 27,881,000 | | 28,213,000 | | +332,000 |
| Total | 3,067 | 57,037,000 | 3,226 | 59,532,000 | +159 | +2,495,000 |

SUMMARY OF PROGRAM

| | | | | | | |
|---|---|---|---|---|---|---|
| a. Communicable diseases | 1,430 | $16,495,000 | 1,576 | $19,138,000 | +146 | +$2,643,000 |
| b. Tuberculosis | 210 | 3,659,000 | 210 | 3,616,000 | | −43,000 |
| c. Venereal diseases | 333 | 4,881,000 | 346 | 4,952,000 | +13 | +71,000 |
| d. Pesticides | 137 | 7,145,000 | 137 | 7,087,000 | | −58,000 |
| e. Foreign quarantine | 608 | 8,199,000 | 608 | 8,245,000 | | +46,000 |
| f. Aedes aegypti eradication | 349 | 16,658,000 | 439 | 16,494,000 | | −164,000 |
| Total | 3,067 | 57,037,000 | 3,226 | 59,532,000 | +159 | +2,495,000 |

| | 1968 estimate | | 1969 estimate | | Increase or decrease | |
|---|---|---|---|---|---|---|
| | Position | Amount | Position | Amount | Position | Amount |
| (a) Communicable diseases | 1,430 | $16,495,000 | 1,576 | $19,138,000 | +146 | +$2,643,000 |

The net budget increase of $2,643,000 results from a program increase of $2,816,000 offset by a built-in decrease of $318,000 due to the change in financing of the management fund, and $145,000 for other built-in items of increase which include the additional day of pay in 1969 and the annualization of military and civilian pay raises. These built-in increases and decreases are distributed over (1) through (8) below.

| | 1968 estimate | | 1969 estimate | | Increase or decrease | |
|---|---|---|---|---|---|---|
| | Positions | Amount | Positions | Amount | Positions | Amount |
| (1) Viral, bacterial, and fungal diseases | 492 | $4,575,000 | 551 | $5,246,000 | +59 | +$671,000 |

*Acute respiratory diseases*

Acute respiratory disease is the most frequent cause of illness. This disease is of particular importance in infants and young children who frequently develop severe bronchitis, bronchiolitis, and pneumonia following respiratory virus infections. It is a major cause of industrial absenteeism, thus resulting in significant economic loss. Current studies are being conducted to obtain information on the occurrence and prevalence of various respiratory agents occurring in a community and to determine the nature and extent of illnesses caused by these agents.

The increase of $331,000 and 28 positions is to extend epidemiologic observations in different populations and to study intensively the immune mechanisms associated with illnesses caused by various respiratory pathogens. A program has been instituted to evaluate the newer respiratory virus vaccines available to determine their efficacy in preventing acute respiratory disease.

*Gastroenteritis*

Gastroenteritis is the second most common cause of illness in man. Recently, studies have shown that more than half of the gastroenteritis cases are caused by viruses or unknown agents. Longitudinal investigations conducted in several populations in Arizona have shown that various types of enteroviruses were associated with cases of gastroenteritis. The exact etiologic relationship of these viruses to gastroenteritis is not known. Therefore, major efforts are currently being directed toward determining the viral etiology of gastroenteritis.

A major group of viruses (enteroviruses) cause central nervous system diseases. This group consists of not only the polioviruses, but also the coxsackie viruses and the echoviruses. Poliovirus infections have been controlled by widespread use of vaccines. However, there are no practical measures or vaccines available for the control of central nervous system diseases caused by over 50 different types of coxsackie and echoviruses. These viruses frequently cause community outbreaks of aseptic meningitis and, occasionally, encephalitis.

Current studies are limited to investigations of outbreaks to determine the exact viral etiology and to determine the epidemiologic characteristics of outbreaks caused by these viruses. The increase of $126,000 and 10 positions will enable field and laboratory activities to obtain sufficient data that will provide a rational basis for developing prevention and control measures.

*Encephalitis*

Arbovirus encephalitis occurs periodically in epidemic proportions with an average of over two epidemics per year in the United States during the past 35 years. The epidemics have been caused by four different viruses, St. Louis, western, eastern and California. These diseases are important not only as a cause of morbidity and mortality, but because there is no effective treatment and permanent brain damage may result, particularly in children with western and eastern encephalitis.

The prevalence of arthropod-borne encephalitis appears to be on the increase. Major epidemics of St. Louis encephalitis occurred in Houston, Dallas and Corpus Christi, Texas, in 1964 and 1966, and the second largest epidemic of western encephalitis in the Nation's history occurred in Colorado and neighboring states in 1965. California encephalitis was unknown until recently, but repeated outbreaks have occurred in Wisconsin and other north central states during the past 5 years. The extent to which many other arboviruses are involved in human disease is not yet fully known. Mosquitoes are the primary vectors of most of the viruses and wild birds are the principal reservoirs.

Current studies are being conducted to determine the epidemiologic and ecologic factors responsible for epidemic and endemic prevalences of arbovirus diseases in selected study areas of Colorado, Texas, California, Louisiana, Florida, and Georgia. These studies provide the basis for developing and evaluating more effective prevention and control measures, such as the aerial application of malathion insecticide at an ultra-low volume dosage. The increase of $107,000 and 8 positions is to expand both the ecological and experimental control studies in order to meet the urgent needs of State and local health departments for more satisfactory methods for the prediction, prevention and control of arthropod-borne encephalitis.

*Streptococcal infections*

Streptococcal infection is the most frequently reported disease in the United States. The number of reported cases now exceeds 400,000 per year, but estimates are that over 7 million cases occur annually. To improve measures for the prevention of streptococcal infection is particularly important as the disease causes serious sequelae such as rheumatic fever, rheumatic heart disease and acute glomerulonephritis (severe kidney disease).

Preliminary field studies have been conducted on seasonal prevalence and the socio-ecologic factors in a group of families in three communities in Colorado. The data obtained indicated that prevalence rates averaged about 25 percent in healthy school children between the ages of 6 and 13 years and that certain "carrier" families were responsible for most of the endemic prevalence of streptococcal infections within the communities. To devise and evaluate appropriate measures for the prevention and control of the disease, observations must be made on at least 100 families in order to obtain meaningful data. The increase of 8 positions and $95,000 will permit expansion of activities to intensify evaluation of factors relating to virulence, most susceptibility, clinical and immunological response, mechanism of dissemination and perpetuation of the disease. Improvement, development and standardization of the procedures for identifying streptoccocci and their antibodies, and the production and evaluation of antisera are necessary also if we are to reach our objective—development of methods to control streptococcal disease and its serious sequelae by interrupting dissemination of Streptococcus in the community.

*Smallpox*

Until the goal of world-wide smallpox eradication is reached, it is incumbent upon the United States to maintain a high competency of skills in the laboratory

diagnosis of smallpox since the introduction of the disease into this country is a constant threat. In the past, the CDC did not have this competency. Today the Center does, and with the increase of 5 positions and $70,000 we will be able to progress with the development and implementation of: (1) studies of immunization levels among high risk groups and when indicated, specific programs to increase immunization to acceptable levels; (2) surveillance of complications of smallpox vaccinations; (3) studies on improving vaccines and vaccination tools and techniques; and (4) professional training for State and local health personnel in the diagnoses and epidemiology of smallpox.

*Rubella*

Rubella (German measles) infection is a major cause of congenital deformity in the United States. In 1967, the Center expanded its sero-diagnostic studies in an effort to meet the demand for sensitive and accurate diagnostic tests for rubella. In addition these studies of the physical, biological, and antigenic characteristics of rubella virus are being performed as the basis for further investigations of the pathogenesis, infectivity, and immune responses associated with rubella virus infections. The need for such knowledge increases as the development of an effective German measles vaccine progresses.

*Hepatitis*

Infectious hepatitis, a virus infection involving the liver, is of world-wide distribution. The disease is cyclical in the United States and we are now experiencing an increase in incidence. There are no effective control measures. Studies have been conducted in cases of infectious hepatitis and in selected populations in Arizona in an attempt to isolate the etiologic agent or agents. Experiments have been made in an attempt to infect chimpanzees with viruses recovered from human cases of infectious hepatitis.

Laboratory activities are being redirected to emphasize work on isolation of viruses from cases of hepatitis in man and in chimpanzees using different tissue culture techniques and animal host systems. Recently, infectious hepatitis has been transmitted from marmoset to marmoset. Therefore, it is planned to explore the use of marmosets as an experimental host for virus isolation and immunologic studies.

*Hospital infections*

Of the 30 million annual admissions to acute-care hospitals in the United States, some 1,500,000 (5%) acquire an infection during hospitalization, increasing costs by a minimum of $75 million per year. The staphylococcus and streptococcus, once the dominant causes of hospital infections, are still important, but the gram negative bacteria and even some viruses are becoming increasingly prevalent, particularly the *E. coli*, pseudomonas, and proteins groups, many of which are resistant to multiple antibiotics. They cause serious infections of the urinary tract, lungs, skin, and sometimes meningitis and septicemia. The current collaborative program of investigation and surveillance will be continued in an effort to identify specific causes of infection and to explore methods of control in the hospital environment.

*"Green Monkey" disease*

During August and September 1967, a total of 28 persons in Germany fell ill from a disease associated with autopsies on green monkeys. Seven of these people died—a case fatality rate of 25 percent. On the invitation of the German Ministry of Health, CDC assisted in the investigation of this unknown disease. This epidemic has concerned the medical world for it appears that a new disease has been tragically discovered. More important is the ominous threat of further illness and death spread by an animal commonly used in research and in the production of vaccines. The Center is continuing its investigation of the disease to define the potential hazard to the United States and to determine the public health measures to be taken to prevent a similar outbreak in this country. Currently the Center is attempting to isolate the causative agent, identify the agent, and develop a serologic test needed for diagnostic purposes.

| | 1968 estimate | | 1969 estimate | | Increase or decrease | |
|---|---|---|---|---|---|---|
| | Positions | Amount | Positions | Amount | Positions | Amount |
| (2) Biology and control of disease vectors | 184 | $1,344,000 | 184 | $1,338,000 | ..... | —$6,000 |

*Plague*

Plague is a highly fatal infectious disease which is transmitted by the bite of a rat flea or other species of fleas, by direct contact with infected rodents, or by pneumonic spread from person to person. The reservoirs of infection are rats and various species of wild rodents. Sylvatic plague is prevalent in wild rodents of the western United States. The hazard of becoming complacent about the transmission of wildlife plague to humans is illustrated by the 1965 and 1966 outbreaks in New Mexico, where a total of 12 human cases were detected. These cases of plague were acquired in Colorado, Utah, Arizona, Nevada, and California.

Because of the potential danger of introducing plague into the United States from Vietnam and other Southeast Asian countries, current studies by the Communicable Disease Center Laboratory in San Francisco are being revised to permit increased surveillance of rats in seaports, as well as in enzootic foci in the United States. Emphasis will be placed on determining the exact geographic distribution of plague foci and the ecologic factors associated with these foci and redefining the eastern boundary of sylvatic plague infection. The program to evaluate the potential hazard of plague in outdoor recreational areas where large numbers of people congregate will be continued. Plans have been made for collaboration and exchange of knowledge with WHO and other agencies throughout the world on the ecology and control of plague.

*Schistosomiasis*

Schistosomiasis is one of the foremost disease problems of the world, affecting approximately 200 million people. It is widely distributed, occurring in Africa, Asia, South America, southern Europe, Australia, and a number of islands in the West Indies, including Puerto Rico and the Virgin Islands. The infection is caused by a parasitic worm (blood-fluke) which lives in the veins of various organs, such as the liver, urinary bladder, and intestines, and results in a serious chronic disease. Approximately 15 percent of the population of Puerto Rico is infected with *Schistosoma mamsoni;* in highly endemic areas, infection rates may be as high as 50 percent. The disease can only be controlled by eliminating the intermediate snail host or vastly improving sanitation.

Field investigations are designed to (1) develop and improve upon means of control and diagnosis already under investigation; (2) develop and evaluate both chemical and biological control techniques; and (3) provide collaboration and exchange of knowledge with other investigators throughout the world. The current studies include determination of infection foci and ecological factors influencing persistence of infection; evaluation of chemical molluscicides and biological agents to control the host snail; and evaluation of new or improved diagnostic methods. The ultimate goal—to reduce the prevalence of schistosomiasis throughout the world—awaits the development of effective methods to control the intermediate snail host.

*Rat control*

In 1968, CDC will redirect general vector control activities to provide technical support for the nationwide rat control effort provided for in funds requested to carry out the Partnership for Health Amendments of 1967. The Center is providing technical training and consultation to local rodent control workers in an attempt to provide trained personnel sorely needed in this campaign to rid our urban areas of the threat of disease and disability caused by rats.

| | 1968 estimate | | 1969 estimate | | Increase or decrease | |
|---|---|---|---|---|---|---|
| | Positions | Amount | Positions | Amount | Positions | Amount |
| (3) Diseases of animals transmissible to man | 66 | $1,255,000 | 66 | $1,244,000 | ---- | —$11,000 |

*Rabies*

Continued surveillance of diseases that man shares with animals (rabies, Q fever, psittacosis, and leptospirosis) provides a needed measurement of the changing pattern of these diseases caused by man's manipulations of natural host-vector ecological relationships.

Methods of evaluating effects of various sylvatic rabies control programs are dependent upon accurate measurements of animal populations. Ecological studies

of wild host populations to produce methods of measuring wild species populations with a known degree of accuracy will be started. These studies will be supplemented by work to determine the degree of interspecies transmission and establish a more logical base for control measures. Detailed antigenic analysis and comparisons will be made of viral strains isolated from the more important host species such as bats, foxes, skunks, etc. Electron microscopy will be employed to reveal any ultrastructural differences between viral strains.

Development of an antirabies immune globulin of human origin will provide a valuable therapeutic tool in the treatment of persons exposed to rabies. A more potent, antigenically "clean" rabies vaccine for use in man, both in therapy and prophylaxis, is a critical need. Studies are under way in each of these areas.

This is the third year of a five-year joint US-Mexican rabies control program suported by a PHS contract. A program was started in 1966 in Baja, California and was expanded in 1967 to the present five-year program which encompasses all of the cities in Mexico along the border of the United States. These programs are now active in all of the contract cities and are designed to be continued by the Mexico Ministry of Health at termination of contract support. Laboratory diagnostic aid and training is provided to Mexicians, as well as other Nationals, in support to this and other programs through the Communicable Disease Center Rabies Investigations Laboratory, Lawrenceville, Georgia, designated a WHO Reference Laboratory for Rabies in 1967.

*Salmonellosis*

Currently, the Center is engaged in continuing longitudinal studies of salmonellosis as it occurs in our population. Only by careful attention to each outbreak will the new sources of infection be found. While the number of infections has remained relatively constant (18,000–20,000 per year) recent episodes have highlighted the dangerous potential for spread of salmonellosis. The discovery of salmonella in nationally distributed products poses a grim possibility of the spread of disease throughout our population.

It is imperative in the shadow of this health threat, that the Center stand ready to identify sources of salmonellosis infection to prevent or contain interstate outbreaks. This requires surveillance, collaboration with State and local health departments, laboratory reference service, production of reagents, and epidemic aid.

Efforts are currently being directed toward the determination of the true incidence of salmonellosis, the vehicles of infection, and the sources and reservoirs of the disease agent. Since there is no specific method as yet to prevent the disease, high priority is given not just to investigations but also to training of public health personnel in the most current methods of prevention.

| | 1968 estimate | | 1969 estimate | | Increase or decrease | |
|---|---|---|---|---|---|---|
| | Positions | Amount | Positions | Amount | Positions | Amount |
| (4) Communicable disease control demonstrations, consultations, and investigations | 65 | $843,000 | 65 | $836,000 | ---- | —$7,000 |

Despite the reduction in the reported incidence of some communicable diseases in the United States, there remains an annual toll of about 140,000 communicable disease deaths, an estimated 300 million acute infections, and approximately 1.5 billion days of communicable disease illness in this country.

The demonstration technique offers new combinations of approaches and methods to some of the unmet public health needs of the community. In particular, the demonstrations have provided local health units with a tool to identify the pockets of communicable disease, evaluate the socioeconomic problems involved, reach the "disadvantaged" populations that are usually associated with high disease incidence, and through stimulation of this group obtain their participation in community sponsored corrective action. Community action programs involving this group have taken place against such diseases as tuberculosis, polio, enteric diseases, hepatitis, diphtheria, smallpox, tetanus, salmonellosis; and to solve such public health problems as animal bites, disease vectors, water and sewage treatment, and refuse storage and disposal.

During 1967 demonstration programs were in operation in seven Public Health Service Regions with 53 comunities participating in some phase of activity. In

demonstration areas, staff specialists will provide assistance in public health education, behavioral motivation, and evaluation. Improved methods for locating disease problems within urban and rural areas will be developed. Field research will be continued to determine the factors of human behavior which prevent certain population groups from participating in disease control activities. Statistical competency will be strengthened to evaluate the efficiency of program methodology and to analyze masses of community data for ecological clues to control or eradication.

| | 1968 estimate | | 1969 estimate | | Increase or decrease | |
|---|---|---|---|---|---|---|
| | Positions | Amount | Positions | Amount | Positions | Amount |
| (5) Epidemic services | 86 | $1,520,000 | 122 | $1,958,000 | +36 | +$438,000 |

Active surveillance of communicable disease as practiced at the Communicable Disease Center includes the identification of disease patterns, study and identification of sources of infection, an early warning system to alert State and local health departments to potential epidemic situations, and the provision of epidemic aid. At the heart of the program stands the Center's Epidemic Intelligence Service, a corps of trained epidemiologists available to furnish immediate assistance in the investigation and control of disease outbreaks. During 1967, the EIS responded to approximately 100 calls for epidemic aid.

There are two vitally important elements which are integral parts of these positive surveillance services—field evaluation of new or improved diagnostic and control techniques and the development of practicing epidemiologists. The expanding emphasis on general health and research programs in this country has accentuated the critical need for training more qualified epidemiologists. Multipurpose surveillance officers must be constantly available to meet new and emerging disease problems—today, encephalitis, tomorrow an epizootic of rabies. The techniques of epidemiology and surveillance must begin to be applied to broad health problems that are upon us, for the term *epidemiology* literally means a study of that which is put upon the people. For example, the great attention being paid to family planning has pointed up an area of deficiency. Much is known about population dynamics and the physiological basis for family planning, but virtually no attention has been paid to the application of epidemiological techniques to the evaluation of such programs. Although this is not a communicable disease, the problem has reached epidemic proportions in many segments of our society and the talents of the epidemiologists must be applied. Many of the communicable diseases are concentrated in the segments of the population most in need of practical programs that will allow them to space their children as they desire. It is therefore logical to integrate the training of epidemiologists for family planning with epidemiologists for communicable disease control. The demands for international epidemiologists will also continue to increase as this country enlarges efforts to assist other countries in raising the health standards of their people. In 1969, an increase of $438,000 and 36 positions is requested for expansion of the Epidemic Intelligence Service to help relieve the shortage of epidemiologists.

| | 1968 estimate | | 1969 estimate | | Increase or decrease | |
|---|---|---|---|---|---|---|
| | Positions | Amount | Positions | Amount | Positions | Amount |
| (6) National laboratory improvement program | 365 | $4,606,000 | 416 | $6,181,000 | +51 | +$1,575,000 |

Although significant strides have been made in improving and strengthening State and local laboratory competency, much remains to be done to keep pace with the needs and combat such problems as poor perofrmance, shortage of trained personnel, obsolescence of laboratory scientists, lack of standardized procedures, lack of standardized reagents, insufficient performance evaluation, and inadequate facilities. As an example of the need for standardization procedures, there are at least 29 methods for the determination of cholesterol, the majority of which give inaccurate results. The need for standardized and im-

proved reagents is pointed out by the fact that 18% of the final packaged commercial products and 24% of the prepackaged products are found unacceptable by CDC standards. The quality of reagents used in the examination of specimens directly influences the accuracy of test results.

The program to improve laboratory performance will continue to direct its efforts in these major areas:

(1) The CDC will continue accumulating baseline data on State and local public health laboratories and some aspects of hospital laboratory operations. These data will serve to determine trends and evaluate future activities.

(2) Reference diagnostic services will be provided to all State and territorial public health laboratories for communicable, congenital, and chronic diseases. Even the most competent laboratories sometimes have reason to request assistance. In 1969 the Center expects to receive approximately 20,000 specimens for reference diagnosis which will be subjected to approximately 120,000 tests. In addition, our laboratories will provide referee services in intrastate laboratory performance evaluation programs.

(3) Standardization and evaluation of new and modified tests will be carried out on a large scale involving many samples and variations of techniques. Methods for glucose, chloresterol, and hemoglobin determinations, as well as techniques in microbiology, will be evaluated to determine which procedures gives consistent values and how results in different laboratories can be compared.

(4) We will evaluate commercially produced microbiological reagents and revise published specifications which define acceptable criteria for production and testing. Also the Center will produce and furnish some reagents which are not commercially available to State public health laboratories and other Federal laboratories and grantees. An estimated 1,500,000 milliliters of reagents and 7,000 cultures will be distributed in 1969.

(5) "Unknown" microbiological, hematological, and clinical chemistry specimens will be mailed to State and territorial public health laboratories and hospital laboratories for examination. Results will be analyzed and recommendations for additional training, tests, or changes in procedures will then be given to the participating laboratories. This consultation includes selection of techniques, performance evaluation, quality control, instrumentation, interpretation of results and animal care.

(6) Training is a major element of the CDC National Laboratory Improvement Program. In 1969, 575 students are expected to receive 5,100 days of training in 35 formal courses at the CDC; 3,000 days of training will be provided to 1,000 students in field courses; and 160 students will receive 1,600 student-days of individualized bench training. A Laboratory Directors Training Program, sponsored jointly by the University of North Carolina and the CDC, will provide a curriculum leading to a doctorate degree in public health for present and future State public health laboratory directors.

(7) Laboratory management consultation will be provided which includes organization, manpower utilization, provision of central services, safety, and other administrative activities. In addition, experts at CDC will provide assistance in laboratory facilities planning, space utilization and modernization.

The serious deficiencies which continue to exist in the nation's clinical laboratories, however, cannot all be solved solely by working with individual State public health laboratories. Information derived from studies conducted by the Communicable Disease Center and other investigations indicates that, although there is considerable variation from laboratory to laboratory, erroneous results are obtained in an average of 25% of all clinical laboratory tests. These inaccurate results often mean the difference between a healthy, productive life and extended convalescence or death.

It is estimated that there are between 13,000 and 14,000 clinical laboratories in the nation. Approximately 1,000 of these transact business in interstate commerce. States cannot effectively control the quality of performance and thus protect their citizens from poor laboratory service, when this service is offered by mail from outside the State boundaries. Federal action is necessary to insure that the clinical laboratories which transact business in interstate commerce comply with minimum standards and will serve as a stimulus to and model for action at the State and local levels.

An increase of $1,575,000 and 51 positions is requested for improvement of laboratories authorized by the Clinical Laboratories Improvement Act of 1967 (P.L. 90–174). Under this authority it will be unlawful for any clinical laboratory to operate in interstate commerce after July 1, 1969 unless such a laboratory has

been licensed by the Secretary. In carrying out this mandate, the Secretary is required to promulgate such regulations and standards as are necessary to insure adequate performance of laboratories. By carrying out this mandate, the health and welfare of millions of Americans will be better protected. The requested funds will permit initiation of an intensive program to develop, promulgate and enforce standards relating to: (1) the quality and accuracy of laboratory performance; (2) the training and experience of the director and staff of the laboratory; (3) proficiency testing; and (4) the quality of reagents used by the laboratory. Enforcement will be coupled with a positive effort to improve and upgrade the quality of laboratory services so that the public's health can be *improved* as well as protected.

The program to achieve this goal will consist of the following elements:

(1) Identification of the estimated 1,000 laboratories covered by this legislation;

(2) Periodic on-site inspection by professional staff;

(3) Evaluating the laboratories proficiency by preparing and submitting check specimens for testing;

(4) Providing training and consultation for laboratories found to be deficient;

(5) Assurance of internal quality control procedures; and

(6) Enforcement of the provisions of the law where improvement is unsuccessful.

The Center has appointed several *ad hoc* and a permanent advisory committee to assist in the promulgation of regulations and development of standards. To supplement the work of the Center's laboratories and to provide equitable and prompt administration, certain laboratories across he country will be designated to serve as referee and control laboratories. This function will be performed under contracts with universities and other research organizations. In addition to this reference work, scientists from these laboratories will assist scientists from the Center in making on-site inspections of clinical laboratories. Equipment must be purchased and contracts for the development of automated equipment must be initiated if the Center is to maintain its leadership in this rapidly developing field. With such a start the Center will be in a position to promptly and properly carry out these new responsibilities.

| | 1968 estimate | | 1969 estimate | | Increase or decrease | |
|---|---|---|---|---|---|---|
| | Positions | Amount | Positions | Amount | Positions | Amount |
| 7. Training of public health workers | 108 | $1,481,000 | 108 | $1,470,000 | ---- | —$11,000 |

Changes in program emphasis, new developments in old programs and newly developed programs present constant problems of training and retraining, and continuing education for public health workers is designed to meet these problems and to speed the flow of information from the research laboratory to the application in the field.

The current explosion of knowledge in the health field has left a large gap between knowledge and practice that can only be filled through in-service education of public health teams and through education of the public. The majority of this kind of teaching in the past has been accomplished by the written or spoken word. The technology of training which has also been developing over the past 10 years has not been adequately used in the health field to meet training needs. Much remains to be done in this area to even begin the task of adequately meeting training requirements. During 1969 emphasis will be placed on updating slides, films, overhead projectuals, flip charts, and other common teaching tools and on training more instructors in the use of these simple training devices.

During 1967, 22 seminars were presented to State public health associations, State chapters of the Academy of General Practice and the Academy of Pediatrics on salmonellosis, immunization, tuberculosis, and viral hepatitis. A new seminar on viral diseases has been developed. The American Medical Association has requested that the seminar services be made available to their State and local associations. Programmed instruction and home study courses are being offered to public health workers who are unable to attend centralized training programs. The training aspects of epidemic assistance are being met through "instant

training" courses. Methods have been sought to improve the basic training of physicians in the diagnosis, epidemiology, and control of the more rare communicable diseases through the provision of teaching library volumes to each school of medicine, osteopathy, and public health in the United States.

| | 1968 estimate | | 1969 estimate | | Increase or decrease | |
|---|---|---|---|---|---|---|
| | Positions | Amount | Positions | Amount | Positions | Amount |
| 8. Immunization services | 64 | $871,000 | 64 | $865,000 | ---------- | —$6,000 |

Primary emphasis was placed during 1967 on the nationwide drive to eradicate measles. The Center is now providing leadership and assistance to communities in (1) establishing the use of measles vaccine as an integral and on-going part of public and private immunization services; (2) establishing effective informational and motivational programs to attain and maintain public interest and understanding of the seriousness of measles and the increased need for maintaining optimal immunization levels; (3) conducting mass immunization clinics, where appropriate, to quickly reduce backlog of susceptibles in order that on-going immunization programs can keep pace with the annual newborn population; and (4) continuing close surveillance of the overall immunization status of the national population and providing appropriate epidemic assistance.

Emphasis will continue to be given in complementing local efforts in the areas of motivation and public information. Prototype materials, including motion pictures and a number of forms of audiovisuals, will be developed and made readily available for local use. In addition, consultative competencies are being developed in all phases of program operation and particularly in those areas which are vital to reaching susceptibles in lower socio-economic areas.

The decline in the reported incidence of measles following the nationwide eradication effort has been quite dramatic. In 1966 a total of 203,010 cases of measles were reported. The preliminary 1967 total of 62,232 reported cases of measles is the lowest number for any year according to records dating back to 1912 when reporting of measles cases began on a national basis. However, as we are moving toward the surveillance stage for this disease, as with polio, the need for continued education of the public concerning the necessity for maintaining optimal immunization levels becomes of paramount importance in order to prevent the resurgence of these diseases.

In 1969 the foregoing activities will continue, but special emphasis will be placed on establishing intensified surveillance activities, particularly for mumps and rubella.

A mumps vaccine has been licensed for use and the prospects are promising that a rubella vaccine will be available within two years. The Center needs to have knowledge of the impact of these immunizing agents in normal community use; therefore, immunization surveillance activities will be continued.

| | 1968 estimate | | 1969 estimate | | Increase or decrease | |
|---|---|---|---|---|---|---|
| | Positions | Amount | Positions | Amount | Positions | Amount |
| (b) Tuberculosis | 210 | $3,659,000 | 210 | $3,616,000 | ---------- | —$43,000 |

The control of tuberculosis depends on shortening the period during which active infectious cases are communicable; assuring that previously active cases which have been treated and are now inactive do not relapse; and preventing the development of infectious cases of tuberculosis. The Center's effort will be directed toward these basic objectives throughout the United States by working with State and local health departments to assure better casefinding and case supervision and to develop more extensive programs of chemoprophylaxis.

During 1969 primary emphasis will be placed on encouraging State and local health agencies to strengthen their control activities designed to prevent the

spread of tuberculosis infection to our school-age children. Specifically, this emphasis at the State and local level will include efforts to:

(1) Tuberculin test four million children entering school—to detect reactors, i.e. those already infected;

(2) Examine reactors' associated—to find the sources of infection and other reactors;

(3) Examine school teachers and employees—to identify reactors and potential sources of infection.

The aim is to forestall the spread of infection from adults to children, as this is the only way to assure a generation free from tuberculosis—the first big step toward significant reduction of the disease.

If an impact is to be made on the tuberculosis problem in the United States, State and local health departments must work toward raising from 85 to 90 percent the completion of initial examination of close contacts in 60 days; from 50 to 90 percent the bacteriologic examination of active cases at home at least every six months; from 20 to 90 percent the treatment of close contacts. The Center is working with State and local health agencies in meeting these objectives by:

(1) Assisting medical schools by providing training aid and films on tuberculosis and,

(2) Providing short term training to physicians, nurses and other tuberculosis workers.

Supplementing these efforts the Center is engaged in other activities designed to enhance State and local tuberculosis control programs. The objective is to upgrade overall effectiveness through better patient management on a community and individual basis and by providing timely disease intelligence:

(1) The computerized tuberculosis register system developed by the Center will be offered to all health jurisdictions. This should improve the possibility for effective management of all TB patients, contacts, and suspects.

(2) State and local health agencies will be encouraged to provide TB services not only on the basis of the patients' needs but also on the type of service they will accept. The aim is to improve the medical management of the disease, in all its aspects—active, inactive, suspect, contact, and infected.

(3) The frequency of tuberculosis infection in the United States will continue to be monitored by Center personnel through the skin test program of young men inducted into the Navy. This index also provides information to pin-point geographic "hot spots", with detailed plotting of rates within 250 large urban areas. A comparable surveillance program is the testing of pretreatment drug resistance of tuberculosis patients in 25 cooperating hospitals. Results of this continuing survey provide an early warning system if the frequency of drug resistant tubercle bacilli should ever increase above its present low level.

A major element in the present control program is a one-year prophylactic course of isoniazid for persons who are at high risk of developing active disease. The data presently available from 10 years of follow-up after one year of drug treatment shows a 65% reduction in tuberculosis. The carefully organized follow-up has 98% of the 10,000 study population under observation with no identification of delayed toxicity. Applied nationwide, this reduction would make a dramatic impact on the tuberculosis problem.

In recent years a high priority has been given to developing skin testing antigens that would differentiate true tuberculosis infection from infection with mycobacteria. Today we are beginning to reap the benefits of this research and laboratory facilities at the Center are being geared to the production and standardization of large lots of the specific antigen for tuberculosis and appropriate atypical antigens. This will allow us to be more precise in identifying those persons truly at risk of developing disease and thus take appropriate preventive measures.

The net budget decrease of $43,000 results from a built-in decrease of $73,000 due to the change in financing of the management fund and $30,000 for other built-in items of increase. These items include the additional day of pay in 1969 and the annualization of military and civilian pay raises.

| | 1968 estimate | | 1969 estimate | | Increase or decrease | |
|---|---|---|---|---|---|---|
| | Positions | Amount | Positions | Amount | Positions | Amount |
| (c) Venereal diseases | 333 | $4,881,000 | 346 | $4,952,000 | +13 | +$71,000 |

The Communicable Disease Center promotes and supports efforts designed to achieve the eradication of syphilis and the control of gonorrhea. The Center provides leadership in the development of venereal disease control procedures and provides assistance to State and local health departments in achieving the most effective utilization of resources in the conduct of control programs through (1) the collection and analysis of data; (2) the development of informational and educational materials; (3) the development of venereal disease control procedures; and (4) laboratory services including consultation, training courses for State laboratory personnel, reagent check testing on commercially prepared products, and the evaluation of therapy schedules.

*Syphilis*

Syphilis persists as a major public health problem with 21,090 primary and secondary cases reported in 1967. While this represents a slight decrease over the previous year, intensive efforts must be continued if the goal of eradication is to be reached. State and local health departments are conducting syphilis eradication programs with financial assistance under health services project grants. Vital to the operation of these efforts is assistance provided by the Center. Trained personnel are assigned to State and local health departments to assist in the conduct and evaluation of the syphilis eradication effort. In addition to serving as a valuable manpower resource in the field, this field staff acts as a direct channel for the application and incorporation of refinements and advances in syphilis epidemiologic techniques which are under continuous development at CDC.

With the build-up of military strength, problems have arisen in effectively controlling venereal diseases in and around military bases. Cooperative efforts between the Center, the military and civilian health jurisdictions located around military bases have been reaffirmed and redefined in the "Seven Point Agreement of 1967" signed by the President of the Association of State and Territorial Health Officers and the Secretaries of Defense, Transportation, and Health, Education, and Welfare.

In syphilis research the objective of the Center is to develop an effective vaccine and to improve diagnostic procedures. The suitability of primates as experimental models for humans has been established. The International Bank for Treponemal Strains, located at CDC, is accumulating isolates of *T. pallidum* and other treponemal strains, which it is hoped will be suitable for the ultimate development of a syphilis vaccine. The possibility of a breakthrough in the development of a vaccine would be greatly enhanced if a method of cultivating *T. pallidum* were found. The only current source of *T. pallidum* is *in vivo* growth in rabbit testes.

The development and field trial of diagnositic tests for syphilis capable of detecting the disease before the patient enters the infectious stage are being continued. Such a diagnostic test will greatly enhance eradication efforts by detecting incubating syphilis and ensuring treatment before infectious lesions appear.

*Gonorrhea*

The seriousness of the gonorrhea problem in the United States is demonstrated by the rapidly increasing number of cases reported and the continued development of increased resistance by the causative agent to penicillin therapy.

The following table reflects the annual percentage increase in reported cases during recent years:

| | *Percent* |
|---|---|
| 1957 to 1964 Average | +4.9 |
| 1965 | +6.7 |
| 1966 | +8.0 |
| 1967 | +12.1 |

In 1967, 375,606 cases were reported in the United States compared to 216,476 cases in 1957. The reported cases, however, are known to be only a fraction of the actual cases occurring so the true extent of the problem is not known. We estimate that the actual number of cases occurring is in excess of 1,200,000 per year.

In order to reverse the increasing rate of gonorrhea, the development of control measures is necessary while effective therapy is still available. The Communicable

Disease Center has initiated pilot programs through contracts with local and State health departments, laboratories, and other health service organizations to determine the extent of the problem and to evaluate various approaches to gonorrhea control. These health organizations will screen large numbers of females to locate and treat previously undetected female cases of gonorrhea and will study resulting effects on the incidence of male cases. Included are studies designed to determine the effectiveness of various epidemiologic approaches such as casefinding and contact interviews used in controlling syphilis, and pilot programs to detect the asymptomatic female carrier. The increase requested will permit expansion of these efforts, both in scope and geographic area, to validate early findings and to develop more effective control measures. The efforts directed toward control measures would be enhanced and the development of an eradication program would be possible if an effective and practical screening device were available. Research efforts of the Center are directed toward these ends.

The net budget increase of $71,000 results from a program increase of $157,000 offset by a built-in decrease of $119,000 due to the change in financing of the management fund and $33,000 for other built-in items of increase. These items include the additional day of pay in 1969, and the annualization of military and civilian pay raises.

| | 1968 estimate | | 1969 estimate | | Increase or decrease | |
|---|---|---|---|---|---|---|
| | Positions | Amount | Positions | Amount | Positions | Amount |
| (d) Pesticides | 137 | $7,145,000 | 137 | $7,087,000 | ---------- | —$58,000 |

The pesticides program is directed toward the detection, assessment, control, and reduction of potentially harmful and/or unnecessary exposure of man to pesticides. To achieve these ends, the Center: (1) investigates health hazards of economic poisons and related materials used in public health and agriculture; (2) defines the health hazards involved in the use of or incidental exposure to these materials; (3) develops procedures for the prevention or alleviation of these hazards; (4) provides epidemiological assistance and gives consultation and technical training in the prevention, diagnosis, and treatment of pesticide poisoning in humans, with emphasis on collaboration with State health department laboratories to develop additional competence in this field; (5) prepares and distributes current pesticide research information; (6) reviews pesticide applications for human health implications prior to issuance of registration certification by the Department of Agriculture.

Community studies on pesticides are conducted under contract with State health departments and medical schools to determine what the actual hazards of exposure to pesticides are to the health status of man. The studies are being conducted in Hawaii, Washington, California, Idaho, Utah, Arizona, Colorado, Iowa, Texas, Louisiana, Mississippi, Michigan, New Jersey, South Carolina, Florida, and Puerto Rico. No additional projects are contemplated for 1969. In 1967, the ecological aspects of pesticides as to who uses what pesticides where, when, how, and why were up-dated for correlation with measured levels of pesticides in human tissue and in the environment. Studies of the clinical physiologic and biochemical effects of this exposure on population groups will be continued during 1969. Particular attention will be given to more accurately define these effects and to determine not only their significance on man's health status but the causative or contributory relationship with type and degree of pesticide exposure.

As recommended by the President's Science Advisory Committee on use of pesticides, the community studies are endeavoring to determine the actual magnitude of risk which chronic exposure to small amounts of pesticides may carry. While pursuing this primary goal, short term objectives of improved diagnostic and therapeutic capabilities are being reached with more efficient surveillance systems for those with high exposures, and safer techniques to minimize the exposure of those who must handle pesticides.

It is estimated that during 1968, 20,000 applications for registration will be reviewed by the staff, and it is expected that approximately the same number will be reviewed during 1969. These reviews will involve a more thorough in-depth evaluation of toxicological data and proposed uses of all pesticide formulations new and in use, when there is any question of potential health hazard to humans.

Valid data from laboratory and environmental observation must provide the basis for Public Health action to prevent adverse effects from use of pesticides. We have initiated extensive toxicological and chemical studies of chlorinated hydrocarbons, organophosphorus compounds and carbamates. Particularly pertinent are continuing long-term chronic toxicity studies on primates with these materials, coupled with a comprehensive study of the pharmacological effect on man of residues of these compounds at levels most frequently encountered. Present investigations will seek to tie in advances in technology to improvement in procedures for measuring minute residues of not only the more recently released pesticides but also the older ones about which there is insufficient information. In this connection a central analytical laboratory has been established which will be used to make measurements in connection with the foregoing studies and develop new and improved ultrasensitive methods that will permit measurement of these pesticides at levels below the minimum.

A limited program of training and assistance is presently provided to State and local health departments to meet a critical need for competent and better trained personnel in pesticides epidemiology and analytics. In addition to providing detailed training in analytical chemistry to the state laboratories, short-term training courses will be developed for personnel of state and local health departments and other interested agencies. These will include courses on chemical epidemiology and on health-pesticides-control programs designed for the local health teams which consist of physicians, nurses, sanitarians and other allied personnel. Also, a short-term course on the administration of pesticides programs will be developed for local health administrators.

In accordance with the recommendations of the President's Science Advisory Committee Report, a surveillance program was undertaken in 1967 to determine on a continuing basis the levels and significance of pesticide residues stored by the general population. Severe restrictions were imposed by technical inadequacies, i.e., practical analytical procedures applicable to tissues and sensitive in the ranges anticipated have been developed only for chlorinated hydrocarbons and these are lipotrophic chemicals which are found in heaviest concentration in adipose tissue. This program is operational, with tissues being collected at 12 sites, and with analytical support being supplied by four regional laboratories operating on a service basis in conjunction with the local Community Study project.

The net budget decrease of $58,000 results from a built-in decrease of $79,000 due to the change in financing of the management fund and $21,000 for other built-in items of increase. These items include the additional day of pay in 1969 and the annualization of military and civilian pay raises.

| | 1968 estimate | | 1969 estimate | | Increase or decrease | |
|---|---|---|---|---|---|---|
| | Positions | Amount | Positions | Amount | Positions | Amount |
| (e) Foreign quarantine | 608 | $8,199,000 | 608 | $8,245,000 | ---- | +$46,000 |

Under the rapidly changing conditions of international traffic, particularly the increase in number of air travelers, the speed of jet travel, and the increase in number of ports of entry, prevention of the introduction of significant communicable diseases into the U.S. becomes increasingly difficult and highly complex.

In 1969 an estimated 150,000,000 travelers will arrive in the U.S. from all over the world—an increase of 11,000,000 as compared with 1968. Approximately 136,000,000 will enter at land border crossings. Fourteen million will arrive aboard 146,00 airplanes and 41,900 vessels—two million more international air and sea travelers than in 1968. Many of them will land at airports open to international traffic for the first time. It is not just the amount of travel, but the areas from which the traveler comes that increase our concern. Last year over 600,000 persons were issued health alert notices indicating that they had been in a country where smallpox, plague, yellow fever, typhus, cholera or relapsing fever was present. An additional 2500 were issued surveillance notices requiring action by local health departments. The changing character of travel and disease conditions abroad is evident in that the increase in health alert notices was 132 percent.

It is impossible to build a completely protective shield around the U.S. to keep out disease from abroad. Our health defenses must rely upon updated operations at our ports of entry and the development of an "early warning" system to alert this country to the occurrence of communicable diseases anywhere in the world. The program is being reoriented to meet current day disease problems—incorporating a medical epidemiologic approach to inspection of all who cross our borders.

Domestic operations at our borders and ports of entry are being reassessed. For example, in June 1967, the Surgeon General announced the discontinuance of a smallpox vaccination requirement for aliens entering the U.S. from Mexico. This resulted from the epidemiologic reevaluation of the status of smallpox in Mexico. The change has permitted redirection and strengthening of inspectional services at the border. Continued emphasis will be placed on improving organization and operation of inspectional services at all ports of entry with particular attention given to the quality of public health service rendered.

The threat of introduction of epidemic diseases will be met by "defense in depth." This includes immunization prior to travel abroad, surveillance, and prompt recognition and diagnosis if entry should occur.

The net budget increase of $46,000 results from a built-in decrease of $101,000 due to the change in financing of the management fund and $147,000 for other built-in items of increase. These items include the additional day of pay in 1969, and the annualization of military and civilian pay raises.

| | 1968 estimate | | 1969 estimate | | Increase or decrease | |
|---|---|---|---|---|---|---|
| | Positions | Amount | Positions | Amount | Positions | Amount |
| (f) Aedes aegypti eradication | 349 | $16,658,000 | 349 | $16,494,000 | ..... | —$164,000 |

The program for the eradication of the *Aedes aegypti* mosquito from the United States (10 southeastern States and Hawaii) and its possessions (Puerto Rico and the Virgin Islands) was approved and funds first appropriated in 1964. Eradication has a dual purpose. First, a successful program will fufill this nation's commitment to other countries in the western hemisphere where eradication has already been accomplished. Secondly, the potential though remote threat of yellow fever, or dengue fever, will be removed. The widespread Caribbean dengue fever in 1963 illustrates this threat. That epidemic could have spread throughout the *Aedes aegypti* infested area of the southeastern United States.

During 1967, operations were under way in varying stages in the heavily infested areas of Puerto Rico, Virgin Islands, Hawaii, and in parts of Texas, Florida, Georgia, Alabama, and South Carolina. By the end of the year approximately 8.5 percent of the target area was in the attack phase of operations. In 1968 advanced efforts will have been expanded into about 11 percent of the area containing a population of approximately 5.5 million people. Included are approximately 1,600 zones in which gains are being consolidated under maintenance activities. This progress is being accomplished by expansion of ongoing programs into contiguous areas in an attempt to prevent reinfestation of treated areas. Recently, reinfestation has moved westward into Louisiana from heavily infested parts of Mississippi. Also resistance to DDT has occurred in southern Florida. These factors and their implications to the eradication effort will be evaluated. In addition, research will be performed on the use in the eradication effort of a recently discovered biological agent which attacks the *Aedes* mosquito.

The States in which this program has operated have reaped two very significant side benefits. Source reduction activities aimed at eliminating breeding spots for the mosquito have resulted in the general clean-up of many urban neighborhoods. This program also affords the opportunity for employing large numbers of unskilled workers needed to perform basic activities. Youth corps workers have been employed in many locations.

The net budget decrease of $164,000 results from a built-in decrease of $210,000 due to the change in financing of the management fund and $46,000 for other built-in items of increase. These include the additional day of pay in 1969, and the annualization of military and civilian pay raises.

NEW POSITIONS REQUESTED, FISCAL YEAR 1969

| | Grade | Annual salary |
|---|---|---|
| Communicable Diseases: | | |
| Viral, bacterial, and fungal diseases: | | |
| Administrative officer | GS–14 | $15,841 |
| Scientist | GS–14 | 15,841 |
| Public health program specialist (2) | GS–13 | 27,014 |
| Scientist (4) | GS–13 | 54,028 |
| Administrative officer | GS–12 | 11,461 |
| Public health program specialist | GS–12 | 11,461 |
| Scientist | GS–12 | 11,461 |
| Administrative officer | GS–11 | 9,657 |
| Public health program specialist (4) | GS–11 | 38,628 |
| Scientist (3) | GS–11 | 28,971 |
| Nurse | GS–9 | 8,054 |
| Scientist | GS–9 | 8,054 |
| Statistician | GS–9 | 8,054 |
| Administrative staff assistant (2) | GS–7 | 13,468 |
| Laboratory technician | GS–7 | 6,734 |
| Nurse (2) | GS–7 | 13,468 |
| Scientist | GS–7 | 6,734 |
| Statistician (3) | GS–7 | 20,202 |
| Clerical assistant (5) | GS–5 | 27,825 |
| Laboratory technician (6) | GS–5 | 33,390 |
| Clerical assistant (7) | GS–4 | 34,965 |
| Laboratory technician | GS–4 | 4,995 |
| Laboratory technician | GS–2 | 4,108 |
| Commissioned Officers: | | |
| Director grade | | 18,409 |
| Senior grade (4) | | 52,696 |
| Full grade (3) | | 32,034 |
| Total (59) | | 517,553 |
| Epidemic services: | | |
| Scientist (4) | GS–13 | 54,028 |
| Scientist (3) | GS–12 | 34,383 |
| Statistician | GS–12 | 11,461 |
| Public health program specialist (2) | GS–11 | 19,314 |
| Statistician (2) | GS–7 | 13,468 |
| Clerical assistant (2) | GS–5 | 11,130 |
| Commissioned Officers: | | |
| Full grade (20) | | 183,120 |
| Senior assistant grade (2) | | 11,188 |
| Total (36) | | 338,092 |
| National laboratory improvement program: | | |
| Medical officer | GS–16 | 20,982 |
| Medical officer | GS–15 | 19,017 |
| Legal assistant | GS–14 | 15,841 |
| Medical officer | GS–14 | 17,953 |
| Training officer | GS–14 | 15,841 |
| Scientist (3) | GS–14 | 47,523 |
| Public health program specialist (7) | GS–13 | 94,549 |
| Scientist (7) | GS–13 | 94,549 |
| Administrative officer | GS–11 | 9,657 |
| Laboratory technician (4) | GS–7 | 26,936 |
| Clerical assistant (2) | GS–6 | 12,274 |
| Clerical assistant (2) | GS–5 | 11,130 |
| Laboratory technician (6) | GS–5 | 33,390 |
| Laboratory technician (7) | GS–4 | 34,965 |
| Clerical assistant (4) | GS–3 | 17,864 |
| Clerical assistant (3) | GS–2 | 12,324 |
| Total (51) | | 484,795 |
| Total new positions, communicable diseases | (146) | 1,340,440 |
| Venereal diseases: | | |
| Public health program specialist | GS–12 | 11,461 |
| Public health program specialist (2) | GS–11 | 19,314 |
| Public health program specialist (2) | GS–9 | 16,108 |
| Public health program specialist (3) | GS–7 | 20,202 |
| Clerical assistant (5) | GS–5 | 27,825 |
| Total (13) | | 94,910 |
| Total new positions, all activities (159) | | 1,435,350 |

BIOGRAPHICAL SKETCH

Name: David J. Sencer.
Position: Director, National Communicable Disease Center.
Birthplace and date: Grand Rapids, Michigan, November 10, 1924.
Education:
College, 1942–44: Wesleyan University, Middletown, Connecticut.
College, 1945–46: University of Mississippi.
M.D., 1946–51: University of Michigan.
Internship, 1951: University Hospital, Ann Arbor, Michigan.
1952–54: Internal medicine residency.
M.P.H., magna cum laude, 1957–58: Harvard University School of Public Health.
Experience:
February 1966–Present: Director, NCDC.
October 1964–February 1966: Deputy Chief, CDC, Atlanta.
December 1960–October 1964: Assistant Chief, Communicable Disease Center, U.S. Public Health Service, Atlanta, Georgia.
February 1959–November 1960: Program Officer, Bureau of State Services, U.S. Public Health Service, Washington, D.C.
October 1955–February 1959: Medical Officer in Charge, Muscogee County TB Field Research Faciilty, USPHS, Columbus, Georgia.
January 1955–October 1955: Medical Consultant, Tuberculosis Program, U.S. Public Health Service.
Association memberships:
American Medical Association.
American Public Health Association.
American Thoracic Society.
American Society of Tropical Medicine and Hygiene.
Georgia Tuberculosis Association.
Delta Omega.

COMMUNITY DISEASE CONTROL

Senator HILL. The subcommittee will kindly come to order.

Dr. Sencer, we are glad to have you here with us. We will be happy to have you proceed now in your own way.

Dr. SENCER. Thank you. Mr. Chairman.

It is again a pleasure to appear before this committee to present the budget for the National Communicable Disease Center.

I would emphasize the word "center" for, although the budget is presented in a series of seemingly unrelated pieces, these pieces unite to form an integrated approach to the control of disease, particularly those diseases which are put upon communities, not just individuals.

On the surface, it may seem difficult to see the relationship between laboratory improvement and venereal disease control; between foreign quarantine and tuberculosis control: between urban rats and immunization against disease: and between pesticides and epidemic services.

A few examples will show the interrelationship of the activities mentioned to provide comprehensive community disease control activities.

LABORATORY IMPROVEMENT—VENEREAL DISEASES

Although we must live in the present and look to the future, we cannot forget the lessons of the past. "Laboratory improvement" has recently had major emphasis at the Center, but our current program continually draws upon the experience gained in improving laboratory services for syphilis diagnosis—for many years a major activity of our venereal disease program.

Standardization, certification, efficiency, testing and training, which are integral parts of laboratory improvement, have been perfected in the field of syphilis serology.

The long experience that we have had in working with State and local health departments to assure high quality syphilis diagnosis is being used as a model in assuring high caliber laboratory diagnosis, not just for the infectious diseases, but in the whole field of clinical chemistry.

### Cities Having High Prevalence Rates of Syphilis and Intensive Education Programs

Senator Hill. We don't hear as much about syphilis now as we did in the old days, Doctor.

Dr. Sencer. I think in many cities and towns we are hearing more about it because syphilis is a health problem, particularly among our teenagers and young adults.

There are 10 cities which have high prevalence rates of syphilis which have an intensive program to get public understanding of the disease, to begin teaching more about it in our schools.

Dr. Stewart. Mr. Chairman, I think we should hear more about it. We have gotten too relaxed about it.

Senator Hill. You say in 10 cities they are giving special——

Dr. Sencer. We have intensive public education programs going in 10 cities, including Washington, D.C. I can put the others in the record if you like.

Senator Hill. Put it in the record, please.

Dr. Sencer. Yes, sir.

Senator Hill. I think Dr. Stewart is right. We should be hearing more about it.

(The list follows:)

### Ten Cities Which Have Intensive Education Programs on Syphilis

Houston, Tex.
New Orleans, La.
Berkeley, Calif.
Los Angeles, Calif.
Atlanta, Ga.
Chicago, Ill.
Cleveland, Ohio
New York, N.Y.
Detroit, Mich.
Washington, D.C.

### Foreign Quarantine—Tuberculosis

Dr. Sencer. For many years, our foreign quarantine program has had the responsibility for determining whether immigrants to the United States have diseases which would be dangerous if introduced into this country. Prime among these has been tuberculosis.

There has been no systematic follow-up of those people who have been admitted to the United States with pulmonary difficulties but who show no evidence of active tuberculosis.

Drawing upon the good relationships between our tuberculosis control programs and State and local health departments, we are developing methods not only to follow up to determine whether they have become ill, but also to provide them with modern tuberculosis preventive techniques such as chemoprophylaxis with isoniazid.

Senator Hill. The thought is that we have not licked tuberculosis?

Dr. Sencer. No, sir.

Senator Hill. We have had a decline?

Dr. Sencer. It has been a decline of about 6 percent per year. We feel that with more active chemoprophylaxis with isoniazid we could improve this dramatically.

We have had a group look at this. They estimate by 1975 if we apply all the tools we have at the present time we could be down to around 20,000 cases.

Senator HILL. How many cases do we have today?

Dr. SENCER. We are having around 49,000 new cases but there are also about 10,000 relapsing cases each year which are a major concern. These are people who were treated before the days of isoniazid and we are setting up programs to bring these people back under care.

### RODENT CONTROL—IMMUNIZATION AGAINST DISEASE

The rat that infests our crowded urban areas and bites an unsuspecting child is quite likely biting a child who has not received needed immunizations and is living in an area where venereal diseases and tuberculosis are still major health problems.

We are encouraging communities, as they undertake urban rodent control programs, to adopt the concepts of community preventive medicine that have been developed in our immunization and demonstration programs.

These programs are aimed at having the people in the community—not just the leaders—recognize their own problems, and develop bold and effective solutions to these problems.

Senator HILL. What sort of cooperation are you getting on this?

Dr. SENCER. We are getting excellent cooperation. We have grant requests in our regional offices now that far exceed the proposed supplemental that has been submitted.

Senator HILL. When you say supplemental, do you mean the money?

Dr. SENCER. Yes, sir.

Senator HILL. You don't have the money to do the job they are ready to do?

Dr. SENCER. They are ready to do it. I think this is the time of the year when you really have to get started on major rodent control programs. This is the time of the year when the rats come out of the sewers and move around in the backyards and on the back porches of communities.

Senator HILL. When the weather gets warm?

Dr. SENCER. Yes, sir.

### PESTICIDES—EPIDEMIC SERVICES

A health department in a Midwestern city called to report a series of bizarre illnesses and deaths in a hospital nursery.

A team of epidemiologists was sent to investigate this outbreak thought to be caused by a virus. It soon became apparent that they were not dealing with an infectious agent but with a chemical toxin.

At this point, our pesticides program was called in to provide expert consultation and assistance. The upshot of the investigation was that the culprit was pentachlorophenol, a chemical that was being used to wash diapers. Although this chemical had been registered and was clearly labeled not to be used for hospital laundering, overzealous persons had used it anyhow, in order to provide whiter diapers.

This tragic episode not only highlights the interrelationship of programs but also points to a major problem in the field of pesticides.

### State and Local Educational Programs

It is not enough to determine the toxicity of a pesticide, nor is it enough to recommend certain labeling practices. There must be an active program of working with State and local health departments, stimulating them to develop educational programs that will prevent catastrophe, thus avoiding the necessity for investigating outbreaks afterwards.

As you may recall, major episodes of poisoning occurred in Saudi Arabia, Mexico, and South America last year.

### MEASLES ERADICATION

It is always dangerous to promise something, particularly before a committee such as this, for we must anticipate being held accountable.

However, last year we were rash enough to promise measles eradication. While we must not be overconfident, I can report substantial success.

Last year, only 62,000 cases of measles were reported, an all-time low compared with 400,000 to 500,000 reported each year in the pre-vaccine era.

This year, with a continued push toward epidemic control and a continued emphasis on a maintenance program of immunizing year-old children, we can accomplish eradication, and, what's more, insure its perpetuation.

### Rubella Vaccine Development

Senator Hill. When do you think we are going to get the rubella vaccine?

Dr. Sencer. The estimates are now that a vaccine can be available by 1970 at the earliest. It is being field tested at the present time.

We hope by 1970 a vaccine will be available for general use.

Senator Hill. It will take that long?

Dr. Sencer. Yes, sir. There are many problems concerned with this virus, as you know. The concern is that it may, when given to an individual, spread to another person.

So far there has been no evidence of this but they are proceeding cautiously with increasing numbers of people being immunized.

### FOREIGN QUARANTINE

Last year, we promised a new look in Foreign Quarantine, one which would change the emphasis from inspection to active epidemiologic surveillence.

We have begun to redirect the emphasis of our foreign quarantine program.

On June 6, last year, the Surgeon General announced that we were no longer requiring vaccination against smallpox for persons coming from Mexico. This is based on sound epidemiologic principles.

There has been no smallpox in Mexico since 1951, therefore, why require vaccination as a prerequisite to entrance into the United States?

Senator Hill. When I was a boy in my home town of Montgomery, we had a place called the "pest house" where we sent cases with smallpox.

Dr. SENCER. Yes, sir. In many parts of the world you still find the "pesthouse" in existence.

### "GREEN MONKEY" DISEASE

The changes in quarantine have not just been procedural, as on the Mexican border, but they also include reaching out to investigate disease wherever it may occur.

In August of this year, reports appeared in the newspaper of laboratory workers dying in Germany of a disease apparently associated with green monkeys being used for the production of vaccine, and also rubella vaccine.

The United States imports thousands of these monkeys each year, and our vaccine production for poliomyelitis is dependent upon this monkey. We could not be satisfied with newspaper accounts.

We actively investigated the outbreak in Germany and Yugoslavia and found it to involve a highly fatal and highly contagious disease.

With the help of the German authorities, we defined the epidemiology of this disease and are working on measures to protect laboratory workers against possible infection, or even death, from this agent.

The Center redirected efforts within the laboratory to begin active investigation of the agent of this disease which is an entirely new micro-organism.

This is an entirely new microbiological agent. It is something that is probably a virus but it is completely different from any other disease agent that has been described.

Senator HILL. In other words, we didn't know about it in the past?

Dr. SENCER. No. It is between a very large virus and a small bacteria. We do not take credit for the isolation of this agent, which was accomplished in laboratories in Great Britain, but we do take pride in the fact that our laboratories have now developed a diagnostic technique and are adapting this to a method of screening monkeys to assure that we use only those monkeys which will not be harmful to personnel and obviate any danger of transmission of this disease through vaccine when given to people.

### SURVEILLANCE AND LABORATORY BACKSTOPPING

To say that we are proud of our prediction of influenza outbreaks this year would be to neglect the tragic implications of this disease, as reflected in the excess mortality we saw in late December and early January.

But our ability to predict an outbreak such as we are experiencing this year is a tribute to the surveillance activities of the Center—surveillance of the trends of the disease in the past, surveillance in the laboratory of the viruses causing the disease, and surveillance of the effectiveness of the vaccine.

To many, surveillance may be a passive function, a sitting, waiting, and watching. As we at the Communicable Disease Center use surveillance, it is anything but passive. It is an active searching out of disease.

Senator HILL. You keep on the move; do you?

Dr. SENCER. Yes, sir. It is an active investigation of the changing character of disease agents. We do not simply record the change and

the occurrence, but we stimulate action to improve our methods of control.

It is, in part, due to our efforts in this active investigation that continued change in the composition of the vaccine used for influenza is being brought about.

If a vaccine is ever to be effective in the control of influenza, an even better product will be necessary.

This can be accomplished only if we have a continued influx of new ideas and new people into our program and if we look at the whole field of respiratory disease of which influenza is but one.

But to concentrate our efforts solely on influenza and upper respiratory disease because this year it is a major problem, would be shortsighted.

We need to expand our active surveillance and laboratory backstopping for other diseases caused by microorganisms. Among these are salmonellosis, malaria, hepatitis, encephalitis, streptococcal disease, rabies, and a disease which has not been present in the United States since 1949, but which is an ever-continuing threat until it has been eradicated from the world—smallpox.

### Malaria

Senator Hill. Do we have much malaria today?

Dr. Sencer. Yes, sir; malaria is a major problem in returning servicemen from Vietnam. So far there has been minimal evidence of transmission from servicemen to people in this country.

We have been able to investigate just about all reported accounts of this and have found no foci malaria developing in the United States.

### Funding Increase

It is for these purposes that we are requesting increases of $1,068,000 to improve our capabilities in epidemiologic services and laboratory support of communicable disease control programs.

### Professional and Operational Staff to Oversea AID-Supported Programs

To help obviate the need for future expenditures for domestic smallpox and malaria control, the Center is providing professional and operational staff to AID-supported programs in 37 countries, from the Philippines to Ecuador.

In these countries our Government is assisting in eradicating these diseases.

In West Africa in just over 1 year our staff has organized programs that have vaccinated over 30 million people against smallpox.

As Dr. Stewart knows, this has happened in spite of logistic and operational problems that defy imagination or description.

### Laboratory Improvement

Last year, we reported to Congress on the state of the art in laboratory diagnostic capabilities across the country. Subsequently, Congress took affirmative action to improve the quality of laboratory services available to the people of this country.

On December 5, 1967, President Johnson signed into law the Clinical Laboratories Improvement Act of 1967. The major feature of this act is a program of licensing laboratories which are in interstate commerce, but it must be remembered that the title is Clinical Laboratories *Improvement* Act.

Licensing is but one step in the improvement of the services rendered by our laboratories. This program will reach only those laboratories which are in interstate commerce——

Senator HILL. What percent of laboratories are in interstate commerce?

Dr. SENCER. We have estimated 1,000 out of the 14,000 laboratories in this country are in interstate commerce. A survey is currently underway to get a more accurate count.

But we hope that the procedures that are developed to implement this can be a model to our States in developing similar programs to improve the services available in the thousands of laboratories which are not in interstate commerce.

### PROMULGATION OF REGULATIONS

It is important, therefore, that those regulations that we promulgate, that those methods that we adopt to assure a high level of proficiency, that the standards that are developed for the personnel in the laboratories and that the quality control mechanisms are of the highest level possible, for we cannot be satisfied with anything less than the best.

This will require scientists who are willing to devote their efforts to methods of standardization and to techniques of proficiency testing.

They will have to work with laboratories across the Nation in fully implementing these techniques so that the highest degree of confidence can be placed in our laboratories.

### FUNDING INCREASE

For this initial program we are requesting an increase of $1,575,000 in this budget.

Senator HILL. Speaking of scientists, do you have difficulty getting them?

Dr. SENCER. Everybody has difficulty in recruiting scientists but I think we are quite competitive. I am very satisfied with the caliber of people we are attracting. We could use better. But looking at the market, we are doing well.

### GOAL OF ZERO OCCURRENCE OF PREVENTABLE DISEASES

A new phrase has entered into American terminology as a result of our space efforts—"zero defects." Our goal at CDC, not always attainable, but a goal, is zero occurrence of those diseases for which we have preventive measures. Until we can reach the goal of zero occurrence, we must continue to strengthen our investigations, our surveillance, and our laboratory support in a unified way to provide the best possible protection to the people of our communities.

I will be pleased to answer any questions.

BUDGET REQUEST NET DECREASE

Senator HILL. I notice that the budget estimate for this year is some $3,911,000 less than for 1968 with adjustments.

Dr. SENCER. Yes, sir.

Senator HILL. What will be the effect of that decrease?

VACCINATION ASSISTANCE ACT EXPIRATION

Dr. SENCER. Most of that decrease, or all of that decrease, is the result of adjustments to the management fund and transfers of the audiovisual activities to the National Library of Medicine and the expiration of the authority for grants under the Vaccination Assistance Act.

So, the effect of losing the grants is probably the one area that will be significant.

We have not finished the job of measles eradication, but we have hopes that the States will be able to find resources to pick this up.

Senator HILL. You are going to eliminate those grants?

Dr. SENCER. We no longer have the authority. The Vaccination Assistance Act expires this year. We have $2,600,000 carryover money which we can use next year.

Senator HILL. Even that does not measure up to the $3,911,000; does it?

Dr. SENCER, No, sir.

LABORATORY IMPROVEMENT PROGRAM

Senator HILL. Dr. Stewart, is there anything you would like to add?

Dr. STEWART. I think, Mr. Chairman, as you know, CDC is one of our exciting program areas. It is expanding greatly.

Senator HILL. It certainly has.

Dr. STEWART. One that we are very much interested in launching this year is a laboratory improvement program.

The laboratory test you get in a hospital is very important. If it is inaccurate, things will be done to you that should not be done.

It is not because laboratories are maliciously wrong or poorly administered, but any time you do a routine for a long period of time, you tend to have breaks in your technique.

The key to it is the performance testing you are going to put in. We are looking forward to another exciting year at CDC.

Senator HILL. You think so?

Dr. STEWART. Yes, sir.

Senator HILL. Is there anything you would like to add, Doctor?

Dr. SENCER. No.

Senator HILL. You have not found a vaccine to keep this up here; have you?

Dr. SENCER. Would you like us to undertake it, sir?

Senator HILL. I thought you might be interested. I don't know.

Dr. SENCER. If we could get rid of syphilis, we could have many people trained in dermatology devote their efforts to problems like that.

SYPHILIS

Senator HILL. You have a thought that I have not heard anyone else express. It is mighty important to get rid of that syphilis.

Dr. SENCER. I think it is important more than our hair.

Senator HILL. You can lose the hair all right, but syphilis causes all kinds of trouble; is that right?

Dr. SENCER. Blindness, mental illness.

Senator HILL. I don't think people in the past realized just how bad a disease it is.

Dr. SENCER. I think the complacency which has developed is because one shot of penicillin is a sufficient cure if you come to the attention of a physician.

If you don't come to the attention of a physician, it is still a serious disease in terms of its results.

Senator HILL. No telling what the results may be.

Dr. SENCER. That is right. Mental illness, blindness, heart disease.

TUBERCULOSIS: TREATMENT WITH ISONIAZID

Senator HILL. It there anything you gentlemen would like to add?

Well, Doctor, you have brought us some most interesting, challenging testimony. We want to thank you for it very much. You are not going to take that bottle?

Dr. SENCER. There is enough isoniazid to last a person a year. I know of no drug in modern medicine that has been as well studied and documented on how safe it is. It is cheap.

The expensive thing is to find methods to get people to take the medicine for a year.

Senator HILL. Do they know about it?

Dr. SENCER. More and more people know about it as a result of our tuberculosis activities. Many contacts that previously would be observed and X-rayed to see when they got the disease are now receiving isoniazid. It has brought a new wave of enthusiasm into our local health department because they now have something positive to offer people with tuberculosis.

Senator HILL. That they did not have in days past?

Dr. SENCER. It was a threat before. We said, "Come on back in 3 months and see if there is any change in your X-ray."

Now we say, "We have something that will help you stay well."

Senator HILL. It is something quite worthwhile, isn't it?

Dr. SENCER. Yes, sir.

Senator HILL. I want to thank you very much, Doctor, for your splendid testimony.

STATEMENT OF DR. JOHN T. MIDDLETON, DIRECTOR, NATIONAL CENTER FOR AIR POLLUTION CONTROL

ACCOMPANIED BY:

ROBERT PERMAN, EXECUTIVE OFFICER

DR. RICHARD A. PRINDLE, DIRECTOR, BUREAU OF DISEASE PREVENTION AND ENVIRONMENTAL CONTROL

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DR. WILLIAM H. STEWART, SURGEON GENERAL

CHARLES MILLER, CHIEF FINANCE OFFICER

JAMES B. CARDWELL, DEPUTY ASSISTANT SECRETARY, BUDGET

## Appropriation Estimate

"AIR POLLUTION

"To carry out the Clean Air Act, *as amended*, and the functions of the Secretary of Health, Education, and Welfare under the provisions of section 48(h)(12)(C)(ii) of the Internal Revenue Code of 1954 (80 Stat. 1508, 1512), including purchase of not to exceed eight passenger motor vehicles, and hire, maintenance, and operation of aircraft, [$64,185,000] *$106,733,000, of which $31,300,000 shall remain available until expended to carry out section 104 of the Clean Air Act.*"

## Appropriation Language Changes

The change in appropriation language provides for authority contained in the Air Quality Act of 1967 including the specification that funds appropriated under Section 104 shall remain available until expended.

AMOUNTS AVAILABLE FOR OBLIGATION

| | 1968 | 1969 |
|---|---|---|
| Appropriation | $64,185,000 | $106,733,000 |
| Unobligated balance brought forward | 4,040,000 | 11,000,000 |
| Cutback from the 1968 President's budget required by H. J. Res. 888 | −2,269,000 | ---------- |
| Total currently authorized for obligation | 65,956,000 | 117,733,000 |
| Plus proposed release of reserves for increased pay and postal costs | 355,000 | ---------- |
| Proposed release of reserves for implementation of the Air Quality Act of 1967 | 1,914,000 | ---------- |
| Proposed supplemental appropriation | 14,086,000 | ---------- |
| Unobligated balance carried forward | −11,000,000 | ---------- |
| Total available for obligation | 71,311,000 | 117,733,000 |
| Disposition of cutback.: | | |
| To be used for pay and postal costs in this account | 355,000 | ---------- |
| To be used for implementation of the Air Quality Act of 1967 | 1,914,000 | ---------- |
| Total cutback | 2,269,000 | ---------- |

OBLIGATIONS BY ACTIVITY

| | 1968 estimate | | 1969 estimate | | Increase or decrease | |
|---|---|---|---|---|---|---|
| | Positions | Amount | Positions | Amount | Positions | Amount |
| 1. Grants | | $32,849,000 | | $37,582,000 | | +$4,733,000 |
| (a) Research | | 7,431,000 | | 8,000,000 | | +569,000 |
| (b) Fellowships | | 468,000 | | 468,000 | | |
| (c) Training | | 2,691,000 | | 2,859,000 | | +168,000 |
| (d) Control programs | | 20,259,000 | | 24,255,000 | | +3,996,000 |
| (e) Survey and demonstration | | 2,000,000 | | 2,000,000 | | |
| 2. Direct operations | 1,191 | 38,462,000 | 1,630 | 80,151,000 | +439 | +41,689,000 |
| (a) Research | 594 | 26,306,000 | 755 | 63,500,000 | +161 | +37,194,000 |
| (b) Abatement and control | 436 | 9,135,000 | 656 | 12,910,000 | +220 | +3,775,000 |
| (c) Motor vehicle pollution control | 71 | 1,409,000 | 88 | 1,574,000 | +17 | +165,000 |
| (d) Training | 90 | 1,612,000 | 131 | 2,167,000 | +41 | +555,000 |
| Total obligations | 1,191 | 71,311,000 | 1,630 | 117,733,000 | +439 | +46,422,000 |

OBLIGATIONS BY OBJECT

| | 1968 estimate | 1969 estimate | Increase or decrease |
|---|---|---|---|
| Total number of permanent positions | 1,191 | 1,630 | +439 |
| Full-time equivalent of all other positions | 52 | 67 | +15 |
| Average number of all employees | 1,029 | 1,468 | +439 |
| Personnel compensation: | | | |
| Permanent positions | $9,173,000 | $13,562,000 | +$4,389,000 |
| Positions other than permanent | 257,000 | 325,000 | +68,000 |
| Other personnel compensation | 73,000 | 112,000 | +39,000 |
| Total personnel compensation | 9,503,000 | 13,999,000 | +4,496,000 |
| Personnel benefits | 982,000 | 1,447,000 | +465,000 |
| Travel and transportation of persons | 1,347,000 | 1,578,000 | +231,000 |
| Transportation of things | 540,000 | 679,000 | +139,000 |
| Rent communications and utilities | 1,274,000 | 1,745,000 | +471,000 |
| Printing and reproduction | 496,000 | 655,000 | +159,000 |
| Other services | 2,871,000 | 3,385,000 | +514,000 |
| Project contracts | 13,743,000 | 46,261,000 | +32,518,000 |
| Services of other agencies | 3,560,000 | 6,000,000 | +2,440,000 |
| Payment to— | | | |
| Public Health Service management fund | 582,000 | | −582,000 |
| National Institutes of Health management fund | 70,000 | | −70,000 |
| Supplies and materials | 1,058,000 | 1,353,000 | +295,000 |
| Equipment | 2,185,000 | 2,699,000 | +514,000 |
| Lands and structures | 251,000 | 350,000 | +99,000 |
| Grants subsidies and contributions | 32,849,000 | 37,582,000 | +4,733,000 |
| Total obligations by object | 71,311,000 | 117,733,000 | +46,422,000 |

## Summary of Changes

| | |
|---|---|
| 1968 enacted appropriation | $64,185,000 |
| Unobligated balance, brought forward | 4,040,000 |
| Cutback required by H.J. Res. 888 | −2,269,000 |
| Proposed release of reserve for increased pay and postal costs | 355,000 |
| Proposed release of reserves for implementation of the Air Quality Act of 1967 | 1,914,000 |
| Proposed supplemental appropriation | 14,086,000 |
| Unobligated balance, carried forward | −11,000,000 |
| 1968 total estimated obligations | 71,311,000 |
| 1969 total estimated obligations | 117,733,000 |
| Total change | +46,422,000 |

| | Base | | Change from base | |
|---|---|---|---|---|
| | Positions | Amount | Positions | Amount |
| Increases: | | | | |
| A. Built in: | | | | |
| 1. Annualization of 197 new positions authorized in 1968 | | | | $572,000 |
| 2. Annualization of 106 new positions requested in proposed supplemental | | | | 801,000 |
| 3. Annualization of civilian and military pay | | | | 115,000 |
| 4. 1 extra day of pay in 1969 | | | | 37,000 |
| B. Program: | | | | |
| 1. Research grants | | $7,431,000 | | 569,000 |
| 2. Training grants | | 2,691,000 | | 168,000 |
| 3. Control program grants | | 20,259,000 | | 3,996,000 |
| 4. Expansion of research | 594 | 26,306,000 | 161 | 37,062,000 |
| (Expansion of sec. 104—research on fuels and vehicles) | (15) | (3,400,000) | (50) | (38,794,000) |
| 5. Expansion of abatement and control activities | 436 | 9,135,000 | 220 | 3,200,000 |
| 6. Expansion of motor vehicle pollution control | 71 | 1,409,000 | 17 | 128,000 |
| 7. Expansion of training | 90 | 1,612,000 | 41 | 492,000 |
| Total program increases | | | 439 | 45,615,000 |
| Decreases: | | | | |
| A. Built in: | | | | |
| 1. Nonrecurring contribution to the Public Health Service management fund | | | | −582,000 |
| 2. Nonrecurring requirements for equipment | | | | −136,000 |
| Total decreases | | | | −718,000 |
| Total net change requested | | | +439 | +46,422,000 |

EXPLANATION OF CHANGES

*Research grants.*—An increase of $569,000 is requested to support 116 continuing grants and 79 new awards as compared to 111 continuing grants and 60 new awards in 1968. Emphasis will be given to areas of special research needs, such as the various aspects of the oxides of sulfur problem and the development of clinical and epidemiological data for air quality criteria.

*Training grants.*—An increase of $168,000 is requested to fund 27 grants in 1969, the same number as in 1968. This increase will provide additional financial support for continuing graduate training projects in the engineering, physical sciences, biomedical, socioeconomic, and biometeorological aspects of air pollution and its control.

*Control program grants.*—An increase of $3,996,000 is requested to fund 286 projects in 1969 as compared to 275 in 1968 to assist State, local, and regional control activities in planning, initiating, improving, and maintaining their air pollution control programs. Emphasis will continue to be given to regional program development.

*Expansion of research.*—An increase of $37,062,000 and 161 positions is requested to provide program emphasis for two areas. After adjusting for the 1967 carryover of $4,040,000, an increase of $35,048,000 and 77 positions in control technology will provide for research and development activities in vehicle emissions and stationary source pollution, especially from the oxides of sulfur and nitrogen. The balance of the increase, or $2,014,000 and 84 positions, will provide for criteria and standards activities which include research on health and economic effects of air pollutants, national air sampling activities, and development of air quality criteria for all major air pollutants.

The increase in control technology provides an increase of $38,794,000 and 50 positions for expansion of accelerated research related to fuels and vehicles, as authorized under Section 104 of the Air Quality Act of 1967. Accelerated research and development activities will be carried out in order to develop new and improved processes and plant designs which can be demonstrated on a large and practical scale.

*Expansion of abatement and control activities.*—An increase of $3,200,000 and 220 positions is requested to carry out an accelerated national abatement program under the Air Quality Act of 1967 which includes programs for Federal abatement activity and technical assistance to States and local government organizations. The increase provides for direct support to the establishment of air pollution control programs aimed at continuing improvement in local control measures.

*Expansion of motor vehicle pollution control.*—An increase of $128,000 and 17 positions is requested for acceleration and improvement in the testing of automotive vehicles, and for related phases of this regulatory activity. Special emphasis will be directed towards an interim goal of more comprehensive and restrictive motor vehicle standards.

*Expansion of training.*—An increase of $492,000 and 41 positions is requested to provide training for additional personnel to meet State, local, and regional program needs.

*Contribution to the Public Health Service management fund.*—The $582,000 decrease for the nonrecurring contribution to the management fund is due to a change in the method of funding. In 1969, it is proposed to fund Office of the Bureau Director costs directly in the activity, "Bureau program direction and management services," in the Radiological Health appropriation rather than through contribution to the Public Health Service management fund.

INTRODUCTION

The air pollution program proposed for 1969, the first full year of activity under the authority of the Air Quality Act of 1967, represents an increased effort toward restoring our air resource to an acceptable quality and preventing its future contamination. The Clean Air Act of 1963, and its subsequent amendments which broadened the authorities of the act, provided for an attack on air pollution through two broad areas of activity: (a) the solution of significant technical problems through research, development, and demonstrations; (b) the application of available technology and control techniques, through a variety of coordinated abatement and control measures, toward achieving a desirable air quality.

The Air Quality Act of 1967, which further amends the Clean Air Act, provides additional tools which strengthen the potential for more effective action in both of these two broad areas. With respect to research and demonstration, the act provides, for example, additional stimuli and incentives for accelerated activity, by both industry and government, on the improvement of emission control technology. With respect to abatement and control, under the act, primary responsibility for the regulatory control of air pollution remains with the States; the act provides, however, that in the absence of appropriate State action, Federal standard-setting activity would be authorized. Major emphasis is placed on the regional approach to air pollution control.

In view of the Air Quality Act of 1967, a supplemental budget request for 1968 is being submitted. It is limited to areas in research, abatement and control, and training which require funding in 1968 in order to comply with provisions in the act for accelerated activity or to permit certain deadlines in the act to be met.

The programs proposed for 1969 have been developed (a) to carry out the provisions of the Air Quality Act of 1967; and (b) as integral steps toward the achievement of a series of objectives, which include: (1) reduction of emissions from motor vehicles; (2) reduction of emissions from stationary sources; (3) expansion and improvement of regional, State, and local regulatory control programs; and (4) development of air quality criteria for the major pollutants which serve as the basis for standard setting by the States.

*1. Grants*

| | 1968 estimate | | 1969 estimate | | Increase or decrease | |
|---|---|---|---|---|---|---|
| | Number | Amount | Number | Amount | Number | Amount |
| a. Research | 171 | $7,431,000 | 195 | $8,000,000 | +24 | +$569,000 |
| b. Fellowships | 70 | 468,000 | 70 | 468,000 | | |
| c. Training | 27 | 2,691,000 | 27 | 2,859,000 | | +168,000 |
| d. Control programs | 275 | 20,259,000 | 286 | 24,255,000 | +11 | +3,996,000 |
| e. Survey and demonstration | 24 | 2,000,000 | 24 | 2,000,000 | | |
| Total | 567 | 32,849,000 | 602 | 37,582,000 | +35 | +4,733,000 |

| | 1968 estimate | | 1969 estimate | | Increase or decrease | |
|---|---|---|---|---|---|---|
| | Number | Amount | Number | Amount | Number | Amount |
| a. Research grants: | | | | | | |
| (1) Noncompeting continuations | 111 | $4,047,000 | 116 | $4,616,000 | +5 | +$569,000 |
| (2) New grants | 60 | 2,857,000 | 79 | 3,184,000 | +19 | +327,000 |
| (3) Supplementals | (14) | 527,000 | (6) | 200,000 | (−8) | −327,000 |
| Total | 171 | 7,431,000 | 195 | 8,000,000 | +24 | +569,000 |

The research grants program is a valuable tool which capitalizes on the scientific expertise and imagination of investigators in universities and other nonprofit research institutions. The continuing increase in the rate of applications for research grants support reflects the growing national interest in abating air pollution problems and an appreciation of the challenging technical problems in their resolution. Under this program, research proposals submitted by investigators are reviewed by advisory panels of non-Federal experts and grant awards are made on the basis of their recommendation.

It is expected that in 1969 there will be continued emphasis on areas of special research needs, such as the various aspects of the oxides of sulfur problem and the development of clinical and epidemiological data needed for air quality criteria. Projects supported will continue to include nearly all other aspects of air pollution problems ranging from the analysis of pollutants, pollutant behavior in the atmosphere, sources of pollutants, their biological effects, economic impact of pollution, and improvement in means for control.

Several examples of research grant projects now being carried out are the following: (1) Dr. John Happel, New York University, in his study, "Sulfur dioxide oxidation," is utilizing new theoretical approaches to determine the importance of the mechanism involved in the sulfur dioxide oxidation on various catalysts. Knowledge gained from this study may be useful in providing the fundamentals of the reaction whereby sulfur dioxide is oxidized, which would contribute to both an understanding of its reactions in the atmosphere and to a potential improvement in means for removing it at the source. (2) Dr. Peter K. Muellar, California State Department of Public Health, in his study, "The respiratory uptake of gaseous air pollutants," is concerned with determining which fractions of nitrogen oxides inhaled under the ambient conditions and concentrations are deposited in the respiratory airways. Information resulting from this project would be useful to help determine an air quality standard for nitrogen oxide based on health effects. (3) A project by Dr. Kimball T. Harper, University of Utah, deals with "The impact of air pollutants on ecosystems." The study is designed to determine the impact that air pollutants have, now or in the future, on four natural ecosystems important to the Salt Lake Valley for water shed protection and/or recreation. Resulting information may be of direct practical value because of the importance of vegetation for water shed areas as ground cover to prevent soil erosion, for timber, forage, recreation areas, and to preserve urban "green belts."

The $8,000,000 requested for 1969 provides for 79 new grants and 116 noncompeting continuations as compared with 60 new grants and 111 noncompeting continuations in 1968.

| | 1968 estimate | | 1969 estimate | | Increase or decrease | |
|---|---|---|---|---|---|---|
| | Number | Amount | Number | Amount | Number | Amount |
| b. Fellowships | 70 | $468,000 | 70 | $468,000 | ---------- | ---------- |

The shortage of trained air pollution personnel is especially serious in view of increased activity in research, teaching, and control activity by public agencies and by industry. The fellowship program is one of the important program components aimed at alleviating this shortage and permitting air pollution activity to move ahead as rapidly as possible. Fellowship awards covering tuition and stipends are made to full-time graduate level individuals who must be accepted by a recognized university having a suitable curriculum.

| | 1968 estimate | | 1969 estimate | | Increase or decrease | |
|---|---|---|---|---|---|---|
| | Number | Amount | Number | Amount | Number | Amount |
| c. Training grants | 27 | $2,691,000 | 27 | $2,859,000 | ---------- | +$168,000 |

An intensified national demand for clean air has created an immediate and urgent need to train thousands of technical and supporting personnel to assume employment in air pollution control. Training resources available now are insufficient to accomplish the task. Training grants are one mechanism employed to stimulate the development of new training programs and to encourage the improvement of existing ones in educational institutions. Two types of training grants are awarded: Graduate and Specialist. Graduate Training Grants provide financial support to educational institutions for the development and improvement of full-time graduate training in the engineering, physical sciences, biomedical, socioeconomic, and biometeorological aspects of air pollution and its control. Specialist Training Grants provide support for the development and improvement of training programs other than full-time graduate training programs, aimed at the development of both professional and subprofessional manpower, and the stimulation of persons to follow an air pollution control, or related, career.

Training grants to educational institutions are used to stimulate the development of new training programs and to encourage the improvement of existing ones. The program proposed for 1969 will assist in improving the educational resources for training air pollution personnel. Approximately 278 students are expected to be trained under this program in 1969 compared with 251 trained in 1968.

| | 1968 estimate | | 1969 estimate | | Increase or decrease | |
|---|---|---|---|---|---|---|
| | Number | Amount | Number | Amount | Number | Amount |
| d. Control program grants | 275 | $20,259,000 | 286 | $24,255,000 | +11 | + $3,996,000 |

Since 1965, when the first grants-in-aid to States and communities were awarded for air pollution control, there has been promising progress. Budgets for State and local air pollution control programs nationally have increased by approximately 82% between October 1964 and June 1967. These grants are made to air pollution control agencies for planning, developing, establishing, improving, and maintaining programs for the prevention and control of air pollution and programs for the implementation of air quality standards authorized by the Air Quality Act of 1967. Grants are made to States, counties, cities, and regional agencies on the basis of a workable program which provides for the enactment and enforcement of effective control laws and regulations.

The importance of the regional approach to air pollution problems was recognized in the authorizing legislation through provision for a larger Federal share in projects conducted by regional air pollution control agencies. Grants for stimulating new programs are awarded to State and local agencies in amounts up to two-thirds of the cost of approved projects and to regional agencies in amounts up to three-fourths of the cost of the project. Grants for the purpose of maintaining prevention and control programs are made for up to one-half the cost of State and local programs and to three-fifths of the cost of regional programs.

The 1969 request of $24,255,000 represents an increase of $3,996,000 over the 1968 appropriation. Under newly authorized provisions of the Air Quality Act of 1967 grants are available for planning for air quality standards. This planning is directed toward the support of coordinated activities, on a regional basis, for air quality standards. The grants also support the planning of programs for enforcing the air quality standards. The availability of grants will facilitate the resolution of problems States will encounter initially in planning for a common regional plan where several States are involved.

| | 1968 estimate | | 1969 estimate | | Increase or decrease | |
|---|---|---|---|---|---|---|
| | Number | Amount | Number | Amount | Number | Amount |
| e. Survey and demonstration grants | 24 | $2,000,000 | 24 | $2,000,000 | ---------- | ---------- |

Survey and demonstration grants provide the financial base for innovation in air pollution control methods—both in technical means of control and in organizational arrangements for implementation of control programs. Grants have been made to a variety of agencies and for diverse purposes. For example, in 1968 a grant to the Commonwealth Development Association of Pennsylvania is for demonstration of a method of extinguishing a burning coal refuse pile. A number have been awarded to planning agencies for the purpose of assessing the air pollution problem and devising organizational plans for control programs. Other grants have been used to test and demonstrate new or improved control operations, to demonstrate motor vehicle inspection systems, to define air-shed boundaries, and to develop and promote compatible laws and regulations where direct multijurisdictional operating programs are not immediately feasible.

The survey and demonstration grant program allows for the participation by a wide variety of agencies and institutions in projects directed toward solution of specific air pollution control problems.

It is estimated that the $2,000,000 requested will fund 24 new and continuation projects in 1969.

*2. Direct operations*

| | 1968 estimate | | 1969 estimate | | Increase or decrease | |
|---|---|---|---|---|---|---|
| | Positions | Amount | Positions | Amount | Positions | Amount |
| Personnel compensation and benefits | 1,191 | $10,485,000 | 1,630 | $15,446,000 | +439 | +$4,961,000 |
| Other expenses | | 27,977,000 | | 64,705,000 | | 36,728,000 |
| Total | 1,191 | 38,462,000 | 1,630 | 80,151,000 | +439 | +41,689,000 |

SUMMARY OF PROGRAM

| | | | | | | |
|---|---|---|---|---|---|---|
| a. Research | 594 | $26,306,000 | 755 | $63,500,000 | +161 | +$37,194,000 |
| (1) Control technology [1] | 238 | 19,025,000 | 315 | 54,042,000 | +77 | +35,017,000 |
| (2) Criteria and standards | 356 | 7,281,000 | 440 | 9,458,000 | +84 | +2,177,000 |
| b. Abatement and control | 436 | 9,135,000 | 656 | 12,910,000 | +220 | +3,775,000 |
| c. Motor vehicle pollution control | 71 | 1,409,000 | 88 | 1,574,000 | +17 | +165,000 |
| d. Training | 90 | 1,612,000 | 131 | 2,167,000 | +41 | +555,000 |
| Total | 1,191 | 38,462,000 | 1,630 | 80,151,000 | +439 | +41,689,000 |

[1] Of which—

| | 1968 estimate | | 1969 estimate | | Increase or decrease | |
|---|---|---|---|---|---|---|
| | Positions | Amount | Positions | Amount | Positions | Amount |
| Includes Sec. 104 research on fuels and vehicles | 15 | $3,400,000 | 65 | $42,300,000 | +50 | +$38,900,000 |

(*a*) *Research*

The overall air pollution research program includes the program of grant-supported projects in universities, noted previously, and directed research carried out by Public Health Service staff and by contract. This activity includes research into the nature and extent of air pollution; its transport and atmospheric behavior; the effects on humans, other biological systems, property, and the atmosphere itself; and improvement in means for controlling pollution. The 1969 program will continue the on-going research primarily in the three principal areas of automotive vehicle emissions, sulfur oxides pollution, and development of air quality criteria, and will place primary emphasis on research areas designated for special attention by the Air Quality Act of 1967. These include development of air quality criteria and emission control techniques as preliminary to subsequent application and regulatory enforcement measures; a comprehensive economic cost study; scientific assessment of data associated with the program of registration by manufacturers and processors of all additives placed in fuels used for combustion, and accelerated research and development into new and improved methods, having industrywide application, for the prevention and control of air pollution resulting from the com-

bustion of fuels as provided in Section 104 of the act. Under Section 104, work is directed toward development of improved, low-cost techniques for control of combustion byproducts of fuels, removal of potential pollutants from fuels, and control of emissions from evaporation of fuels; determination of results of research in order to develop new or improved processes and plant designs to the point where they can be demonstrated on a large and practical scale; and study of new or improved methods for the recovery and marketing of commercially valuable byproducts resulting from the removal of pollutants. Amounts appropriated for this section shall remain available until expended. The proposed 1968 supplemental provides a total of $14,400,000 for research under Section 104 as applied especially to vehicle emissions and process control. The 1969 request provides a total of $31,300,000 for Section 104 research.

| | 1968 estimate | | 1969 estimate | | Increase or decrease | |
|---|---|---|---|---|---|---|
| | Positions | Amount | Positions | Amount | Positions | Amount |
| (1) Control technology | 238 | $19,025,000 | 315 | $54,042,000 | +77 | +$35,017,000 |

The control technology activity includes the engineering, chemical, meteorological, and related physical science aspects of air pollution research. In addition to work conducted directly by the Public Health Service, the program will continue to use, through contracts, the best available technical resources of universities, industry, Federal agencies, and other organizations.

Complementing the regulatory aspects of motor vehicle pollution control are the vehicle emissions research and development activities included in the 1969 program. There are two main elements in this program for which an increase of 20 positions and $5,946,000 is requested in 1969. The two elements are: (1) Carrying out the research needed for the development of more comprehensive and stringent standards, including test techniques, now planned for the 1970 model vehicles: this area will be given highest priority in 1969 in view of the timetables of tighter standards for 1970 model vehicles. The program will emphasize the development of more realistic chassis dynamometer test cycles which will simulate road operation of passenger cars, trucks, and buses; the development of improved means for defining and testing evaporative losses; the refinement of analytical techniques for the measurement of pollutant emissions; and the development of standard test methods for diesel engine emissions such as odor and smoke, and (2) Development of new, more effective control techniques for internal combustion engines: emphasis will be on second generation systems for hydrocarbons and carbon monoxide, first generation oxides of nitrogen control, diesel odor and smoke, and control of particulate emissions, including those derived from fuel additives. In addition, because the air pollution potential from motor vehicles is sufficiently hazardous that sole reliance cannot be placed on fundamental improvement in the performance of the internal combustion engine, the 1969 program provides for continued activity toward the end of stimulating development of a "pollution-free" vehicle.

The process control programs proposed for 1969 are directed toward effecting a reduction in emissions from stationary sources. In order to do this, there must be vigorous activity in research and development toward improved control technology. An increase of 53 positions and $29,002,000 is requested in 1969.

Principal emphasis in 1969 will continue to be on accelerating technical solutions to the widespread pollution problems resulting from sulfurous emissions. The concentrations of sulfur oxides in our larger communities are reaching levels which pose serious hazards. Projections indicate a significant buildup of sulfurous emissions if we rely on today's control technology. It is essential that urban sulfur oxide levels be reduced to one-fifth to one-tenth of projected levels. Unfortunately, there is not now available a control technology which is both technically and economically satisfactory to achieve this.

The seriousness of this problem was underscored in the President's memorandum of April 21, 1967, calling for "a greatly accelerated research and development program." The 1967 supplemental appropriation included $4,040,000, to remain available until December 31, 1967, for the initial increment of this program, which is being continued and expanded in 1968. The 1969 research and development program is part of an overall sulfur oxides research and development program which is aiming at the availability of a substantial technology for commercial design

applications. The 1969 program includes accelerated activity in the following areas:

1. *Design, construction and operation of prototype plants.*—Work will be done on the limestone or dolomite-injection process, the alkalized alumina process, pyrite-coal fluid bed reactor, molten carbonate scrubbing, and the development of auxiliary equipment.

2. *New control processes.*—These include increased activity in desulfurization of coal and oil, new stack cleaning processes, and investigation of new power cycles.

3. *Control processes for noncombustion sulfur emission sources.*—Emphasis will be given in this area to control processes for smelters, refineries, paper mills, etc.

4. *Full-scale demonstration studies.*—Priority projects for full-scale demonstration studies include (a) the construction and testing of a module of a full-scale plant, e.g., a power plant-size scrubber using effluent from full-scale trials of the alkaline injection process, (b) joint support of systems such as full-scale alkaline injection trials for different fuels and furnace types at existing plants in large urban areas, and the demonstration of a moderate-sized coal cleaning and pyrite-coal processing plant, and;

5. *Systems studies of economic relationships, field studies, and analysis of alternative solutions to meet air quality criteria.*—The other major area of expansion in research and development aimed at emissions reduction from stationary sources is concerned with control of the oxides of nitrogen. These effluents constitute a significant and widespread pollution problem from all combustion equipment and contribute importantly to the photochemical type of pollution popularly, but erroneously, associated only with Los Angeles. Systems studies initiated in 1968 are aimed at the ultimate provision of recommended guides for nearly all forms of stationary combustion sources emitting oxides of nitrogen. The 1969 program will include the initial large-scale research and development contracts in this area.

The control technology activity also provides for chemical, physical, and meteorological research. The area of chemical and physical research is concerned with atmospheric reactions of pollutants and studies of chemical and physical properties of important aerosol constituents in urban atmospheres. Attention is focused on application of "space age" advances in instrumentation to develop methods for accurate measurement of pollutant concentrations and pollution emissions. In 1969 an increase of 2 positions and $39,000 will provide for emphasis on work supporting the development of air quality criteria.

Meteorological research includes research on the intercity transport and diffusion of air pollutants. It emphasizes the development of atmospheric dispersion models for better understanding of variables affecting a given atmosphere's diluting capacity. Closely related to this is work concerning the development of a comprehensive air pollution potential climatology. The 1969 program will stress application of knowledge to air quality planning; an increase of 2 positions and $30,000 is requested for meteorological research.

The net budget increase for control technology of $35,017,000 results from a program increase of $35,048,000 offset by a built-in decrease of $201,000 due to the change in financing of the management fund and $170,000 for other built-in items of increase and decrease. These items include the additional day of pay in 1969, the annualization of positions new in 1968, annualization of civilian/military pay raises, and nonrecurring decreases.

| | 1968 estimate | | 1969 estimate | | Increase or decrease | |
|---|---|---|---|---|---|---|
| | Positions | Amount | Positions | Amount | Positions | Amount |
| (2) Criteria and standards | 356 | $7,281,000 | 440 | $9,458,000 | +84 | +$2,177,000 |

This activity includes research on health and economic effects of air pollutants, national air sampling activities, and development of air quality criteria for all major air pollutants. The programs for 1969 will emphasize implementing the several new authorizations under the Air Quality Act of 1967 relating to the development of criteria and standards. The Air Quality Act of 1967 places far more emphasis on criteria and standards development than has been the case to date. Air quality criteria describe the effects of a pollutant; air quality standards set the level at which a pollutant may be tolerated. Criteria and standards development are interwoven in a Federal-State pattern designed to broaden greatly

the national enforcement effort. Under the act, Federal publication of air quality criteria is a mandatory prerequisite to submission, by the States, of proposed State standards and operating plans.

The health effects research program will place emphasis on studies which will lead to the development of new criteria and to fill in the critical gaps in our knowledge uncovered in the preparation of our criteria reports. Significant steps will be taken toward intensifying the study of the synergistic effects of air contaminants in human and controlled animal studies. Major concern will continue to be focused on chronic effects of long-term exposure to air pollutants.

The Secretary is authorized to obtain information on additives to fuels from the fuels manufacturer or processor. This requirement for registration will provide the Government with a valuable body of technical information of potential significance to the development of criteria and standards. In addition to continued collection and evaluation of data on fuel additives, the 1969 program will emphasize the analytical determinations of the pollutant effluents associated with use of the additives and laboratory tests, principally toxicological, of the effects of such effluents on living organisms. Initial efforts must concentrate on establishing the administrative mechanisms for compliance with the act's registration requirements, and on determinations of the fuels which are to be designated for registration. The research on fuel additives will emphasize, as much as possible, the utility of the findings in the development of air quality criteria and associated supporting documents. An increase of 10 positions and $136,000 is requested in 1969 for these studies.

The economic effects research program will expand its efforts to ascertain the damage to agriculture and materials and the relationship of level of pollutants to extent of damage. While the effects on vegetation and forestry will continue to be studied, there will be some work initiated on livestock investigations. More studies are contemplated dealing with the damage done to materials of all varieties by air pollution. These additional projects are designed to be applied and focused toward the development of the dose-response relationships required for criteria reports. In 1969, an increase of 4 positions and $25,000 is requested for work on the development of costs of pollution abatement and on methodology for improving estimates of economic damage in urban areas.

The 1969 estimate also provides for the preparation and submission to Congress of a detailed estimate of the cost of carrying out the provisions of the Air Quality Act, the cost of the impact on affected units of government, and the cost of the impact on industry.

As a necessary adjunct to a major thrust in the development of criteria and standards, air quality and emissions data collection activities will be expanded and will be reflected in the substantially enlarged pattern of air measurement in the Standard Metropolitan Statistical Areas representing the concentrations of population in the United States. Increasing efforts will be made to determine the severity, extent, and characteristics of the air pollution problem. A concerted effort will be directed toward determining the source of pollutants and a beginning will be made in the direction of determining the effectiveness of control efforts.

There will be an expansion in the program of assembling a nationwide inventory of air pollutant emissions and control practices. A major alteration and expansion of the air quality computer data systems will be continued in 1969. This will allow data from State and local agencies to be added, in a coordinated fashion, to the existing Federal information leading toward the goal of a data bank system capable of handling all measurements of air quality, pollution effects, and emission data being collected on a routine basis.

The sampling and data collection activities of these coordinated networks will have important applications other than those related to criteria and standards development. They provide basic data of value in abatement and control activities. In addition, they are expected to play a significant intelligence role in implementing the important new provisions of the Air Quality Act, which authorize the Secretary, under emergency situations involving an imminent and substantial health danger, to seek court action for enjoinment of a contributor to the pollution. An increase of 34 positions and $310,000 is requested in 1969 for these data collection activities.

Under the Air Quality Act of 1967, air quality criteria must be accompanied by publication of recommended control technology for each specific pollutant. Initially, data will have to be accumulated and analyzed toward the end of outlining a schedule of needs to insure that recommendations are developed and prepared for all possible significant sources. Cooperative work with industry, other Federal agencies, and other research organizations will be undertaken to develop a master

plan to insure complete and timely coverage for all sources, assess the adequacy of existing control technology for such sources, initiate or stimulate research and development for adequate and economically feasible methods not presently available, and develop cost analyses and alternative approach techniques for inclusion in the issuances.

In addition to new air quality criteria, published criteria volumes will be placed under a system of reevaluation for revisions, as the findings of new research become available.

Criteria for the oxides of sulfur have been published. Under preparation are criteria for photochemical oxidants, nitrogen oxides, hydrocarbons, carbon monoxide, and particulates. The 1969 request provides an increase of 36 positions and $1,706,000 for programs to include fluorides, lead, and hydrogen sulfide, as priority candidates for the establishment of criteria. Increased emphasis will be placed in 1969 on selected metals, with special emphasis on fuel additives.

The net budget increase of $2,177,000 for criteria and standards results from a program increase of $2,014,000 offset by a built-in decrease of $157,000 due to the change in financing of the management fund and $320,000 for other built-in items of increase and decrease. These items include the additional day of pay in 1969, the annualization of positions new in 1968, annualization of civilian/military pay raises, and non-recurring decreases.

| | 1968 estimate | | 1969 estimate | | Increase or decrease | |
|---|---|---|---|---|---|---|
| | Positions | Amount | Positions | Amount | Positions | Amount |
| b. Abatement and control | 436 | $9,135,000 | 656 | $12,910,000 | +220 | +$3,775,000 |

This activity includes the programs for Federal abatement activity and technical assistance to States and local government organizations. These are the areas in which direct support is given to the establishing and building of air pollution control programs and, through abatement recommendations, to continuing improvement in local control measures. The Technical Information Center provides for the collection, evaluation, and dissemination of scientific and technical information on air pollution.

The major activity designed to provide more immediate improvement in air quality is that of the Federal abatement program, which includes conducting field investigations and surveillance to determine sources, concentration, and behavior of air pollutants· giving advice, technical assistance, and consultation to State and local officials regarding formal abatement activities· convening abatement conferences and public hearings· issuing conference reports and recommendations· and determining when reasonable abatement action has not been taken by the appropriate control authority. The abatement program is carried out principally in urban interstate areas, but under the act, the Secretary may initiate abatement activity on his own initiative in any areas of interstate pollution. To date, 10 such actions have taken place. Approximately 72 urban interstate areas have been under surveillance to provide the technical basis for a program of abatement aimed at enforcement in all major problem areas. Recommendations toward improving the air pollution situation result from the abatement activities and these are intended to have a major impact, through insuring improvement in local control measures, on air pollution emissions from stationary sources.

The Federal abatement activity also includes the program for controlling air pollution from Federal facilities. Toward this end, Executive Order 11282 and implementing regulations have been issued. Emission limitations for sulfur oxides from Federal facilities located in New York, Chicago, and Philadelphia were issued effective October 1, 1968. Consultative and liaison services with Federal agencies operating facilities will be expanded. In 1969, development will be accelerated on an automatic data processing method for the large number of nventory reports from Federal agencies.

The 1969 estimate is aimed at providing for the costs of carrying out an accelerated national abatement program under the Air Quality Act of 1967. An increase of 131 positions and $1,721,000 is requested for this purpose.

The establishment and building of effective State, local, and regional air pollution control programs are important objectives of the act. In addition to the financial assistance, technical assistance is provided to such agencies by the

National Center for Air Pollution Control. In order to coordinate and maximize the effectiveness of technical and financial assistance activities dealing with a common clientele, these functions have been placed in a closer operating relationship in 1968. This provides for a closer liaison with agencies receiving grant support, and expedites consultation and short-term assistance for the development of the resources, competence, and regulatory mechanisms needed if the States and municipalities are to meet their responsibilities.

A major new activity is now being initiated to develop comprehensive simulation models of air pollution and its control to assist public agencies in the planning and operation of control programs. In 1969, emphasis will be placed on development and verification of increasingly sophisticated systems for analysis of alternative pollution control strategies.

The technical assistance activity provides an important qualitative link to State and local control achievements. The qualitative aspect rests in the improved capability of State and local staffs to solve problems drawing upon advice, consultation, and related guidance provided by the Federal program. It is planned to assign engineers in the field to furnish continuing frequent liaison and assistance on a regional basis to groups of programs. Demands for assistance are increasing as the number of control programs across the country increases.

The Air Quality Act of 1967 contains several new provisions aimed at enhancing the capabilities of States, localities, and, particularly, regional agencies, in planning and enforcing more effective control programs. The Secretary is authorized, under certain conditions, to designate interstate air quality planning commissions, as a means of expediting the establishment of standards for an interstate air quality control region. The act provides for Federal funding of necessary staff for such commissions, and for related commission expenses. The 1969 request will permit the financing of approximately eight such appointed commissions. The Secretary is directed to designate air quality control regions based on jurisdictional, urban industrial concentrations and related factors. These regions, emphasizing physical characteristics, will provide a necessary basis for the designation of the air quality control regions, which take into account political, economic, and jurisdictional factors. The 1969 program will require a significant accumulation of data relating to urban industrial concentrations and will require the development of formulas and techniques to insure compatibility between the atmospheric and the air quality control regions. In addition to the 15–20 regions anticipated for initial designation, several models, based on actual data from selected areas, will be developed as a means of insuring the most effective pattern to be used in determining further regional designations, and possible alterations in designated regions. An increase of 56 positions and $1,961,000 is requested for these control activities.

The development of the Air Pollution Technical Information Center is a phased operation with limited operational status being achieved in 1967. During 1968 it has extended services to a great variety of users to include Government personnel, industrial organizations, educational institutions, scientists, engineers, students, and others. Such services involve indexing, abstracting, translating, and evaluating air pollution technical information. During 1969 we plan to employ the most modern techniques of computer technology, including optical scanning devices, magnetic tape, disc, core or drum storage, photocomposition processes, and the use of remote consoles and dataphones as direct hook-up to data banks. Other activities planned for 1969 are (1) development of an ongoing selective dissemination program particularly for State and local control agencies, (2) cooperation with foreign countries in the establishment of an international network of technical information centers on air pollution, and (3) the provision of technical audiovisual aids to the air pollution community. For these information activities an increase of 33 positions and $93,000 is requested.

The net budget increase of $3,775,000 for abatement and control results from a program increase of $3,200,000 offset by a built-in decrease of $166,000 due to the change in financing of the management fund, and $741,000 for other built-in items of increase and decrease. These items include the additional day of pay in 1969, the annualization of positions new in 1968, annualization of civilian/military pay raises, and nonrecurring decreases.

| | 1968 estimate | | 1969 estimate | | Increase or decrease | |
|---|---|---|---|---|---|---|
| | Positions | Amount | Positions | Amount | Positions | Amount |
| c. Motor vehicle pollution control | 71 | $1,409,000 | 88 | $1,507,000 | +17 | +$165,000 |

In view of the evidence that motor vehicles are a major source of air pollution in all sections of the country, a goal of a 20 percent reduction in pollutant emissions from motor vehicles has been established. The program proposed for 1969 is planned not only to help to meet this goal, but, in addition, to stimulate and assist in the development of new, more effective control systems.

At present, the provisions of the Clean Air Act relating to emission controls for new vehicles are being carried out through testing and certification of 1968 model vehicles. Regulations have been published which establish Federal standards for some components of exhaust and crankcase emissions from gasoline-powered automobiles and small trucks. The regulations also establish emission test procedures. Procedures have been established whereby manufacturers of motor vehicles may apply for certification that their products comply with Federal standards. The 1969 programs will continue work directed toward improvement in precertification activity, using data and experience now being accumulated. There will be expanded compliance and surveillance testing of newly manufactured vehicles.

The 1969 program will emphasize work directed toward an interim goal of more comprehensive and restrictive motor vehicle standards, to be effective for the 1970 model vehicles. While the existing standards will result in some improvement, more restrictive standards are indicated if a 20 percent reduction in emissions is to be achieved. Accordingly, work in 1969 will be directed toward (a) more restrictive limits for pollutants presently covered by the Federal standards, (b) inclusion of evaporative emissions other than carbon monoxide and hydrocarbons, the only pollutants now covered by the standards—and (c) extension of the scope of the standards to include exhaust emissions from all gasoline-powered trucks and buses and diesel-powered vehicles.

The net budget increase of $165,000 results from a program increase of $128,000 offset by a built-in decrease of $28,000 due to the change in financing of the management fund and $65,000 for other built-in items of increase and decrease. These items include the additional day of pay in 1969, the annualization of positions new in 1968, annualization of civilian/military pay raises, and nonrecurring decreases.

| | 1968 estimate | | 1969 estimate | | Increase or decrease | |
|---|---|---|---|---|---|---|
| | Positions | Amount | Positions | Amount | Positions | Amount |
| d. Training | 90 | $1,612,000 | 131 | $2,167,000 | +41 | +$555,000 |

One of the most serious obstacles to attainment by State and local agencies of effective control programs is the shortage of trained personnel available for air pollution control work. The 1969 training program will emphasize approaches designed to cut down this shortage. It will work toward the end of insuring that the growing State, local, and regional programs have an adequate reservoir of trained personnel for staffing. Adequate staffing for public agencies is critical.

Demand for courses presented directly by the training program has exceeded and continues to exceed the program's capacity each year; approximately 25 percent of the applicants for training remain on a waiting list. In addition, requests for the presentation of training courses in various locations other than program facilities exceed actual scheduled presentations by approximately 20 percent. The Air Quality Act of 1967 will undoubtedly increase existing pressures for a greater number and variety of scheduled courses in 1969. The anticipated number of applications and requests will require the presentation of approximately 83 intensive short courses. Approximately 50 courses will be in training program facilities with the remaining 33 courses presented in various field locations. In addition, approximately 10 to 15 requests for 1- to 2-day orientation courses will be received and honored for an additional enrollment of 1000 to 1500. In 1969 it is estimated that 2600 individuals will be trained through these technical short courses, as compared with 2100 in 1968.

The budget request for an increase of 41 positions and $555,000 will assist in meeting these demands by permitting an accelerated curriculum design and development for effective and rapid mass teaching in formal, programmed, and computer-assisted modes; an expanded curriculum presentation in residence and in the field; an accelerated training aid design and development for use intramurally and for assignment to States and localities; and added emphasis on promotional, training assistance, and grants activity for the development and improvement of extramural training resources.

The 1969 estimate also provides for the conduct of a complete study relating to State and local manpower needs and training programs designed to meet such needs.

The net budget increase of $555,000 results from a program increase of $492,000 offset by a built-in decrease of $30,000 due to the change in financing of the management fund and $93,000 for other built-in items of increase and decrease. These items include the additional day of pay in 1969, the annualization of positions new in 1968, annualization of civilian/military pay raises, and nonrecurring decreases.

NEW POSITIONS REQUESTED, FISCAL YEAR 1969

| | Grade | Annual salary |
|---|---|---|
| Direct operations: | | |
| Economist (2) | GS–15 | $36,808 |
| Engineer (12) | GS–15 | 220,848 |
| Scientist (6) | GS–15 | 110,424 |
| Information specialist (2) | GS–15 | 36,808 |
| Statistician (2) | GS–15 | 36,808 |
| Administrative officer | GS–14 | 15,841 |
| Engineer (21) | GS–14 | 332,661 |
| Scientist (14) | GS–14 | 221,774 |
| Public health program specialist (5) | GS–14 | 79,205 |
| Statistician (5) | GS–14 | 79,205 |
| Engineer (18) | GS–13 | 243,126 |
| Scientist (13) | GS–13 | 175,591 |
| Public health program specialist (6) | GS–13 | 81,042 |
| Statistician (4) | GS–13 | 54,028 |
| Engineer (13) | GS–12 | 149,375 |
| Scientist (11) | GS–12 | 126,483 |
| Public health program specialist (6) | GS–12 | 68,766 |
| Medical staff assistant (4) | GS–12 | 45,844 |
| Engineer (8) | GS–11 | 81,120 |
| Scientist (10) | GS–11 | 100,434 |
| Public health program specialist (12) | GS–11 | 115,884 |
| Administrative staff assistant (5) | GS–11 | 48,285 |
| Engineer (12) | GS–9 | 100,503 |
| Scientist (12) | GS–9 | 97,993 |
| Engineering technician (2) | GS–9 | 16,108 |
| Public health program specialist (10) | GS–9 | 80,540 |
| Statistician (2) | GS–9 | 16,108 |
| Research technician (6) | GS–9 | 48,324 |
| Engineer (13) | GS–7 | 88,892 |
| Scientist (12) | GS–7 | 80,808 |
| Research technician (2) | GS–7 | 13,468 |
| Laboratory technician (4) | GS–7 | 26,936 |
| Public health program specialist (6) | GS–7 | 40,404 |
| Public health program specialist (5) | GS–6 | 30,685 |
| Clerical assistant (15) | GS–6 | 92,055 |
| Engineer (6) | GS–5 | 40,086 |
| Engineering technician (4) | GS–5 | 22,260 |
| Scientist (4) | GS–5 | 23,376 |
| Statistician (6) | GS–5 | 33,390 |
| Laboratory technician (9) | GS–5 | 50,085 |
| Research technician (4) | GS–5 | 22,260 |
| Clerical assistant (20) | GS–5 | 111,300 |
| Research technician (13) | GS–4 | 64,935 |
| Laboratory technician (10) | GS–4 | 49,950 |
| Administrative staff assistant (4) | GS–4 | 19,980 |
| Clerical assistant (26) | GS–3 | 116,116 |
| Research technician (4) | GS–3 | 17,864 |
| Commissioned officers: | | |
| Director grade (8) | | 113,674 |
| Senior grade (17) | | 206,489 |
| Full grade (7) | | 62,143 |
| Senior assistant grade (16) | | 89,510 |
| Total new positions (439) | | 4,236,602 |

## Biographical Sketch

John T. Middleton, Director of the National Center for Air Pollution Control, was Professor and Director of the University of California Statewide Air Pollution Research Center at the time of his appointment to the newly-created National Center on January 1, 1967. His pioneer studies of the environment as a regulating factor in disease development in agricultural crops enabled him to first recognize photochemical air pollution as an adverse economic factor to California agriculture in the mid-1940's.

Dr. Middleton has served in the past as: Chairman, California Motor Vehicle Pollution Control Board; member, Governor's Interagency Committee on Air

Pollution, and Executive Task Force on Waste Management; consultant, U.S. Public Health Service, National Advisory Committee on Community Air Pollution, Executive Office of the President, Office of Science and Technology, and the World Health Organization. He is a member of numerous professional associations and is currently serving as a Director for the Air Pollution Control Association.

Dr. Middleton has a B.S. degree from the University of California and a Ph.D. from the University of Missouri. An author and lecturer, he is a recognized international authority in the broad field of air pollution.

### AIR QUALITY ACT OF 1967

Senator HILL. Dr. Middleton, we are glad to have you here, sir. You may proceed now in your own way, sir. I think this air pollution is becoming more of a problem every day.

Dr. MIDDLETON. Unfortunately, that is so. But I think the Air Quality Act of 1967 presents a new rationale that State and local communities can use to proceed with their business plus assistance from the Federal Government.

The budget proposal before you, Mr. Chairman, is the first submitted under the Air Quality Act of 1967. It covers the first full year of operation under the Act and the figures reflect a proposed supplemental for 1968.

This Act, which became law last November 21, adds important new dimensions to the Federal effort to restore our air resource to an acceptable quality and prevent its future contamination.

It is a tremendous and exciting step forward, one which will have a stimulating effect on the research and control efforts of both government and industry.

It is also providing the Nation with the added assurance that there is both sensitivity and concern at the Federal level toward insuring that the air we breathe is clean, safe, and healthful.

### RESEARCH AND CONTROL PROGRAMS

The Clean Air Act of 1963 and its subsequent amendments provided for an attack on air pollution through two broad areas of activity; the first involves the solution of significant technical problems through research, development, and demonstrations; and the second, the application of available control techniques through a variety of coordinated abatement and control measures.

The most recent amendments provide additional measures for more effective action in both of these two broad areas.

The budget before you proposes programs for 1969 which carry forward ongoing work and add new and expanded activities required by the Act.

### PROGRESS TO DATE

Before enumerating some of these programs, I would like to mention some of the more significant achievements that the National Center for Air Pollution Control has accomplished to date. These are:

*The establishment in 1965 of grants-in-aid to States and communities for air pollution control—*

Since that time, air pollution control program budgets at the State, regional, and local level have increased by about 82 percent.

While this progress is encouraging, the current level of control activity represents only about 50 percent of the minimum State and local effort which is needed to attain a reasonably effective degree of air pollution control.

Senator HILL. In other words, they are making only about half the effort you really need?

Dr. MIDDLETON. That is right. It is a significant and substantial beginning but it is precisely just that.

Federal financial assistance to States becomes especially important in view of new provisions under the 1967 Act which make it mandatory for States to develop air pollution standards and programs. Approximately 168 agencies have been assisted by this program.

*The initiation of a program of survey and demonstration grants—*

Senator HILL. The truth is that we were slow in starting on this?

Dr. MIDDLETON. There were many imaginative people in the States and Federal Government who had a desire to do this, but to obtain the public support and the congressional leadership required took some time.

It certainly has been identified now and I think you and your committee have done much to aid and abet this cause.

New and innovative processes and techniques for air pollution control are being developed, such as a grant to the State of New Jersey for demonstrating methods and equipment for use in measuring the performance of automobile exhaust emission control systems.

*The establishment of a Federal abatement activity designed to bring about abatement proceedings whenever reasonable—*

Action has not been taken by the appropriate control authority.

NEW JERSEY DEMONSTRATION

Senator HILL. When do you think you might get the results of this demonstration?

Dr. MIDDLETON. The results are likely to be polished up in another year. We have interim information which suggests that a short cycle on a standard inspection lane may have applicability.

I think the work in New Jersey is a first step in the direction of using an existing inspection system to add the factor of emission systems inventory and assessment.

We have to be certain, however, that the system that they may evolve will suggest to the driver and the car owner what may be done to correct the system in the event it is failing.

This has not yet come from this particular work.

Senator HILL. You have not reached that point yet?

Dr. MIDDLETON. Not quite.

Senator HILL. But you are moving on to it?

Dr. MIDDLETON. We are. We are developing the equipment necessary. We need now to add the test procedures and know more of the details before we can make a general recommendation.

There have been 10 such actions to date, most of which have resulted in significant steps toward improving the quality of the air. These actions will ultimately be of benefit to about 20 million people.

*The initiation of a Federal emission control program for automobiles beginning with the 1968 models—*

This involves the setting of automotive emission control standards, the testing of new model cars equipped with control systems, and the certifying of those models which meet the standards.

This means that new cars now being sold in this country release significantly less pollution into the air than they have in the past.

Senator HILL. That is a step forward.

Dr. MIDDLETON. Yes, it is, a very significant one since the motor vehicle is unquestionably the largest single source of pollution in the Nation.

Senator HILL. Of course, you have to realize that, so many of our cars last a long time.

Dr. MIDDLETON. You have touched on an important issue. The motor vehicle control program is designed to accommodate the newly manufactured cars. You perhaps will recall that the average terminal age of a car is 10 years and it goes 100,000 miles.

We are making just the first one-tenth step in this direction.

While it is significant, we have a long way to go.

Senator HILL. We certainly have. We started late.

Dr. MIDDLETON. We may have started late, but we have a start. I think the programs we have afoot now are designed to provide more stringent standards, to see that the motor vehicle is not only safe from an accident point of view, but safe from the breathing point of view, which is certainly of equal importance.

*An expanded research and development effort aimed at solving the very complex problems relating to automotive vehicle emissions, sulfur oxide pollutants, and the development of data for use in establishing air quality criteria—*

During 1968, the resources and capabilities of private industry were used to a much greater degree than in the past, especially in the area of sulfur oxide contractual research.

*The designation of the eight atmospheric areas of the Nation in the Federal Register as a first step toward the subsequent designation of air quality control regions—*

This is a required first step toward the designation of air quality control regions which will pave the way for more effective control of air pollution on a regional basis.

*Providing a program for supplying the increased manpower needs at all levels of government and industry for trained air pollution personnel—*

Since 1955, the National Center for Air Pollution Control has provided training to approximately 13,000 registrants.

These registrants include State and local personnel, industry personnel, and staff of other organizations concerned with air pollution. Much remains to be done.

NEW AUTHORITY

The Air Quality Act of 1967 provides us with substantial new authority for taking the next series of steps toward the eventual control of the air pollution problem.

One of the chief purposes of the Act is to insure that State governments, in cooperation with municipal and county governments, will develop and apply air quality standards on a regional basis in all parts of the country where there are pollution problems.

In accomplishing this, the individual States will be given more responsibility—as well as more opportunity—than ever before in the development of practical and workable air pollution control programs.

But at the same time, the Federal responsibility for providing States with the tools required to build effective control programs and put them into operation likewise is greater than it has ever been.

Senator HILL. You have a major problem, don't you?

Dr. MIDDLETON. We have a major problem of providing tools, training people, and seeing that the rationale of the Clean Air Act is actually brought about.

OBJECTIVES FOR 1969

Therefore, the 1969 budget must provide the resources to enable the National Center for Air Pollution Control to—

*Designate air quality control regions, each of which will consist of a group of communities, in one or more States, that share a common air pollution problem—*

The air quality control regions will be designated on the basis of such factors as meteorology and topography, jurisdictional boundaries, and the extent of urban-industrial concentrations.

*Publish air quality criteria and information on control techniques for most of the major classes of pollutants—*

This is a vital effort, the results of which will determine the course of action that States will follow in setting standards.

In addition to a review and modification of the air quality criteria for oxides of sulfur already published, data will be provided for carbon monoxide, nitrogen oxides, particulates, hydrocarbons, and photochemical oxidants.

Senator HILL. When do you expect to get this data?

Dr. MIDDLETON. Most of the data we will use is from programs sponsored by research grants, programs that have been sponsored by contracts, programs that have been initiated by private industry themselves, and most of this material is published in the literature.

There is a great amount of information available which provides a good base for a start but insufficient to have it properly polished up for our real future needs.

There is enough to be sure that we can move forward but not enough to be sure we are moving forward as well as we should.

Senator HILL. And as you could?

Dr. MIDDLETON. Right.

In addition, work will be directed at investigating the effects of other pollutants such as lead, the fluorides and hydrogen sulfide.

The scientific basis for this work, as required under the Act, will come from research on the effects of pollution on humans, animals, vegetation, materials, and visibility.

*Provide expanded assistance and technical consultation to States in the development of air quality standards and enforcement programs.*

*Expand the research and development program for motor vehicle pollution control including increased efforts directed toward the development of low pollution propulsion systems—*

More restrictive control requirements are planned for the 1970 model vehicles and are estimated to reduce present allowable emissions by another 20 percent.

Work will also be directed toward the application of emission standards for all gasoline-powered trucks and buses, and diesel-powered vehicles.

*Further expand research on the solutions to the reduction and control of the sulfur oxides, which is one of the major pollution problems throughout the country—*

Senator HILL. One of our biggest problems, isn't it?

Dr. MIDDLETON. One of our biggest problems, particularly in areas where there is need for power generation and heat and in areas of concentrations of people.

The powerplants are nearby these cities or located within them.

Under the expanded authority of Section 104 of the Act, we will undertake large-scale contractual studies with industry and others for purposes of developing and testing the most promising control techniques available at this time.

Increased efforts will be directed at research on the control of nitrogen oxides which are another growing problem area.

*Expand our program of financial assistance to States and communities for support of air pollution control programs—*

Included in this grant-in-aid activity will be assistance to States in planning their standard setting and control programs.

PROGRESS REPORTS TO CONGRESS

Although these represent most of the major objectives for fiscal year 1969, there are many other important activities that are essential, and contribute directly to the total program effort.

The Act sets forth specific dates for completing this work and also requires that a report on the results be submitted to the Congress.

Among these will be a study of the need for and effect of national emission standards for major industrial sources of air pollution; a comprehensive study of the economic costs of controlling air pollution, including costs that will be incurred by both Government and industry; an investigation of manpower needs in the air pollution field and of needs for training programs; and a study of ways to control air pollution from aircraft and of the feasibility of establishing national emission standards applicable to aircraft.

Senator HILL. We are getting more and more aircraft all the time, aren't we?

Dr. MIDDLETON. Yes, we are. As we are getting skills to improve handling of more planes at our airports, we have the increased air pollution that follows.

SUMMARY OF REQUEST

In conclusion, Mr. Chairman, the Air Quality Act binds all levels of Government and industry together and provides for all a comprehensive plan for attacking air pollution; each level needs to assume a proper degree of responsibility or the plan cannot completely fulfill the promise it holds.

The National Center for Air Pollution Control will strive to carry out, as promptly and thoroughly as possible, all of its responsibilities under the Act, so that States, local governments, and industry will have the tools they need to move the Nation toward an effective means for control of air pollution.

I believe that this 1969 budget request for new obligational authority of $106,733,000 will enable us to meet these responsibilities in a timely and effective manner.

DEPARTMENT AND BUDGET BUREAU REDUCTIONS

Senator HILL. That $106,733,000 is much under your request to the Department and under the request of the Department to the Budget Bureau, isn't that true?

Dr. MIDDLETON. Yes, sir, that is quite true. You will see that there was an opportunity under the ceiling of appropriations in the Congress to ask for more.

The request was made to ask for $170,652,000.

Senator BARTLETT. To the Department?

Dr. MIDDLETON. Yes, sir.

Senator BARTLETT. What did the Department do on that?

Dr. MIDDLETON. The Department provided the reduction of $20 million. The Bureau of the Budget then received a request for $150,652,000. This was further reduced, Senator, to the figure that you have before you, to $106,733,000.

EFFECT OF REDUCTIONS

Senator HILL. You got a reduction of about $63 million altogether?

Dr. MIDDLETON. Yes, we did. A portion of this falls in the important area of Section 104 which deals with the immediate concern of pollution from the combustion of fuels and the utilization of industry-Government efforts in joint programs to develop the control techniques to control the specific pollutants involved.

Senator HILL. That is quite a reduction.

Dr. MIDLETON. I am obliged to agree with you.

Senator HILL. Senator Bartlett.

Senator BARTLETT. On this same point, I fail to comprehend how you can meet your responsibilities in a timely and effective manner with $106 million when you made a budget request for $170 million.

You must have figured that amount of money was essential to the work that you are supposed to carry on.

Dr. MIDDLETON. We felt that the budget request to the Department represented the budget that would implement the Air Quality Act of 1967 and would allow us to have several involvements of not only State and local governments but the need for contractual work on control techniques with industry and private institutions.

The reduction in the budget, of course, will occasion changes in some aspects of the program but it certainly will not mean that we cannot move forward.

It does mean that we will have to change the rate of progress in some areas and we will have to eliminate consideration of control of certain kinds of pollutants at this time.

Senator BARTLETT. Are you going to tell the committee not only in prepared statement but again now that $106 million is enough?

Dr. MIDDLETON. I can tell you that $106 million will allow us to begin on the requirements of the Clean Air Act and its amendments.

It will not provide the full thrust that may be the intention of the public and of the Congress.

Senator BARTLETT. You say here, "will do so in a timely and effective manner."

I can't quite understand how we are supposed to believe that and at the same time realize you asked for $170 million which you must have considered essential for the next fiscal year.

Dr. MIDDLETON. The timely and effective manner is meant to initiate the scheme that is set forth in the Air Quality Act. That is, we shall begin the designation of air quality control regions, we shall begin the publication of criteria, we shall also provide some of the information on control techniques.

In this sense it is responsive to the Act. It is doing the things that are essential but it does it at a much lower key than otherwise might be possible.

In fact, we are timely. It is an effective program but it is not to the full throttle position that the problem actually requires.

### BUDGETARY RESTRICTIONS

Senator BARTLETT. It makes it pretty difficult for this committee, I should think, or the Senate to add to this amount when others who wish to keep the budget quite low will say, "My goodness, the testimony is that this will provide enough money to move ahead in an effective manner."

Dr. MIDDLETON. I believe it will move it forward in an effective manner, but at a level of activity which is much below that that is desired.

Mr. CARDWELL. Senator Bartlett, I think we should point out that the budget that you now have before you, $106 million budget, is a budget that will increase from this year's appropriation of $64 million. That is a considerable step forward. There is a serious question of our capacity and ability to assimilate and grow that fast even though we do recognize this is a high priority and serious problem.

If you take that factor into consideration and weigh it against the tightness of the overall budget, we think we have put before you a responsible program.

Senator BARTLETT. So you are content with this amount?

Mr. CARDWELL. Taking into consideration the overall budget constraints that the department faces, balancing that against the problem, balancing against the present year level, I think that would have to be my answer, yes.

Senator BARTLETT. I have no more questions.

SUPPLEMENTAL REQUEST

Senator HILL. Now your submission indicates a full supplemental appropriation of $14,086,000.

Dr. MIDDLETON. There is a proposed supplemental with an adjusted figure.

REDUCTION

Senator HILL. The estimate transmitted to the Congress on March 11, just last month, requests only $8,355,000. The President's budget message indicates a supplemental for $16 million.

What about that?

Dr. MIDDLETON. This, again, reflects the items that Senator Bartlett and you have spoken to. May I ask Mr. Perman, my Executive Officer, to be further responsive in this regard.

Mr. PERMAN. Mr. Chairman, after the figures were prepared showing $16 million for the supplemental, the Executive Branch did make a final allowance as to how we would seek the funds to implement the new provisions of the Act and the supplemental actually now stands as a request for $8,355,000 rather than the figure you mentioned.

UTILIZATION OF 1967 SAVINGS RESULTING FROM EXPENDITURE REDUCTIONS

This would not be new obligational authority. It is a request to utlilize $8,355,000 which has already been appropriated under several Titles of the Public Health Service, and which has been placed under administrative reserve pursuant to congressional direction.

The supplemental estimate represents our request to release $8,355,000 so that we can implement certain of the now pressing provisions of the Act just as quickly as possible.

Therefore, there are these apparent discrepancies because of the developments I have described.

Senator HILL. You simply cut your request down, didn't you?

Mr. PERMAN. This would have the effect of changing the $117 million, which is the 1969 figure in the basic budget you have, to approximately $109 million.

Senator HILL. It won't give you much more money, will it?

Dr. MIDDLETON. This provides some additional working capital to get on with the requirements of the Clean Air Act.

It will also allow us to see that we have some more people trained to meet the State and local needs.

There are many people available. Our allotted positions in the Center are now all filled. You may see from this that it is possible to do this work even in the short time span we present to you at this time.

IMPLEMENTATION OF SECTION 104

Mr. PERMAN. Mr. Chairman, I might add that the major thrust of this supplemental is to implement the very important Section 104 of the Act.

This particular section authorizes activity for 2 years, 1968 and 1969. It is therefore important to make progress as quickly as possible because of the limited duration of this authority.

The actual effect of the reduction of the supplemental from $16 million to approximately $8 million generally means a halving of the

amount that would be available to implement Section 104 which deals with badly needed control technology research.

It is this portion of the research program which would be reduced as a result of the $8 million reduction in the supplemental.

### Effect of Reduction

Senator Hill. What do you think will be the effect of that reduction?

Dr. Middleton. It will simply mean we will have fewer tools to combat air pollution. It will mean also we will have some fewer industries actually involved in the joint effort of the private and public sector to combat pollution.

It will be a lower keyed approach.

Senator Hill. It will not be carrying on the program that you really feel should be carried on, is that right?

Dr. Middleton. That is right.

Mr. Cardwell. It is more an issue of when you start. The 1969 budget does propose the same level as originally proposed before the supplemental adjustment.

The downward adjustment of the supplemental postpones the full start that the original budget anticipated.

Senator Hill. Reduced that much?

Mr. Cardwell. This year. We will take it up next year.

Senator Hill. But that delays the whole thing?

Mr. Cardwell. Yes, sir; it is in effect a delay.

Dr. Middleton. It removes the possibility, too, I think that was implicit in his remark, for requesting funds for Section 104 since there are appropriation limitations only for the years 1968 and 1969.

Senator Hill. Are there any further questions?

Senator Bartlett. No, thank you.

Senator Hill. Thank you very much, Doctor. We appreciate your testimony.

Dr. Middleton. Thank you for your indulgent consideration.

STATEMENT OF JEROME H. SVORE, DIRECTOR, NATIONAL CENTER FOR URBAN AND INDUSTRIAL HEALTH

ACCOMPANIED BY:

DR. MURRAY C. BROWN, CHIEF, OCCUPATIONAL HEALTH PROGRAM

DR. RICHARD E. MARLAND, CHIEF, INJURY CONTROL PROGRAM

RICHARD D. VAUGHAN, CHIEF, SOLID WASTES PROGRAM

HOWARD L. KUSNETZ, CHIEF, OFFICE OF PROGRAM PLANNING AND EVALUATION

DR. RICHARD A. PRINDLE, DIRECTOR, BUREAU OF DISEASE PREVENTION AND ENVIRONMENTAL CONTROL

VERNON G. MacKENZIE, DEPUTY DIRECTOR, BUREAU OF DISEASE PREVENTION AND ENVIRONMENTAL CONTROL

PETER J. BERSANO, FINANCIAL MANAGEMENT OFFICER, BUREAU OF DISEASE PREVENTION AND ENVIRONMENTAL CONTROL

DR. WILLIAM H. STEWART, SURGEON GENERAL

CHARLES MILLER, CHIEF FINANCE OFFICER

JAMES B. CARDWELL, DEPUTY ASSISTANT SECRETARY, BUDGET

## APPROPRIATION ESTIMATE

### "URBAN AND INDUSTRIAL HEALTH"

"To carry out sections 301, 311, and 361 of the Act with respect to occupational health, injury control, arctic health, milk, food, and environmental sanitation, and interstate quarantine activities; section 2(k) of the Water Quality Act of 1965 (79 Stat. 903); and the functions of the Secretary of Health, Education, and Welfare under the Solid Waste Disposal Act of 1965 (79 Stat. 997)[, including purchase of not to exceed two passenger motor vehicles, $41,750,000] *and the Flammable Fabrics Act (15 U.S.C. 1191), as amended; $45,611,000.*"

### APPROPRIATION LANGUAGE CHANGES

The first change in language deletes authorization for the purchase of two passenger vehicles authorized for purchase in 1968.

The second change in language is necessary to reflect the Department of Health, Education, and Welfare's responsibilities under the Flammable Fabrics Act (15 U.S.C. 1191) as amended. These consist of a continuing and comprehensive study and investigation of the deaths, injuries and economic losses resulting from fires involving fabrics, products, or related materials.

## AMOUNTS AVAILABLE FOR OBLIGATION

| | 1968 | 1969 |
|---|---|---|
| Appropriation | $41,750,000 | $45,611,000 |
| Cutback from the 1968 President's budget required by H.J. Res. 888 | −1,069,000 | |
| Total currently authorized for obligation | 40,681,000 | 45,611,000 |
| Plus proposed release of reserves for increased pay and postal costs | 404,000 | |
| Total available for obligation | 41,085,000 | 45,611,000 |
| Disposition of cutback: | | |
| To be used for pay and postal costs in this account | 404,000 | |
| To be returned to the Treasury | 665,000 | |
| Total cutback | 1,069,000 | |

## OBLIGATIONS BY ACTIVITY

| | 1968 estimate | | 1969 estimate | | Increase or decrease | |
|---|---|---|---|---|---|---|
| | Positions | Amount | Positions | Amount | Positions | Amount |
| 1. Grants | | $21,297,000 | | $21,471,000 | | +$174,000 |
| (a) Research | | 11,643,000 | | 11,271,000 | | −372,000 |
| (b) Training | | 2,531,000 | | 2,531,000 | | |
| (c) Fellowships | | 123,000 | | 123,000 | | |
| (d) Survey and demonstration | | 5,000,000 | | 5,546,000 | | +546,000 |
| (e) Planning | | 2,000,000 | | 2,000,000 | | |
| 2. Direct operations | 1,228 | 19,788,000 | 1,462 | 24,140,000 | +234 | +4,352,000 |
| (a) Solid wastes | 239 | 5,418,000 | 316 | 6,983,000 | +77 | +1,565,000 |
| (b) Occupational health | 327 | 4,434,000 | 367 | 5,302,000 | +40 | +868,000 |
| (c) Injury control | 164 | 3,223,000 | 213 | 4,151,000 | +49 | +928,000 |
| (d) Water supply and shellfish | 222 | 2,671,000 | 290 | 3,701,000 | +68 | +1,030,000 |
| (e) Arctic health | 80 | 1,460,000 | 80 | 1,445,000 | | −15,000 |
| (f) Special health protection | 196 | 2,582,000 | 196 | 2,558,000 | | −24,000 |
| Total obligations | 1,228 | 41,085,000 | 1,462 | 45,611,000 | +234 | +4,526,000 |

## OBLIGATIONS BY OBJECT

| | 1968 estimate | 1969 estimate | Increase or decrease |
|---|---|---|---|
| Total number of permanent positions | 1,228 | 1,462 | +234 |
| Full-time equivalent of all other positions | 34 | 56 | +22 |
| Average number of all employees | 1,093 | 1,364 | +271 |
| Personnel compensation: | | | |
| Permanent positions | $9,592,000 | $12,294,000 | +$2,702,000 |
| Positions other than permanent | 170,000 | 310,000 | +140,000 |
| Other personnel compensation | 200,000 | 216,000 | +16,000 |
| Total personnel compensation | 9,962,000 | 12,820,000 | +2,858,000 |
| Personnel benefits | 1,318,000 | 1,764,000 | +446,000 |
| Travel and transportation of persons | 1,230,000 | 1,481,000 | +251,000 |
| Transportation of things | 323,000 | 361,000 | +38,000 |
| Rent, communications, and utilities | 804,000 | 860,000 | +56,000 |
| Printing and reproduction | 200,000 | 281,000 | +81,000 |
| Other services | 521,000 | 708,000 | +187,000 |
| Project contracts | 2,950,000 | 3,442,000 | +492,000 |
| Services of other agencies | 275,000 | 300,000 | +25,000 |
| Payments to— | | | |
| Public Health Service management fund | 350,000 | | −350,000 |
| National Institutes of Health management fund | 136,000 | | −136,000 |
| Supplies and materials | 599,000 | 729,000 | +130,000 |
| Equipment | 980,000 | 1,219,000 | +239,000 |
| Lands and structures | 140,000 | 175,000 | +35,000 |
| Grants, subsidies, and contributions | 21,297,000 | 21,471,000 | +174,000 |
| Total obligations by object | 41,085,000 | 45,611,000 | +4,526,000 |

SUMMARY OF CHANGES

| | |
|---|---|
| 1968 enacted appropriation | $41,750,000 |
| Cutback required by H.J. Res. 888 | −1,069,000 |
| Proposed release of reserves for increased pay and postal costs | 404,000 |
| 1968 total estimated obligations | 41,085,000 |
| 1969 estimated obligations | 45,611,000 |
| Total change | +4,526,000 |

| | Base | | Change from base | |
|---|---|---|---|---|
| | Positions | Amount | Positions | Amount |
| Increases: | | | | |
| A. Built-in: | | | | |
| 1. Annualization of 92 new positions authorized in 1968 | | | | $469,000 |
| 2. Annualization of civilian and military pay raises | | | | 135,000 |
| 3. One extra day of pay in 1969 | | | | 38,000 |
| B. Program: | | | | |
| 1. Survey and demonstration grants | | $5,000,000 | | 546,000 |
| 2. Expansion of solid wastes program | 239 | 5,418,000 | 77 | 1,497,000 |
| 3. Expansion of occupational health program | 327 | 4,434,000 | 40 | 739,000 |
| 4. Expansion of injury control program | 164 | 3,223,000 | 49 | 910,000 |
| 5. Expansion of water supply and shellfish program | 222 | 2,671,000 | 68 | 1,055,000 |
| Total program increases | | | 234 | 4,747,000 |
| Decreases: | | | | |
| A. Built-in: | | | | |
| 1. Nonrecurring items of equipment | | | | −141,000 |
| 2. Nonrecurring contribution to the Public Health Service management fund | | 350,000 | | −350,000 |
| B. Program: | | | | |
| 1. Research grants | | 11,643,000 | | −372,000 |
| Total decreases | | | | −863,000 |
| Total net changes requested | | | +234 | +4,526,000 |

EXPLANATION OF CHANGES

*Survey and demonstration grants*

The requested increase of $546,000 will raise the total available for survey and demonstration grants for solid waste to $5,546,000 in 1969. Of the $5,546,000 total, $4,300,000 will provide for 15 new and 19 continuing demonstration projects as compared to 11 new and 9 continuing grants in 1968; the balance of $1,246,000 will allow for 12 new and 10 continuing survey projects as compared to 10 new and 16 continuing in 1968. Increased emphasis will be placed on planned future productive utilization of marginal land initially used for sanitary land fill operation.

*Solid wastes program*

The increase of 77 positions and $1,497,000 will be primarily for the application of systems analysis to solid wastes management problems and expansion of research on the reuse and disposal of wastes. Additional resources will also be devoted to development of computer programs for solution of solid wastes problems and the development of reports on State surveys. Training, demonstration and technical assistance activities will be expanded to aid and assist public and private agencies in reducing unacceptable solid waste disposal practices.

*Occupational health program*

The increase of 40 positions and $739,000 will be directed to the critical problem of controlling radon exposure of uranium miners. Epidemiological studies, medical studies and evaluation of control measures are to be developed to reduce the incidence of lung cancer resulting from exposure to ionizing radiation.

*Injury control program*

The increase of 49 positions and $910,000 will be used to implement the Flammable Fabrics Act by investigating and collecting data on burn injuries for the future establishment of effective standards; to strengthen the program to reduce fractures, particularly among the elderly; and to study deaths from asphyxia, particularly from "smoke inhalation" in fires.

*Water supply and shellfish program*

The increase of 68 positions and $1,055,000 will be used to support research and development on the effects of water quality on health, and DHEW participation in the nationwide inter-departmental water resources planning activities.

*Contribution to the Public Health Service management fund*

The $350,000 decrease for the nonrecurring contribution to the management fund is due to a change in the method of funding. In 1969, it is proposed to fund Office of the Director, Bureau of Disease Prevention and Environmental Control costs directly in the activity, "Bureau program direction and management services", in the Radiological Health appropriation rather than through contributions to the Public Health Service management fund.

*Research grants*

The decrease of $372,000 is a result of a reduction in the support of projects in the field of traffic safety. In total, thirteen less grants will be supported in 1969 than the 380 supported in 1968.

*Introduction*

The National Center for Urban and Industrial Health provides a focus for a national program for the prevention and control of health hazards and injuries associated with the urban environment, including those resulting from occupational exposure. The pattern of living created by the combination of our urbanized and industrialized society presents environmental hazards and health problems of growing severity. Some of these hazards and problems have existed for a long time but have become critical as cities grow larger and industrial activities become more complex. Some are new and are the result of our expanding technology. Some are acute, such as the immediate effects of foodborne disease. Others are more subtle and take their toll from prolonged exposure, such as some of the industrial diseases.

The Center, established a little over a year ago, is undertaking a coordinated approach to effectively cope with these growing urban and industrial health problems. The range of programs covers solid wastes management; occupational health hazards; prevention and control of accidental injuries; health aspects of drinking water supplies and shellfish sanitation; food protection; transportation; housing hygiene; sanitation; environmental health aspects of urban planning; and cold weather research.

In 1969, the requested increase will be directed to application of systems analysis to solid wastes management problems and expansion of research on the reuse and disposal of wastes; the critical problem of controlling radon exposure of uranium miners; injury control studies related to flammability of fabrics, osteoporosis, and asphyxiation; and research and development on the health aspects of water quality. Through survey and demonstration grants, increased emphasis will be given to planned future productive utilization of marginal land initially used for sanitary land fill operation.

1. GRANTS

| | 1968 estimate | | 1969 estimate | | Increase or decrease | |
|---|---|---|---|---|---|---|
| | Number | Amount | Number | Amount | Number | Amount |
| (a) Research | 380 | $11,643,000 | 367 | $11,271,000 | −13 | −$372,000 |
| (b) Training | 51 | 2,531,000 | 51 | 2,531,000 | | |
| (c) Fellowships | 16 | 123,000 | 16 | 123,000 | | |
| (d) Survey and demonstration | 46 | 5,000,000 | 56 | 5,546,000 | +10 | +546,000 |
| (e) Planning | 41 | 2,000,000 | 41 | 2,000,000 | | |
| Total | 534 | 21,297,000 | 531 | 21,471,000 | −3 | +174,000 |
| (a) Research grants: | | | | | | |
| (1) Noncompeting continuations | 246 | 7,537,000 | 261 | 7,480,000 | +15 | −57,000 |
| (2) New grants | 134 | 3,923,000 | 106 | 3,491,000 | −28 | −432,000 |
| (3) Supplements | (31) | 183,000 | (21) | 300,000 | (−10) | +117,000 |
| Total | 380 | 11,643,000 | 367 | 11,271,000 | −13 | −372,000 |

Investigators at universities and other non-profit institutions define, assess, and provide solutions for health problems of the urban and industrial environments through research grants support.

During 1969, grants in the water supply and sea resources area will continue to support research in the health implications of aquatic ecology, possible hazards to marine food resources and the aquatic food chain, taste and odor control in water supplies, organic residues in drinking waters and their significance and removal, and other related projects. New problem areas will be explored such as improvements in the storage and distribution of potable water supplies; the effects of trace contaminants in water on man's health; engineering and hydrographic studies on shellfish growing areas and health hazards to this food source.

Occupational health problems identified for continuing research attention include studies of the hazards of metal toxicoses, occupationally-employed chemicals, pneumoconioses, toxic gases, dermatitises, and nonspecific stressors such as the effects of heat in the working environment on man's efficiency and well-being. Other industrial health problems of on-going concern are the hazards of industrial exposure to beryllium and asbestos; the effects of exposure to lasers and uranium; and the determination of safe exposure limits.

The grant program in injury control will continue its studies of non-traffic related injuries. These will include recreational hazards such as skiing and scuba diving, athletic injuries to children, and special problems in age associated injuries in the home and in the whole environment.

During 1969, the environmental sanitation program will continue to support research grants in areas of concern including ultra-high temperature heating of milk, abnormal milk supplies, salmonella in dairy products, and viral contamination. Other foods, as well as milk, will continue to be studied in relation to health hazards such as pathogenic bacteria, microbial toxins, pesticides, and the methodology of ascertaining these and other contaminants. Studies will include noise control, community facilities, evaluation of neighborhood stresses, housing hygiene, overcrowding, and facets of these problems related to development of criteria which will lead to establishment of minimal conditions necessary for a healthful living environment in urban areas.

Grants for solid wastes research are for developing and supporting projects aimed at many sectors of the national solid wastes problems. Project support planned for the coming year will emphasize conservation of resources through solid wastes processing techniques aimed at potential reuse of presently wasted materials. Research to conserve and reuse waste materials is a natural follow-up to past and current research which is providing basic information about solid wastes. This emphasis is in line with the Solid Wastes Disposal Act, which identifies development of solid wastes recovery and utilization techniques as a primary objective. Some examples of solid wastes research projects related to this objective are: utilization of bark wastes; solid fibrous wastes usage as nutrient sources; useful disposal of auto bodies; poultry offal silage as feed ingredient; and conversion of food industry solid wastes to new food products.

The decrease of $372,000 in 1969 will provide for 13 less than the 380 estimated grants in 1968.

| | 1968 estimate | | 1969 estimate | | Increase or decrease | |
|---|---|---|---|---|---|---|
| | Number | Amount | Number | Amount | Number | Amount |
| (b) Training grants: | | | | | | |
| (1) Continuations: | | | | | | |
| Solid wastes | 9 | $394,400 | 11 | $453,900 | +2 | +$59,500 |
| Other | 27 | 1,605,600 | 35 | 1,896,600 | +8 | +291,000 |
| (2) New grants: | | | | | | |
| Solid wastes | 3 | 95,600 | 1 | 36,100 | −2 | −59,500 |
| Other | 12 | 435,400 | 4 | 144,400 | −8 | −291,000 |
| Total | 51 | 2,531,000 | 51 | 2,531,000 | | |
| Solid wastes | 12 | 490,000 | 12 | 490,000 | | |
| Other | 39 | 2,041,000 | 39 | 2,041,000 | | |

The research training grants activity is conducted to meet the need for more qualified research specialists to undertake research in urban and industrial health problems. Grants provide support for faculty, visiting lecturers, research seminars, equipment, stipends and tuition for graduate students selected by the university recipients of these grants.

Numerous scientific committees have pointed out that trained manpower now available is insufficient for the task of dealing with the hazards to public health from environmental contamination. The President's Science Advisory Committee,

in its recent report on Restoring the Quality of Our Environment, stated, "In the long run, improving both numbers and quality of highly trained manpower engaged in key actions, from research to enforcement, will do most for us, and merits highest priority." The aim of the program is to produce personnel with the capability to pursue the complexities of characterization, measurement, evaluation, and elimination of urban and industrial health hazards.

During 1969, grant funds will continue at the same level of funding as 1968 for graduate programs of research training in professional schools which by curriculum design and direction are oriented to attract and train scientists for the public health fields with which the Center is concerned. In these programs, student will receive training in a particular discipline, research experience in a problem area significant to urban and industrial health, and a synthesis of research methodology of related fields of science. In addition to the support of pre- and post-doctoral students, these funds strengthen the scientific base of the national effort to solve urban and industrial problems by augmenting faculties, stimulating the organization and conduct of seminars, and improving training laboratories by providing modern research instrumentation.

The research training grant activity will eventually permit a stepped-up attack on pressing problems in research. It will help in overcoming the specialized manpower shortage, a serious deterrent to our national capability for developing sound programs in urban and industrial health, including urban health planning and development.

Public Law 89–272 authorized the training of persons in the field of solid wastes. The need for such training is evidenced by the estimate that the minimal national need for professionally trained personnel is 3,000 persons. Recognizing this urgent need, the NCUIH training grant program provides curricula development, training aids, and support of graduate students as authorized. The program develops students capable of researching and applying new concepts and systems for solid wastes management.

During 1968 an estimated total of 274 students received training in urban and industrial health problems through 51 training grants. Of this total number, an estimated 40 students pursued studies in solid wastes management at 12 universities.

Approximately 51 grants will be awarded with the requested $2,531,000, the same level as 1968.

| | 1968 estimate | | 1969 estimate | | Increase or decrease | |
|---|---|---|---|---|---|---|
| | Number | Amount | Number | Amount | Number | Amount |
| (c) Fellowships | 16 | $123,000 | 16 | $123,000 | ---- | ---- |

In addition to training grants, fellowships are used to meet the need for trained and experienced investigators interested in undertaking research. They provide support to students for graduate or postgraduate training in order to increase research manpower in the program areas of responsibility of the Center.

There are now programs for training of students in specialities related to the functional areas of the NCUIH programs at a few universities such as UCLA, Cornell, and the Ohio State University.

The 1969 grants will continue at the same level as 1968.

| | 1968 estimate | | 1969 estimate | | Increase or decrease | |
|---|---|---|---|---|---|---|
| | Number | Amount | Number | Amount | Number | Amount |
| (d) Survey and demonstration grants, solid wastes: | | | | | | |
| (1) Survey | 26 | $2,142,000 | 22 | $1,246,000 | −4 | −$896,000 |
| (2) Demonstration | 20 | 2,858,000 | 34 | 4,300,000 | +14 | +1,442,000 |
| Total | 46 | 5,000,000 | 56 | 5,546,000 | +10 | +546,000 |

The survey and demonstration grants program is designed to encourage the application of new methods, techniques and equipment for solid waste management; provide sound and reliable performance data on full scale applications of new and innovative techniques developed through research; and demonstrate, study and investigate the practicability and effectiveness of new techniques, equipment and methods for solid waste management. The stimulation of public interest in,

and acceptance of, proven solid waste management practices is an additional benefit resulting from the projects supported through this program. Grant projects may receive up to two-thirds Federal support and may include the construction of disposal and waste reduction facilities. The funds made available through this program make a direct impact on the speed with which new and improved solid waste management systems are adopted by local, State and regional communities.

Several innovative concepts are being tested and demonstrated in the program. One project, for example, has been initiated to evaluate the costs and benefits associated with the collection and disposal of solid wastes by rail haul from an urban area to strip mines at some distance from the city.

Another grant is supporting the demonstration of improved incinerator technology for a small community. In this project it is being shown that a small mechanically stoked rotary grate incinerator can provide a small municipal area with a feasible means for the disposal of solid wastes which will meet air pollution standards, eliminate environmental health hazards, and be the most economical method of disposal in an area where sanitary landfill methods cannot be adopted.

In another demonstration the feasibility of disposing of demolition wastes by shredding and compacting into a sanitary landfill is being undertaken. This operation will help to eliminate the current air pollution problem in Tacoma, Washington caused by open burning of demolition waste. By reducing the bulk of the material to a more practical size, the disposal of this material in a sanitary landfill becomes more practical.

Grant funds are also being used to demonstrate the feasibility of consolidating and centralizing the solid waste disposal facilities of Niagara County, New York (population 250,000) into one regional solid waste management under an established county agency. In addition this project will demonstrate the capabilities of a newly developed landfill compaction machine and will rehabilitate 13 existing disposal sites which are to be abandoned, therefore eliminating numerous existing nuisance conditions.

The requested increase of $546,000 in 1969 will provide a total of $5,546,000 for this grants activity, of which $4,300,000 will provide for 15 new and 19 continuing demonstration projects. The balance, $1,246,000 will allow for 12 new and 10 continuing survey projects. In 1968 there were 11 new and 9 continuing demonstration projects and 10 new and 16 continuing survey projects.

| | 1968 estimate | | 1969 estimate | | Increase or decrease | |
|---|---|---|---|---|---|---|
| | Number | Amount | Number | Amount | Number | Amount |
| (e) Planning grants, solid wastes | 41 | $2,000,000 | 41 | $2,000,000 | ---------- | |

Planning grants are designed to encourage sound State solid waste management planning programs, create interstate and regional planning programs, generate basic data, and develop the expertise necessary for effective national programs. They are made to State and interstate agencies and provide up to one half of the total project costs. The initial phase of the grant projects requires that the agencies gather basic data on the extent of the solid wastes problem and on the effectiveness of on-going programs within their geographic areas. The agencies then develop comprehensive long-range plans for meeting their solid waste problems. The plans will include not only appropriate consideration of the existing and projected solid wastes disposal needs but also take into consideration such related factors as the control of air and water pollution resulting from improper disposal operations, meaningful land-use planning, protection of the public health, and trends in population and industrial growth. To the fullest extent possible, these plans encourage inter-governmental cooperation.

The $2,000,000 requested in 1969 will permit the continuation of grants funded in 1968.

2. DIRECT OPERATIONS

| | 1968 estimate | | 1969 estimate | | Increase or decrease | |
|---|---|---|---|---|---|---|
| | Positions | Amount | Positions | Amount | Positions | Amount |
| Personnel compensation and benefits | 1,228 | $11,280,000 | 1,462 | $14,584,000 | +234 | +$3,304,000 |
| Other expenses | | 8,508,000 | | 9,556,000 | | +1,048,000 |
| Total | 1,228 | 19,788,000 | 1,462 | 24,140,000 | +234 | +4,352,000 |

SUMMARY OF PROGRAM

| | | | | | | |
|---|---|---|---|---|---|---|
| a. Solid wastes | 239 | $5,418,000 | 316 | $6,983,000 | +77 | +$1,565,000 |
| b. Occupational health | 327 | 4,434,000 | 367 | 5,302,000 | +40 | +868,000 |
| c. Injury control | 164 | 3,223,000 | 213 | 4,151,000 | +49 | +928,000 |
| d. Water supply and shellfish | 222 | 2,671,000 | 290 | 3,701,000 | +68 | +1,030,000 |
| e. Arctic health | 80 | 1,460,000 | 80 | 1,445,000 | | −15,000 |
| f. Special health protection | 196 | 2,582,000 | 196 | 2,558,000 | | −24,000 |
| Total | 1,228 | 19,788,000 | 1,462 | 24,140,000 | +234 | +4,352,000 |

| | 1968 estimate | | 1969 estimate | | Increase or decrease | |
|---|---|---|---|---|---|---|
| | Positions | Amount | Positions | Amount | Positions | Amount |
| a. Solid wastes | 239 | $5,418,000 | 316 | $6,983,000 | +77 | +$1,565,000 |
| (1) Research | 100 | 2,614,000 | 117 | 2,868,000 | +17 | +254,000 |

The Task Force on Environmental Health and Related Problems in its June 1967 report to the Secretary of Health, Education, and Welfare stressed the need for: (1) basic research into the health effects of waste and waste disposal techniques; and (2) a stepped-up research effort to secure breakthroughs in the reuse and disposal of solid, liquid and gaseous wastes. The President's Science Advisory Committee in its report "Restoring the Quality of Our Environment" and the National Academy of Sciences in its report "Waste Management and Control" have called for a new and redoubled effort to find better methods of alleviating the national solid waste burden, not merely by employing improved disposal techniques but also be developing techniques for the reduction of wastes.

In its efforts to be responsive to this national burden the Solid Wastes Program's research effort is directed towards the investigation of the impact of existing disposal practices on public health, and the development of new and improved techniques for the collection, utilization and disposal of solid wastes.

A recently completed project is particularly worthy of identification because it not only offers solutions to the intricate problems and health relationships of the railroad cars dismantling industry, but also offers new and improved techniques of structural demolition and resources recycling in other industries. In the railroad car industry open air burning, with attendant pollution problems, is the classical method used to separate wood and other combustibles from salvageable metals. Burning is a fast and inexpensive system. Other systems, regardless of health relationships, must be economically competitive if the railroad car industry, like many others using open burning, is to survive. Two potential solutions to the problem of salvage have been developed without open air-burning. One, a new concept, slices wood from railroad cars using high-pressure manually operated water jets. This method has many advantages besides the obvious ones concerned with health. The up-grading of steel and increasing the number and quality of salvage parts are of additional benefits to recycling concepts. The second method, applicable primarily to railroad cars, makes each car serve as its own incinerator. It involves the careful placement of openings in the car to develop a proper draft under a large steel hood. The railroad car is rolled under a hood, which is equipped with necessary smoke control devices, and the wood is then ignited. Ninety percent of the railroad cars now in existence may be salvaged through this process which removes the combustible materials without producing odor and smoke problems.

Another new concept developed is a solid waste power generation system. This project anticipates the utilization of heat, generated through incineration of solid

waste, as a direct producer of electric power, The heart of the project is a jet engine such as used on commercial airlines. The heat generated in the controlled burning process turns the jet engine blades, generating low cost electric energy. It is possible that such a method of refuse reduction-power generation could produce a revolution in incinerator construction producing electricity at lower cost and greater efficiency.

Investigation of specific health hazards associated with solid waste will receive additional emphasis in 1969. This project is oriented towards determination of pathogen survival rates under varying conditions as solid waste handling processes such as incineration and composting. Work to date indicates that incinerator residues and compost may serve as a reservoir of pathogenic organisms indigenous to a geographical area. Utilization and disposal of such materials could introduce health hazards in new sections of the country.

Another area in which increased effort will be made is the identification of waste materials having intrinsic value through reprocessing into useful materials. Millions of tons of nutritious organic liquid and solid waste are presently being disposed of by the processing and packaging industry. Most studies have centered on the large, readily identified groups of such materials resulting in projects such as citric acid from citrus wastes, animal feed from poultry litter, and the reclamation of basic starches and sugars from vegetable wastes. An estimated $96,000 and eight positions will be used to systematically identify the materials presently being disposed of, group them by related physical and chemical characteristics, and assess their potential for further reclamation studies.

The requested increase of $254,000 and 17 positions will provide for continuing ongoing research and expanding research in the areas indicated above.

| | 1968 estimate | | 1969 estimate | | Increase or decrease | |
|---|---|---|---|---|---|---|
| | Positions | Amount | Positions | Amount | Positions | Amount |
| (2) Training | 26 | $424,000 | 33 | $580,000 | +7 | +$156,000 |

Objectives of the training activity are to provide specialized training for professional personnel (enforcement officers, sanitarians, civil, chemical and mechanical engineers) representing agencies who have solid waste engineering and management responsibilities. Training health and health-oriented organizations to plan, conduct and assess their own solid wastes activities, and to provide operator and technician training are an integral part of this program. It is estimated that 3,000 professional and 300,000 non-professional personnel need basic information in the different aspects of solid waste storage, collection, disposal, planning and management. The requested increase of $156,000 and seven positions for 1969 will be used to expand the current activities designed to help meet this need. These resources will be used to increase the course offerings to approximately 12 courses covering 20 weeks of training from the 1968 level of 8 courses and 13 weeks of training. With this increase, it will be possible to train an estimated 850 persons as compared to 475 for 1968.

| | 1968 estimate | | 1969 estimate | | Increase or decrease | |
|---|---|---|---|---|---|---|
| | Positions | Amount | Positions | Amount | Positions | Amount |
| (3) Technical assistance | 80 | $1,582,000 | 121 | $2,535,000 | +41 | +$953,000 |

The demand for increased technical assistance from State, local, and industrial officials is growing as a result of the rising national awareness of past and present shortcomings in the field of solid waste management. During the first half of 1968, technical assistance teams have responded to over 125 requests for assistance and it is projected that for 1969 there will be approximately 500 requests from governmental and industrial agencies for information and assistance on solid waste problems. Questions range from straightforward requests, such as, "Who manufactures grinding equipment?", to rather complex ones, such as, "Who will accept the solid waste from my city?". The State Planning grant program has also intensified the need for extensive technical advice on such topics as methods of conducting surveys, application of survey information to the planning process, and guidelines for handling solid wastes.

The general objective of the technical assistance activity is to provide technical services and resources to State, regional and local agencies, private organizations, industrial and agricultural groups to help eliminate unacceptable solid waste management systems that are a threat to public health and welfare and are operated at a cost of approximately three billion dollars per year.

To progress towards this general objective the Center has developed a two pronged attack to be conducted over a minimum five year period by the Systems and Operations Planning Group and the Direct Technical Assistance Group.

The Systems and Operations Planning Group will expand its program, which provides the basic information necessary for the solution of State and local problems in the areas of State planning grant activities, develops model State and local legislation, and operates an acquisition and retrieval system of technical information. It will also develop and provide basic data relating to solid wastes generation, storage, collection and disposal and will develop computer-oriented mathematical models of solid wastes management systems applicable for study of community problems.

The Direct Technical Assistance Group will undertake to improve one fifth of the currently estimated 6,600 solid wastes collection and disposal systems in urban areas by direct consultation, studies, or surveys of specific problems. In addition it will develop manuals, standards, and guides for use by industrial and agricultural groups concerned with specialized solid waste management problems.

An increase of $953,000 and 41 positions is requested for the support of these activities in 1969.

| | 1968 estimate | | 1969 estimate | | Increase or decrease | |
|---|---|---|---|---|---|---|
| | Positions | Amount | Positions | Amount | Positions | Amount |
| (4) Demonstration development | 33 | $798,000 | 45 | $1,000,000 | +12 | +$202,000 |

A systematic study of the solid waste problem influenced the decision to exploit research and technical breakthroughs by means of full-scale demonstration projects, developed through the mechanisms of demonstration grants and demonstration projects conducted by program personnel. The ultimate goal of the demonstration activity is to reduce and eventually eliminate open dumps and similar unhealthy, insanitary, and unsightly disposal methods now used by approximately 4,600 urban communities in the United States by substituting acceptable methods as demonstrated by the demonstration projects, particularly with respect to encouraging regional approaches to the solid waste disposal problem. In approaching this goal, program personnel: (1) administer demonstration projects which encourage the application for new methods, techniques, and equipment for solid waste disposal; (2) stimulate wide-spread public and private agency participation in those types of demonstration grant projects which meet carefully defined needs of the solid waste field; and (3) prepare careful analyses and evaluations of the knowledge gained from such projects and make this information available nationally for use by those agencies and organizations who can profitably use it.

The requested increase of 12 positions and $202,000 in 1969 will be used to augment the professional staff assigned to the 56 survey and demonstration grants and the direct operations demonstration projects projected for 1969. The increase of 10 grants over the estimated 1968 level of 46 grants require a professional staff to conduct systematic technical and engineering reviews of proposed survey and demonstration grants; to make feasibility studies, preliminary site visits and evaluations before such grants are initiated; to review construction, and provide the necessary liaison with grantees or contractors after they are under way.

The Joint PHS–TVA Composting project, Johnson City, Tennessee, a direct operations project, is completing its first full year of operation during 1968. This operation will continue in 1969 through research on the public health implications of using compost made from municipal refuse and raw sewage sludge. A new project, designed to develop techniques for improved thermal reduction of solid wastes, will be initiated during 1969 at the University of West Virginia. Little improvement has been made in incinerator technology over the past several decades and full understanding of the many principles involved is essential to needed improvement.

The net budget increase of $1,565,000 results from a program increase of $1,497,000 offset by a built-in decrease of $62,000 due to the changes in financing of the management fund, and an increase of $130,000 for other built-in items of increase and decrease. These items include the additional day of pay in 1969, the annualization of positions new in 1968 and of military and civilian pay raises, and nonrecurring decreases.

| | 1968 estimate | | 1969 estimate | | Increase or decrease | |
|---|---|---|---|---|---|---|
| | Position | Amount | Position | Amount | Position | Amount |
| b. Occupational health | 327 | $4,434,000 | 367 | $5,302,000 | +40 | +$868,000 |
| (1) Research | 224 | 3,254,000 | 264 | 4,077,000 | +40 | +823,000 |

During 1969 research activity will continue at the same level as 1968 in the fields of occupational respiratory diseases, asbestos, beryllium, and the general research area. The only increase in 1969 will be in the uranium research activity.

The study of the working environment of underground uranium mines has revealed potentially hazardous exposures from internal radiation due to the inhalation of radon and its daughter products. While biological effects on other body tissues are possible, most of the deleterious health effects which have been observed are found in the lungs. Excess lung cancer rates have been demonstrated among uranium miners. The time lag between the start of mining and diagnosis of lung cancer ranges from seven to forty years, with a median of approximately twenty years. Until 1963 there was little indication of excessive mortality rate from lung cancer. At that time the rate of incidence began to climb markedly. Currently there have been approximately 100 reported deaths due to respiratory cancer among the uranium mining population. At present there are 2,200 miners actively engaged in underground mining. The number of miners who have already been exposed is approximately 10,000. Program projections now indicate, however, that the problem is in its early stages and that between 600 and 1,100 uranium miners will die as a result of exposure to radon.

The 1969 estimate for uranium research is $856,000 and 49 positions compared to $116,000 and nine positions in 1968. The 1969 budget will enable the program to pursue studies in three major areas assigned to the Public Health Service by "The Inter-Departmental Committee on Research and Development on Uranium Miners." The August 24, 1967 report of this Committee charged the Public Health Service with directing its efforts toward:

> Epidemiological studies of health hazards associated with uranium mining. The current epidemiologic study has clearly demonstrated an association between excess mortality from lung cancer and exposure to radon daughters, and has suggested the existence of an exposure-response relationship with radon daughters. Currently unanswered questions include the precise definition of exposure-response relationship, relationship of exposure to actual dose relationship of exposure level and duration to development of lung cancer, and other questions such as duration of latent period, relationship of other carcinogenic agents such as smoking, age, race, and associated morbidity and mortality. To answer these questions, study groups will be expanded or developed from a current study group on 5,370 uranium workers, low exposure groups (hard-rock metal miners), underground miners with known exposures (potash miners), miners just entering the uranium industry with low exposures, and analysis of already available data on mining groups.
>
> Medical studies to develop early diagnostic tests and bioassay procedures for evaluating exposures. Intensive studies will be made of known and suspected cases of lung cancer among uranium miners and other individuals within study groups. The main efforts in this area will be devoted to increasing the frequency and evaluating the use of sputum cytology as a diagnostic aid, determining the effects of removal from exposure of miners with suspicious cytology, studies to determine if exposure has resulted in biological effects other than lung cancer, and in hospital evaluation, treatment, and medical follow-up of patients with respiratory cancer or suggestive sputum cytology.
>
> Evaluation of control measures in terms of significance to disease prevention. A continuing responsibility of the Public Health Service will be this evaluation of the effectiveness of control measures. Data so obtained, much of which will be obtained from other agencies involved, is essential for the

epidemiologic and research studies of all Federal and State agencies. Evaluations will include improvement made in mine atmospheres, personal protective devices, personal dosimeters, air monitoring methods and the characteristics of mine air. All evaluations will be made with respect to reduction of exposures to miners and related health effects.

Basic investigations into the cause and prevention of occupational respiratory diseases of soft coal miners will be continued during 1969 at the same level as during 1968 with $1,227,000 and 77 positions. Cardiopulmonary studies and biochemical studies will be conducted on approximately 200 miners. Full-time field studies designed to uncover environmental factors contributing to coal worker's pneumoconiosis will also be continued. These studies will assess the role of infectious disease organisms and will evaluate air contaminants in mines and communities with different prevalences of pneumoconiosis.

Research in beryllium is designed to establish safe levels of exposure for the estimated 500,000 workers directly exposed. During 1969 surveys will be conducted tc determine the environmental exposure of 2,000 beryllium workers and will include a medical examination of each worker. A records study of 8,000 former beryllium workers will be continued in order to establish mortality patterns in relation to exposure.

Asbestos research is designed to establish safe levels of exposure for the estimated 3.5 million workers exposed to asbestos fibers and dusts. During 1969 air sampling surveys will be conducted in factories employing 8,000 people. Physical examinations will be administered to 1,000 of these people. The social security records of 20,000 asbestos workers will be analyzed to determine excess mortality rates.

Research activities during 1969 will continue in toxicology, pathology, physiology, occupational medicine, and engineering and chemical analysis. Studies of the physical environment will emphasize noise, radiant energy, and thermal stress. Studies in noise will be aimed toward the identification and evaluation of noise effects on hearing, total health, productivity and well-being, as well as the promotion of effective control methods. Laboratory research will be conducted to determine the effects of impact-type noise on hearing, safety and physiological functions.

| | 1968 estimate | | 1969 estimate | | Increase or decrease | |
|---|---|---|---|---|---|---|
| | Positions | Amount | Positions | Amount | Positions | Amount |
| 2) Training | 20 | $221,000 | 20 | $232,000 | ..... | +$11,000 |

The primary objectives of the training activity are to strengthen the competency and increase the trained manpower pool of State and local governmental agencies which represent a focal point for controlling occupational hazards in today's industry. These objectives include the following activities: (1) upgrading training courses and (2) consultation and assistance, including the development of training manuals and aids for State, local and industrial training programs.

Short-term training will be provided to 450 occupational health personnel in 1968. It is anticipated that approximately the same number of professional personnel will receive training during 1969. Of this number, 140 will receive broad-based training which will enable them to undertake professional responsibilities and 310 will receive refresher training or courses in new and specialized techniques.

| | 1968 estimate | | 1969 estimate | | Increase or decrease | |
|---|---|---|---|---|---|---|
| | Positions | Amount | Positions | Amount | Positions | Amount |
| (3) Technical assistance | 83 | $959,000 | 83 | $993,000 | ..... | +$34,000 |

Technical assistance during 1969 will be directed toward improving the working environments for 160,000 workers involved in such processes as lasers, polyurethane, and zinc smelting industries. Assistance will be provided to State and local regulatory agencies, labor unions, management, and private citizens. The working environment of 350,000 workers will be evaluated and used to

supplement existing information to form the nucleus of a national surveillance network. This information will provide base line data for measuring the impact of occupational health programs, pinpointing occupational health problems, and defining areas of greatest need. Various services will be provided to workers and industry through the Employee Health Service function, the Clinical Service function, and the Scientific Reference Service. The assistance given to States through direct and liaison activities will benefit an estimated four million workers. Results of recommendations and suggestions made through technical assistance activities will be obtained by means of follow-up surveys.

The net budget increase for the occupational health program of $868,000 results from a program increase of $739,000 offset by a built-in decrease of $93,000 due to the change in financing of the management fund and an increase of $222,000 for other built-in items of increase and decrease. These items include the additional day of pay in 1969, the annualization of positions new in 1968 and of military and civilian pay raises, and nonrecurring decreases.

| | 1968 estimate | | 1969 estimate | | Increase or decrease | |
|---|---|---|---|---|---|---|
| | Positions | Amount | Positions | Amount | Positions | Amount |
| c. Injury control | 164 | $3,223,000 | 213 | $4,151,000 | +49 | +$928,000 |

The research activities of the Injury Control program are directed toward finding more definitive and practical information on the causes and ways of preventing fatal and disabling injuries. They focus on the physical, physiological, and psychological characteristics of man in relation to the things he does, the tasks he must perform, and the factors in his environment which cause injury either to himself or to others. This program of directed research is conducted by surveillance teams in the field, personnel at program headquarters and an associated field laboratory, and by contracts and cooperative agreements with universities, hospitals and private organizations expert in this field. The technical information obtained provides working knowledge for other Federal, State, and local governmental agencies which are encouraged to adopt the prevention and control techniques developed.

In 1969, work will be initiated toward implementing the 1967 amendments to the Flammable Fabrics Act (PL 90–189). The Act directs the Secretary of Health, Education, and Welfare to conduct a continuing study and investigation of deaths, injuries, and economic losses resulting from accidental burning of products, fabrics, or related materials leading to the establishment of standards for the prevention of such injuries. Since the formulation of the standards, their evaluation, and to some extent, their enforcement is dependent upon the findings and recommendations of this program, this work will receive emphasis in 1969.

To implement this Act, 40 field investigators will operate in small surveillance teams of 3 to 5 members each to personally investigate and report on burns associated with flammable fabrics and materials in representative areas of the Nation. They will collect data to (1) permit the identification, analysis, and tracing of actual materials involved in the burn; (2) obtain factual data on the economic, social, and psychological impact of such injuries on the person and his family; (3) determine the controllable element which could lead to effective standards; (4) identify associated conditions in the environment which contribute to the problem. A staff of 9 professional personnel will be required to plan and direct operation and process information from these teams. In addition to on-the-scene studies and investigation of burns, a major study will be made of the economic drain on the Nation's health and welfare resources as a result of burn injuries. An increase of $514,000 is requested to conduct these burn studies of which $364,000 will be for the direct investigation of burns and $150,000 will be for study of the cost of burns and the benefits achieved from a control program.

In 1969 a significant effort will be made to improve findings as to the influence of osteoporosis in causing fall accidents, especially in elderly people, and to determine ways of maintaining bone strength and improving bone mending. From this contractual study, it is anticipated that either preventive or control measures to lower the accident rate from falls can be attained. An increase of $207,000 is requested for this research.

Asphyxiation is the cause of many deaths, especially in association with fires where fatalities are listed as being due to "smoke inhalation". In 1969 the elements produced by the combustion of a variety of common materials will be studied to

determine what toxic substances are involved, and how to develop warning systems for use in homes, apartments, and hotels to alert residents. An increase of $207,000 is requested.

Burns, fractures, poisoning, suffocation, shock, and piercing injuries—particularly in and around the home—will continue to be examined. Examples of preventive or control measures that have been developed or evolved from similar investigations are the recommendations to industry to improve the quality of glass used in glass doors, to improve the design and operation of lawnmowers, and the movements toward public enlightenment concerning the hazards of refrigerator entrapment, plastic bag suffocation, and improper use of regular household appliances and equipment.

Two surveillance teams, in Denver and Boston, have demonstrated the effectiveness of collection and analysis of data regarding accidental injuries and deaths in major metropolitan areas. They will continue gathering information on accidents from fire, explosions, drownings, and traffic. In 1969 these teams will devote increasing attention to the relationship of consumer product design to injury potential, in order to identify present and emerging hazards of this type.

Other continuing research includes the study of normal and abnormal behavior of people driving automobiles. Laboratory studies in a controlled situation will single out factors of stresses and human behavioral elements which might involve the danger of driving accidents. Under simulation conditions, the effects of drugs and medical disabilities on driving will also be studied.

Training in injury control is provided to State and local public health personnel. Health workers have the capability and opportunity to make important contributions toward reducing accident mortality and morbidity, but if they are to be most effective, they must understand injury control and be aware of available information. This program provides training necessary to achieve these objectives.

Methods for improving and expanding community training resources are developed, including visual aids in the form of exhibits, brochures, films, and radio and television materials. Regional seminars and intensive short courses will continue to be provided. Special courses are being developed in the investigation of deaths and injuries associated with flammable fabrics.

The general objective of technical assistance is to provide agencies, organizations, and individuals working in States and communities with the information, technical aids, and professional consultative services necessary to establish and carry out activities that will actually bring about individual protection from accidental deaths and injuries. Principal emphasis, at this time, is on prevention of the accident or a minimization of its consequences. Burns, fractures, drowning, asphyxiation, poisoning, and injuries or deaths from electrical sources will be the major areas of attention in 1969, with special attention being devoted to injuries associated with household products.

Over half of the States now are conducting formal injury control programs with at least one staff member devoting full time to directing and coordinating the activities. The Public Health Service assigns personnel, as necessary, on a full time basis to State and local health offices to assist these program activities. At present, there are 23 Public Health Service professional injury control field personnel rendering technical services to State and local health departments. Eleven work directly in State or local offices and 12 in regional offices.

The net budget increase of $928,000 results from a program increase of $910,000, offset by a built-in decrease of $13,000 due to the change in financing of the management fund and an increase of $31,000 for other built-in items of increase and decrease, These items include the additional day of pay in 1969 and the annualization of positions new in 1968 and of military and civilian pay raises.

| | 1968 estimate | | 1969 estimate | | Increase or decrease | |
|---|---|---|---|---|---|---|
| | Positions | Amount | Positions | Amount | Positions | Amount |
| d. Water supply and shellfish | 222 | $2,671,000 | 290 | $3,701,000 | +68 | +$1,030,000 |
| (1) Water supply | 70 | 924,000 | 138 | 1,971,000 | +68 | +1,047,000 |

The objective of the Water Supply program is to assure the citizens of this Nation a safe potable drinking water supply and water of healthful and beneficial quality for all other water uses. Human health aspects associated with pollution of water in relation to the various uses are numerous, complex, and certainly to date have not been adequately pursued. Technological progress continually

creates new contaminants that must be evaluated. Restrictive limits for many of the new materials or for low-level chemical contaminants found in drinking water supplies are, however, difficult to establish because of the gap in our knowledge regarding acute and chronic physiological effects on humans. In some cases the analytical procedures and treatment technology need improvement to make the standard practical and enforceable.

Of equal concern is the need to determine whether or not the barriers guarding against biological contamination of drinking water supplies are being strained to the breaking point. To what degree time-tested supply safeguards and safety factors have been reduced to dangerous levels poses a vital question. Little is actually known of quantitative procedures for isolating pathogens from water, and of the infectious dose of many pathogens that reach our water intakes. Current extensive experimentation with, and the eventual need for, waste water re-use with resultant increase of biological hazards as well as buildup of chemical contaminants, imposes on the Public Health Service the responsibility for determining the health hazard potential. The Service is equally responsible for assuring that meaningful indicator indices are developed and used in assessing the impact of water renovation on human health.

Of the requested increase, $738,000 and 48 positions will provide additional research and development resources pertaining to water quality, including refinement of meaningful potable water standards. Investigations will include the development of improved methods for the identification and measurement of organic matters and trace elements occurring in drinking water supplies, epidemiological and toxicological studies to determine the significance of organic material and trace elements in relation to human health, development of suitable methods for the removal of harmful trace contaminants, determination of human health effects of water that has been renovated from polluted sources, and initiation of development of rapid determinable tests to assure public drinking water supplies of good quality.

In recognition of the rapidly expanding demands for water throughout the Nation, Congress established, through the 1965 Water Resources Planning Act, a national policy of conservation, development, and utilization of water and related land resources of the Nation. Eighteen comprehensive framework studies, coordinated by the Water Resources Council, have been proposed or are now in progress. These framework studies are to provide basic information for implementation of the national policy in the development of our water resources for the next fifty years.

In accordance with the interdepartmental agreement concerning health aspects of water resources control approved by the President on September 1, 1966, DHEW is required to have representation on the Water Resources Council and its various framework study commissions and other planning groups. Federal agencies planning and/or constructing water resource projects expect review and comment by DHEW on the health aspects of such developments. An increase of $300,000 and 20 positions will permit programming to meet immediate priority responsibilities under the Water Resources Planning Act. The increase will permit strengthening the Regional technical staff for project reviews and other program functions to insure adequate consideration of the public health aspects of water resources planning. Increased funding will permit the development of public health guidelines for the use of water pollution control and water resources development agencies, development of public health inputs in the form of comprehensive health aspects appendices for inclusion in the national planning effort being made in framework and other studies, and development of technical assistance capabilities utilizing research and surveillance data on water pollution and diseases.

Under the provisions of the Interstate Quarantine Regulations, the Public Health Service is responsible for inspecting and certifying water supplies used by interstate and foreign public conveyances in the United States. Responsibility for certification of interstate water supplies involves regular sanitary engineering inspections and evaluation of approximately 780 public water supply systems serving some 92,000,000 local populace and 2,000,000 interstate travelers daily. Surveys are made by Public Health Service personnel of the source, treatment processes, storage, distribution system, and supporting laboratory services of State health departments and local water suppliers. Certification and regulatory activities will be continued at the same level in 1969.

| | 1968 estimate | | 1969 estimate | | Increase or decrease | |
|---|---|---|---|---|---|---|
| | Positions | Amount | Positions | Amount | Positions | Amount |
| (2) Shellfish | 152 | $1,747,000 | 152 | $1,730,000 | ..... | —$17,000 |

Technical audit of State shellfish control programs by the Public Health Service is the keystone of the National Cooperative Federal-State Industry shellfish program, a program designed to insure that shellfish shipped in interstate commerce are a safe food item. In making these audits the PHS inspects 860 of the 1,300 shippers or packers; evaluates complex sanitary engineering and oceanographic surveys of 447 growing areas covering 8.2 million acres in 21 States; evaluates marine patrol of 445 polluted areas covering 2.0 million acres of the Nation's estuarine waters; and evaluates laboratory procedures used in these States in support of State control programs. Surveillance and monitoring activities provide for sanitary control of shellfish resources on the Federally-controlled continental shelf (35% of the total U.S. production). Certification and regulatory activities will be continued at the same level as in 1968.

In 1969, the shellfish sanitation research program will continue providing scientific data required for maintenance of effective controls to prevent transmission of disease agents through marine foods, notably shellfish. Emphasis will parallel problems associated with natural and man-made contaminants, both chemical and microbiological, of estuaries. Attention will continue to be given to controlled laboratory studies on the uptake, retention, and elimination of potentially toxic agents in order to establish or validate safe limits for estuarial water and shellfish. Laboratory, pilot plant, and field studies will be directed toward survival of human disease-causing viruses in estuaries and their uptake, retention, and depuration by shellfish; development of accurate laboratory methods for assay of industrial wastes, naturally occurring marine toxins, pesticides, viruses, bacteria, and other similar disease-causing microorganisms in shellfish; ecology, biogenesis and detoxification of marine toxins; refinement of methods for the depuration and/or detoxification of shellfish; and evaluation of new or modified production, harvesting, processing, and distribution practices on the final sanitary quality of shellfish.

The net budget increase for the water supply and shellfish program of $1,030,000 results from a program increase of $1,055,000 offset by built-in decrease of $85,000 due to the change in financing the management fund and an increase of $60,000 for other built-in items of increase and decrease. These items include the additional day of pay in 1969, the annualization of positions new in 1968 and of military and civilian pay raises, and nonrecurring decreases.

| | 1968 estimate | | 1969 estimate | | Increase or decrease | |
|---|---|---|---|---|---|---|
| | Positions | Amount | Positions | Amount | Positions | Amount |
| e. Arctic health | 80 | $1,460,000 | 80 | $1,445,000 | ..... | —$15,000 |

The Arctic Health Research Laboratory conducts scientific investigations of problems affecting human health in arctic and cold weather climates. Field and laboratory research is gradually providing scientific data needed to delineate the health hazards of living in such climates and to control or provide protection against these hazards. Such an ecologic approach carries out, in one area, the urban, industrial environmental concepts embodied in the National Center for Urban and Industrial Health.

In 1968 the Laboratory started work in its new research facility at College, Alaska. An increase of $156,000 in 1968 permitted expansion of investigations in certain areas. These include disease transmission from animals to man, mechanisms of physiological adaptation to cold, metabolic diseases and neurological disorders associated with extremely cold climates, and environmental problems such as solid wastes and water supply affecting healthful living in such climates.

This work will continue in 1969. Other studies conducted by the laboratory relate to nutritional disease, the health hazards of insects in a cold climate, epidemiological studies of problems peculiar to arctic conditions, such as otitis media and its relation to hearing loss, and the ecology of respiratory viruses.

The net decrease of $15,000 results from a built-in decrease of $23,000, due to the change in financing of the management fund and an increase of $8,000 for other built-in items of increase and decrease. These items include the additional day of pay in 1969, the annualization of positions new in 1968 and of military and civilian pay raises, and nonrecurring decreases.

| | 1968 estimate | | 1969 estimate | | Increase or decrease | |
|---|---|---|---|---|---|---|
| | Positions | Amount | Positions | Amount | Positions | Amount |
| f. Special health protection | 196 | $2,582,000 | 196 | $2,558,000 | ..... | —$24,000 |

In the area of housing hygiene, emphasis will be placed on providing assistance to ten of the sixty-three model cities for solving unhealthful housing hygiene problems. Only a small portion of our population is protected by adequate housing codes. Health Educator Aides will be selected from ghetto areas and will be trained in four of the fourteen Neighborhood Services Programs to work within their neighborhood. This represents a direct way of bridging the community gap with the slum neighborhood.

The continuing population growth on the U.S.-Mexico border requires appropriate sanitation measures to correct and prevent public health hazards. Since the beginning of comprehensive environmental health sanitation along the border in 1966, considerable progress has been made through demonstrations and training activities. In 1969 demonstrations will continue to be directed at food protection, housing hygiene, and general urban sanitation. Monthly training sessions will include personnel from both sides of the border.

Research on the causes and means or prevention of food-borne illnesses will include studies on the occurrence and control of food contamination by pathogenic microorganisms, natural poisons, chemical residues, and indicators of insanitary conditions to develop measures for controlling these substances in food. New microbiological, serological, and chemical assay techniques for examining foods will continue to be developed and recommended for use by food protection agencies.

Technical assistance in food protection is given via standards development and direct consultations. Examples are the standards development for fluid milk and the machine vending of food and beverages, from which associated illnesses have been virtually eliminated. Epidemiologic investigations continue to identify or associate the transmission of certain diseases with specific foods and food processes such as salmonellosis with egg products, dry milk and smoked fish; and botulism with smoked fish. During 1969 public health standards and criteria will continue to be refined to reduce and eliminate health hazards associated with certain foods and food processes.

Activities in interstate quarantine protect the health of 2,000,000 people who travel daily in this country on airplanes, buses, trains, and ships. These are carried out by surveillance, inspection, and certification of food sources and service, watering points and waste disposal activities of the carriers, and by engineering review and approval of construction plans. The advent of the high speed trains and jet planes will result in an increase in travelers who must be protected from the health hazards of transportation. Surveillance is also exercised over safe packaging and shipment of etiologic agents by manufacturers and laboratories. Technical assistance is provided to the Department of Defense in evaluating and approving the design of their shipment containers for etiologic agents.

The net budget decrease of $24,000 results from a built-in decrease of $74,000 due to the change in financing of the management fund, and an increase of $50,000 for other built-in items of increase and decrease. These items include the additional day of pay in 1969 and the annualization of military and civilian pay raises.

NEW POSITIONS REQUESTED, FISCAL YEAR 1969

| | Grade | Annual salary |
|---|---|---|
| Solid wastes: | | |
| Engineer | GS–15 | $18,404 |
| Epidemiologist | GS–15 | 18,404 |
| Sociologist | GS–15 | 18,404 |
| Statistician | GS–15 | 18,404 |
| Ecologist | GS–15 | 18,404 |
| Virologist | GS–15 | 18,404 |
| Public health program specialist | GS–15 | 18,404 |
| 6 engineers | GS–14 | 95,046 |
| Engineer | GS–13 | 13,507 |
| Information specialist | GS–13 | 13,507 |
| 2 training specialists | GS–12 | 22,922 |
| Urban planner | GS–12 | 11,461 |
| Statistician | GS–12 | 11,461 |
| 2 economists | GS–12 | 22,922 |
| Soil scientists | GS–12 | 11,461 |
| Engineer | GS–12 | 11,843 |
| Chemist | GS–11 | 10,945 |
| Biologist | GS–11 | 9,657 |
| 2 statisticians | GS–11 | 19,314 |
| 3 technicians | GS–9 | 24,162 |
| Chemist | GS–9 | 9,399 |
| Writer editor | GS–9 | 8,054 |
| 2 technicians | GS–7 | 13,468 |
| Secretary | GS–5 | 5,565 |
| 2 clerks | GS–5 | 11,130 |
| 8 clerks | GS–4 | 39,960 |
| 5 clerks | GS–3 | 22,330 |
| 2 clerks | GS–2 | 8,216 |
| Commissioned officers: | | |
| 2 director grade | | 26,863 |
| 5 senior grade | | 51,875 |
| 5 full grade | | 42,975 |
| 7 senior assistant grade | | 41,608 |
| 6 assistant grade | | 29,412 |
| Total (77) | | 717,891 |
| Occupational health: | | |
| Medical officer | GS–14 | 17,953 |
| Engineer | GS–13 | 13,507 |
| 2 medical officers | GS–13 | 32,414 |
| Biochemist | GS–13 | 13,507 |
| Industrial hygienist | GS–13 | 13,507 |
| Chemist | GS–12 | 11,843 |
| 3 medical officers | GS–12 | 41,259 |
| 2 industrial hygienists | GS–12 | 23,686 |
| Chemist | GS–11 | 10,945 |
| Biochemist | GS–11 | 10,945 |
| 2 engineers | GS–11 | 21,890 |
| 2 chemists | GS–9 | 18,798 |
| Engineer | GS–9 | 9,399 |
| 3 industrial hygienists | GS–9 | 28,197 |
| 3 chemists | GS–7 | 24,252 |
| Management trainee | GS–7 | 6,734 |
| Secretary | GS–5 | 5,565 |
| Physical science aide | GS–5 | 5,565 |
| 2 technicians | GS–5 | 11,130 |
| Secretary | GS–4 | 4,995 |
| Physical science aide | GS–4 | 4,995 |
| 2 physical science aides | GS–3 | 8,932 |
| 4 clerks | GS–2 | 16,432 |
| Ungraded: 2 automatic equipment operators | WB–8 | 11,980 |
| Total (40) | | 368,430 |

NEW POSITIONS REQUESTED, FISCAL YEAR 1969—Continued

| | Grade | Annual salary |
|---|---|---|
| Injury control: | | |
| Statistician | GS–14 | $15,841 |
| Do | GS–13 | 13,507 |
| 3 public health advisers | GS–13 | 40,521 |
| 3 statisticians | GS–12 | 34,383 |
| 2 public health advisers | GS–12 | 22,922 |
| Sociologist | GS–12 | 11,461 |
| Statistician | GS–11 | 9,657 |
| 3 public health analysts | GS–11 | 28,971 |
| 2 public health advisers | GS–11 | 19,314 |
| 3 public health advisers | GS–9 | 24,162 |
| Computer programer | GS–9 | 8,054 |
| Staff assistant | GS–9 | 8,054 |
| 3 statisticians | GS–9 | 24,162 |
| Statistician | GS–7 | 6,734 |
| Public health analyst | GS–7 | 6,734 |
| 3 staff assistants | GS–7 | 20,202 |
| 3 clerks | GS–5 | 16,695 |
| Do | GS–4 | 14,985 |
| 2 clerks | GS–3 | 8,932 |
| 5 clerks | GS–2 | 20,540 |
| Commissioned officers: | | |
| Full grade | | 9,616 |
| 2 senior assistant grade | | 13,348 |
| 3 assistant grade | | 15,551 |
| Total (49) | | 394,346 |
| Water supply and shellfish: | | |
| Chemist | GS–13 | 13,507 |
| Educational specialist | GS–13 | 13,507 |
| Engineer | GS–13 | 13,507 |
| Epidemiologist | GS–13 | 13,507 |
| Microbiologist | GS–13 | 13,507 |
| Chemist | GS–12 | 11,461 |
| 2 microbiologists | GS–12 | 22,922 |
| 4 technicians | GS–9 | 32,216 |
| 2 chemists | GS–9 | 16,108 |
| Engineer | GS–9 | 8,054 |
| Nurse | GS–9 | 8,054 |
| 2 technicians | GS–5 | 11,130 |
| 6 secretaries | GS–5 | 33,390 |
| Clerk | GS–5 | 5,565 |
| 6 secretries | GS–4 | 29,970 |
| Animal caretaker | GS–3 | 4,466 |
| Commissioned officers: | | |
| 2 director grade | | 26,863 |
| 6 senior grade | | 62,252 |
| 15 full grade | | 128,925 |
| 8 senior assistant grade | | 47,550 |
| 5 assistant grade | | 24,510 |
| Total (68) | | 540,971 |
| Total new positions, all activities (234) | | 2,021,638 |

## Biographical Sketch

Name: Jerome H. Svore.

Position: Director, National Center for Urban and Industrial Health.

Birthplace and date: Norway, Kansas, December 29, 1911.

Education: Bachelor of Science in Mechanical Engineering, University of North Dakota, 1934; Master's Degree in Sanitary Engineering, Harvard University, 1940; Professional Engineer Degree (honorary), University of North Dakota, 1949.

Experience: 1958–67, Directed Federal water pollution control activities in the South Central United States carried out initially by the Division of Water Supply and Pollution Control of the Public Health Service and subsequently by the Federal Water Pollution Control Administration; 1957–1958, Executive Secretary, Columbia Basin Interagency Committee; 1953–1957, Director of Public Health, North Dakota State Department of Health; 1945–1953, Chief Sanitary Engineer, North Dakota State Department of Health; 1938–1945, Sanitary Engineer, North Dakota State Department of Health; 1934–1938, Field Engineer, Federal Emergency Construction Program.

Association memberships: American Public Health Association, Water Pollution Control Federation, American Water Works Association, Sigma Xi, National Society of Professional Engineers, National Academy of Sanitary Engineers.

NATIONAL CENTER ESTABLISHMENT AND MISSION

Senator HILL. Now the National Center for Urban and Industrial Health. You may proceed.

Mr. SVORE. Thank you, Mr. Chairman, and members of the committee.

A little over a year ago, the Public Health Service established the National Center for Urban and Industrial Health. Its mission is to prevent illness and injuries and control environmental hazards in our cities and protect the health of this Nation's workers at their jobs.

The Center, since August 1, 1967, has had its national headquarters in Cincinnati, Ohio, together with its principal research, technical assistance and training facilities.

A coordinated approach is being undertaken to deal with the following problems: pollution from the insanitary disposal of refuse and other solid waste; health protection for the employed population; prevention and control of accidental injuries in the home and on the highway; the safety of our drinking water and our food; the sanitation of the Nation's housing, particularly in the urban ghettos; the planning of a healthy environment for our future cities; and health problems encountered by special populations, including arctic health.

Senator BARTLETT. You have a full-time job.

Mr. SVORE. Yes, sir.

Senator HILL. You have enough to keep you busy anyway, haven't you?

Mr. SVORE. Yes, sir.

ATTACK ON SOLID WASTES

Senator HILL. You certainly have with all that.

Mr. SVORE. The recently inaugurated Federal program to attack the problem of solid wastes concerns just about every community in the Nation.

For each person in the United States, an average of 5 pounds of solid waste is thrown away each day. Much of it is threatening health by polluting the air when it is burned or befouling our land and water through dumping.

We will expand efforts to find more sanitary and efficient techniques to dispose of the 165 million tons of solid waste discarded each year.

Senator HILL. What is the effect on agriculture?

Mr. SVORE. We are doing considerable work in the disposal of agricultural waste. It is a major problem.

Senator HILL. Agricultural waste is a major problem?

Mr. SVORE. That is right. We estimate that it amounts to at least a billion tons per year. We are supporting research and demonstration projects throughout the country to develop these techniques, and many of them are highly imaginative. For example, one researcher in Palo Alto, Calif., hopes to create heat from the incineration of solid wastes to drive a jet engine generating electric power.

In Chicago, as another illustration, sludge will be transported by pipeline to fertilize farmland in Will County, Ill. We are also helping to finance a model sanitary landfill to replace Kenilworth dump in Washington, D.C., and provide an area for recreational land use; a study of rail haul of waste from big cities to abandoned mines; a study in Madison, Wis., on reducing the volume of refuse by grinding;

and at the University of Pennsylvania a study on the use of pipelines to collect solid wastes.

### OCCUPATIONAL HEALTH

A large majority of our working force lacks adequate health protection and services. Many are exposed to excessive amounts of harmful contaminants, some of which are known to cause respiratory diseases and toxic illnesses.

For example, about 100 uranium miners have died of lung cancer due to exposure to radon gas and its radioactive decay products, and many more will die unless preventive measures are taken.

Senator HILL. They died within what period of time?

Mr. SVORE. This has happened within the last decade and many more will die unless preventive measures are taken.

Increased research emphasis will be undertaken in this area during the coming year. Other workers have been exposed to health hazards from industrial processes associated with asbestos and beryllium. Coal miners have suffered pneumoconiosis, a major occupational disease in the coal industry which is being studied at our laboratory for occupational respiratory disease at Morgantown, W. Va. We are also concerned with approximately 7 million workers who may be exposed to noise hazardous to hearing.

Senator HILL. Where would those workers be?

Mr. SVORE. In all types of industries, especially the heavy industry where the noise level is excessive.

### INJURY CONTROL

One of the most baffling and serious health problems in our country is accidental injuries. Fifty-two million Americans—one-fourth the population—are injured annually in accidents at home, at work, on the highways, and elsewhere.

More than one hundred thousand of them die. Injury control activities are directed to elimination of hazards in the envorinment that lead to accidents. Recent recommendations of the President's Advisory Committee on Consumer Protection and the 1967 amendments to the Flammable Fabrics Act have focused attention on injuries, especially burns. Our studies will emphasize the collection and analysis of data on burns and other injuries as a basis for improvement of standards related to the flammability of fabrics and other consumer products. We will also be studying the behavior of people under stress conditions using driving simulators at our Human Behavior Laboratory in Providence, R.I.

### WATER SUPPLY

The effects on human health of organic materials and trace elements in drinking water supplies have not yet been fully determin d. Of equal concern is the need to determine whether or not the existing treatment techniques which guard against biological contamination of water supplies are being strained to the breaking point.

The human health aspects of water pollution and the potential use of reclaimed sewage for drinking water require careful evaluation to establish a sound technological basis for the development of mean-

ingful standards for the Nation's drinking water supplies. Our research effort in 1969 will place a high priority on seeking solutions to these problems.

Adequate consideration of public health implications in planning water resources development are important to the Nation's future well-being.

Our plans for the next year include increased participation in the river basin planning activities of the Federal Water Resources Council, provided for in the Water Resources Planning Act, to assure adequate consideration of the public health aspects of water resources planning.

### SPECIAL HEALTH PROTECTION

In the area of significant health problems associated with housing hygiene, the Center will provide technical assistance to agencies directly concerned with urban housing, with particular attention to the need for home as well as neighborhood standards for slum areas.

As an illustration of this kind of work, we have supported a project in the Chicago slums aimed at instructing ghetto residents in sanitation and health techniques.

Changing patterns in transportation, such as superjets carrying hundreds of people, pose new concerns for health protection of passengers and crew.

Under the interstate quarantine regulations, review of the sanitary features of common carrier design helps provide this protection. Carriers' food and water sources are also periodically inspected and approved.

Our milk and food research seeks ways and means of reducing the incidence of foodborne disease. The voluntary cooperative State-PHS program for the certification of interstate milk shippers, which has proven an effective safeguard for interstate milk shipments, will continue its important work.

Senator HILL. A lot of milk is not interstate.

Mr. SVORE. Yes, but much of it does. We have interstate cooperative agreements among 47 of the States. This is a voluntary operation.

### ARCTIC HEALTH

This past summer the principal research facility of the Arctic Health Research Laboratory was moved from Anchorage to Fairbanks, Alaska. The scientific investigation conducted there into health problems of extremely cold climate is an example of our approach to the environmental health problems of special areas or population groups. We plan to develop a similar ecological approach to the Appalachian region.

Senator HILL. Are you going to get your funds from the Appalachia fund?

Mr. SVORE. No; we have the start of this at a facility in Morgantown, W.Va., now. We have authorization for it.

The work in Alaska already represents a significant contribution to the understanding and solution of health problems in that area. The new facility will provide improved resources for this work.

The problems are varied and complex. They represent a challenge to both scientific and managerial skills to find timely solutions. We must find them. As the Secretary's task force reported: "Man has

discovered that he cannot act toward his surroundings with the abandon of a caveman * * * our health and well-being—and those of future generations—are at stake."

BUDGET SUMMARY

To carry out the Center's objectives, we are requesting a total of $45,611,000 for fiscal year 1969, an increase of $4,526,000 over the estimated program level in fiscal year 1968.

I shall be pleased to answer any questions you may have.

Senator HILL. That is a reduction of some $12 million under your request; isn't it?

Mr. SVORE. This is $12 million under the request that we submitted.

Senator HILL. Senator Bartlett.

Senator BARTLETT. Yes. Thank you, Mr. Chairman. I have a few questions.

TRANSPORTING SEWAGE SLUDGE AS FERTILIZER BY PIPELINE TO WILL COUNTY, ILL.

I note that you informed us that sludge will be transported by pipelines to fertilize farmland in Will County, Ill. Is that being done?

Mr. SVORE. This is a demonstration project that has been approved. It is not being done as yet. But the plans are underway. We expect to do it in the near future.

Senator HILL. How big a pipeline will be used?

Mr. SVORE. I do not recall. If I may ask——

Senator BARTLETT. It isn't material.

Mr. VAUGHAN. We are designing it now on the basis of sludge from a large part of Chicago.

Senator HILL. Eventually is it intended to take all the sludge by pipeline to a point where it might be usefully employed as fertilizer?

Mr. SVORE. This is the intent of this project—to determine feasibility of long lines to transport sewage sludge, whether it is a feasible means of providing it in the area where it can be used as fertilizer.

Senator BARTLETT. To your knowledge, have the people of Will County been polled about their reaction to this undertaking?

Mr. SVORE. Not to my knowledge.

Senator BARTLETT. I asked the question, but now, I want to give you some information.

One summer, a few years ago, my wife, who is an ardent gardener, bought some sludge. I was driving home from here and about a mile from home, I became aware of a very peculiar odor. My smelling apparatus isn't very good, but it worked perfectly then. Our neighbors didn't speak to us for several weeks.

I am convinced that it was then that the strained relations between France and the United States began because there was a French Admiral living nearby who took a very dim view of the whole procedure and expressed himself forcibly to my wife, who had no defense because she was standing all alone.

It is just as well that you don't have a poll of the people of Will County because they might not approve of this.

ARCTIC HEALTH RESEARCH LABORATORY

Now, I shall turn, as you may have expected, to the Arctic Health Research Laboratory which came into being, I want the record to show, because of the chairman of the committee who saw the need for exploring health problems in subarctic and arctic conditions and provided the money so that this might be done. Now, how much are you asking for this activity for the coming fiscal year?

Mr. SVORE. $1,445,000.

Senator HILL. That was a cut of $503,000.

Mr. SVORE. This is correct.

Senator BARTLETT. To satisfy my curiosity, please tell me what caused this Laboratory to wind up in your division.

Dr. STEWART. Senator Bartlett, I think I am the one that was responsible for that.

Senator BARTLETT. I am just curious.

Dr. STEWART. The choices that we were working between were the Communicable Disease Center and the Urban and Industrial Health Center. It could have gone either way. We felt that a great deal of the effort of the Urban and Industrial Health Center was toward the environmental problems.

Since much of the Arctic health research has been in the peculiar environmental problems of the Arctic area it was more appropriate there than it was in the Communicable Disease Center. We have had a great deal of working together, though, within the Center.

There are some people from the Communicable Disease Center doing some of the work on the middle ear infections that are so prominent in the Arctic area. That is why the decision was made.

PERSONNEL

Senator BARTLETT. I see. How many people are now employed?

Mr. SVORE. We have 68 people employed, permanent full-time positions.

Senator BARTLETT. How many are authorized now?

Mr. SVORE. Eighty.

Senator BARTLETT. And appropriations for how many?

Mr. SVORE. The total appropriation that was authorized by Congress last year was for employment of 83 people. House Joint Resolution 888 resulted a 32-position reduction for the entire Center, of which three were taken from Arctic Health, revising its budgeted positions to 80. Arctic Health's current employment of 68 is end-of-year ceiling, 12 below its budgeted positions.

Senator BARTLETT. Why is it then that 17 aren't on the rolls?

Mr. SVORE. Sixty-eight is what we have.

Senator BARTLETT. Oh, 68. I though you said 63. Why is that?

Mr. SVORE. A total of 80 positions is budgeted but the end-of-year ceiling limitations in the current year restrict employment to a level of 68. Reductions have been applied rather uniformly throughout the entire Center.

Senator BARTLETT. You mean throughout the entire Arctic Health Laboratory.

Mr. SVORE. No; throughout the Urban and Industrial Health Center. The Arctic Health Research Laboratory had a reduction of 12 positions.

Senator BARTLETT. That is a pretty sharp reduction, is it not?

Mr. SVORE. Yes; but for the Urban and Industrial Health Center as a whole the end-of-year reduction totaled 117 positions.

Senator BARTLETT. For your entire division?

Mr. SVORE. For the entire Center.

Senator BARTLETT. And those 12 come from Arctic Health?

Mr. SVORE. Yes.

### DEDICATION AND CONSTRUCTION COST

Senator BARTLETT. When was that laboratory opened?

Mr. SVORE. The new facility was dedicated in July of this year. The move from Anchorage was, I believe, in May or June.

Senator BARTLETT. In July 1967.

Mr. SVORE. Right.

Senator BARTLETT. And a brand new facility?

Mr. SVORE. That is right.

Senator BARTLETT. How much did it cost?

Mr. SVORE. The total cost of the construction was $4,588,000.

Senator BARTLETT. How many people do you believe ought to be there do to the kind of job that needs to be done and can be done within whatever limitations there may be as to physical space?

Mr. SVORE. The facility, our portion of the building, is designed for approximately 100 people.

Senator HILL. You say your portion of the building?

Mr. SVORE. Yes. When this facility was originally constructed or designed, the water pollution activities were in the Public Health Service. So a portion of the building was designed for water pollution activities, the rest of it for the Arctic Health Laboratory.

Since then of course water pollution has been transferred to Interior. That portion of the building now is entirely Interior's. For this reason our environmental activities are no longer in that portion of the building and we have temporary facilities at Wainwright to take care of that at this time.

### BUDGET REQUEST AND PROPOSED ACTIVITIES

Senator BARTLETT. How much are you asking for the Lab for the next year?

Mr. SVORE. $1,445,000.

Senator BARTLETT. There was how much for this year?

Mr. BERSANO. $1,460,000.

Senator BARTLETT. About the same.

Mr. SVORE. About the same.

Senator BARTLETT. What was the request you made of the Department?

Mr. SVORE. The request we made of the Department was $1,948,000.

Senator BARTLETT. After that request emerged from the Department how much was left?

Mr. BERSANO. $1,948,000. There was no reduction at the Department level.

Senator BARTLETT. You were whacked by the Bureau of the Budget in the amount of $503,000.

Had you been allowed that $503,000, had the Congress approved that, how would you have used it?

Mr. SVORE. We would, of course, have increased our activities in the preventive and clinical medicine in the Arctic community and also planning for a stepped-up activity in the health aspects of environmental control.

PERSONAL REQUEST

Senator BARTLETT. Are you seeking 112 positions?

Mr. SVORE. That was the original request, allowed by the Department, but subsequently reduced to 80 by the Bureau of the Budget.

Senator BARTLETT. Now you have 68, although 80 are authorized.

Mr. SVORE. We are authorized eighty; yes.

Senator BARTLETT. How many did you say you would have under the fiscal year 1969 budgetary request?

Mr. BERSANO. Eighty.

Senator BARTLETT. If further curtailments are made, you might be subjected to the same experience that you had this year.

What happens when you have highly skilled people hired for the Arctic Health Center, or anywhere else, and after 4 or 5 months, you are told to cut? Do those people leave you forever?

Mr. SVORE. In moving to Fairbanks, of course the people who have moved there have stayed in Fairbanks. There was no loss in moving the laboratories as far as the personnel were concerned. Of course, we were involved in the freeze immediately after that. However, these people who made this move are very pleased with their new facilities. We have made no cuts from that standpoint.

Senator BARTLETT. I know they are pleased. I have been there.

REDUCTIONS IN FORCE

Mr. BERSANO. Senator Bartlett, in most cases when there are such reductions there has been no need to separate anyone that is on duty. Rather, we have achieved these reductions by not filling vacancies and deferring filling of positions.

Senator BARTLETT. You take care of it by attrition?

Mr. BERSANO. Yes.

PERSONNEL: AUTHORIZED AND REQUESTED

Mr. CARDWELL. Senator Bartlett, could I make a comment about this question of difference between the authorized budget position and the actual request?

I think there are four factors that affect it. First, there was a requirement that 2 percent of all authorized positions be stricken from our current budget as a result of the application of House Joint Resolution 88.

Further, our department is operating under a restricted employment ceiling given to us by the President and the Bureau of the Budget which authorized current employment of about 85 percent of our budget strength.

Then the latter two factors would be the normal turnover and the difficulty of moving. I don't know how to account for all four of these factors in the difference but I imagine all four have come into play. My suggestion would be to give you a list for the record which would show that. I certainly don't want to create any impression that this program was singled out for any harsh ceiling.

Senator BARTLETT. I know that. I realize that in all matters you work by directive.

I want to explore this further, as the Chairman will understand, he always does, because I have a particularly personal interest in it.

### ABILITY TO CARRY OUT PROJECTS

Will you be able to carry out any new research projects or expand those currently underway with the proposed budget?

Mr. SVORE. No, this will maintain the operation at about its present level.

There are probably some activities that will be drawing to a close that will enable others to start. But basically the activities are to remain at the same level as they have been during the past year.

### LOCATION OF CENTER

Senator BARTLETT. What do you think personally? Should the Arctic Health Center stay where it is, or should it be transferred to some other division?

Mr. SVORE. Well, I believe the Arctic Health Center is in a way a miniature urban and industrial health center in that it has many of the broad interests that we have throughout the entire center. It has interest in the singular problems that we have with occupational health.

We certainly have problems up there of solid waste disposal, too. We have air pollution problems there. The Air Pollution Center, of course, is interested in this phase of it. It would be my opinion that the decision to place it in the new center was correct and I am sure that it can function well in that spot.

### ANIMAL FACILITIES

Senator BARTLETT. Of course, a good deal of the research revolves around experiments made on animals, including, I believe , bear.

Mr. SVORE. And moose.

Senator BARTLETT. Do you have adequate facilities for taking care of these animals?

Mr. SVORE. Unfortunately we were unable to move the animals. They are still at Anchorage. There is an authorization and an appropriation for a new animal facility to be constructed at Fairbanks, but we will be unable to move the animals until that facility is completed. Present plans are that it will be finished in 1970.

Senator BARTLETT. Now that you have to have the environmental engineering section of the laboratory at Fort Wainwright and the physiology section at the Institute of Artic Biology, will that take care of the problems facing you?

Mr. SVORE. No. This will not. This will take care of only the animal facility. There are plans to temporarily house them in some of the vacant space providing it can be remodeled. While this would be a temporary solution to the problem, it would get them over on the campus of the university instead of being at Fort Wainwright.

ESKIMO RESEARCH

Senator BARTLETT. I think I informed this committee last year of some of the rather remarkable discoveries made by the Health Center among Eskimos.

There were physical disabilities and diseases that apparently had never been recorded before which, of course, was intriguing to doctors and researchers in the health field.

Dr. Edward Scott, Chief of the Center, came to see me not long ago. He informed me, and you must have heard about this, of another discovery made during the last year. It relates to what the people of the Center call—they have not denominated it by a medical term yet—floppy baby, completely lacking in muscletone. When normal babies are walking, these children aren't.

People of the Center believe that this condition can be ultimately corrected without treatment but they are not sure. Of course, this poses another need for continuing the research.

All kinds of things are popping up there among these so-called native peoples which may be related to the differences in environment and conditions under which they live. Some of the Eskimos, in the more remote areas are facing tremendous problems now, trying to adjust to the white man's civilization. We are trying to educate them. In the Arctic economy it is becoming increasingly necessary that they do so.

Dr. Scott also related to me that he went to Bethel on the lower Kuskokwim River just a few weeks ago. This is the general area where, as I recall, infant mortality runs at the rate of 200 per thousand in contrast to the national average of 25. They live hard, hard lives.

What I wanted to tell you especially is that he reported to me, and I had not heard it before, that he made some inquiries in Bethel, a community of 1,500 people, the largest community in that section of Alaska, and discovered that during the 3 months before his visit there had been 17 suicide attempts in that little town. Only one was successful.

In the old days these people did not attempt to commit suicide. This relates, one would think, to the transition process moving from one way of life to another.

I believe the Arctic Health Center Research Laboratory can fill a very important role in aiding in this process, leaving one form of life and entering another.

I have no further questions.

Senator HILL. Do you have any further comments?

Senator BARTLETT. You are implying correctly that most of my questions have been in the form of comments and you are right too.

Senator HILL. No. You are from Alaska and you know that situation out there, whereas most of us do not know it. Therefore you speak with authority.

TRIBUTE TO SENATOR HILL

Senator BARTLETT. I do want to say for the record, Mr. Chairman, before concluding, that all of us, all of us—this is an inclusive statement—regret to think that next year you won't be presiding. You are retiring voluntarily as very few Members of Congress ever do.

Your monument, whether or not it is ever physically constructed.

is now built. You have done more for the health of this Nation, more for medical research, more to advance our medical knowledge, than any other man or group of men in the history of this Nation.

Senator HILL. Thank you, sir.

Senator BARTLETT. I think that you have only lagged in one respect, and I want to note right here and now what that is. Time after time, even since you made your announcement of your impending retirement, you have stated an intention of visiting the Arctic Health Research Center. We insist that before this year is out you come and visit it.

Senator HILL. I appreciate your gracious and most generous remarks. I assure you no one on this committee has been finer or more helpful and contributed more to the work of this committee than you, sir, from Alaska.

Senator BARTLETT. I tried to follow you but I have been a long way behind.

Senator HILL. No, you have been right on the frontline.

BEHAVIORAL LABORATORY, PROVIDENCE, R.I.

Senator HILL. You said you will also be studying the behavior of people under stress conditions using driving simulators at your human behavior laboratory in Providence, R.I. Have you had any funds for this simulator?

Mr. SVORE. We have the laboratory that was opened there approximately a year ago to study the behavior of individuals under various stress conditions, and of course using this type of facility is an excellent way to determine how individuals do behave, why they are involved in accidents and what some of the human factors are that cause them to react the way they do and make the kind of decisions that they do which could result in injury to them. The facility there is operating, of course, under a rather limited budget.

Senator HILL. That is what I thought. How much is in this budget for that?

Mr. BERSANO. $934,000.

Senator HILL. How much does that limit you in what you would like to do there?

Mr. SVORE. Of course there is considerably more that can be done with this type of equipment. The equipment, of course, is expensive. This is probably the first generation of this type of equipment. I am sure the more sophisticated they get the more expensive they become.

Much of this could be applied to why we have injuries in industry, what might be done about human behavior patterns to control some of these types of injuries and accidents. We feel it has considerable potential.

Mr. KUSNETZ. For example, we are trying to apply the simulator technique to machine tools.

Senator HILL. Are there any further questions?

Senator BARTLETT. No, thank you, Mr. Chairman.

Senator HILL. I am glad Alaska is in the Union.

Senator BARTLETT. So am I.

Senator HILL. I want to thank my friend for his generous remarks. I repeat again he has been right on the frontline of the battle for these programs.

ARCTIC HEALTH RESEARCH CENTER BUDGET REQUEST

Senator BARTLETT. The first part of my statement came from my heart.

All would be well if we just get enough money for the Arctic Health Research Center.

Senator HILL. Well, I am for that.

Senator BARTLETT. I know

Senator HILL. I know how important that is.

Thank you very much, sir.

Mr. SVORE. Thank you, sir.

## Radiological Health

**STATEMENT OF JAMES G. TERRILL, JR., DIRECTOR, NATIONAL CENTER FOR RADIOLOGICAL HEALTH**
**ACCOMPANIED BY:**
**DR. RAYMOND T. MOORE, DEPUTY DIRECTOR**
**ROBERT R. HARWICK, EXECUTIVE OFFICER**
**DR. RICHARD A. PRINDLE, DIRECTOR, BUREAU OF DISEASE PREVENTION AND ENVIRONMENTAL CONTROL**
**PETER J. BERSANO, FINANCIAL MANAGEMENT OFFICER, BUREAU OF DISEASE PREVENTION AND ENVIRONMENTAL CONTROL**
**DR. WILLIAM H. STEWART, SURGEON GENERAL**
**CHARLES MILLER, CHIEF FINANCE OFFICER**
**JAMES B. CARDWELL, DEPUTY ASSISTANT SECRETARY, BUDGET**

### Appropriation Estimate

"RADIOLOGICAL HEALTH

"To carry out sections 301 and 311 of the Act, with respect to radiological health; [purchase of not to exceed one passenger motor vehicle for replacement only; and] *including* hire, [acquisition,] maintenance, and operation of aircraft; [$15,687,000] *and for expenses necessary for the Office of the Director, Bureau of Disease Prevention and Environmental Control; $18,077,000.*"

### APPROPRIATION LANGUAGE CHANGES

The first change in language deletes authorization required in 1968 for replacement of a motor vehicle.

The second change in language deletes authorization required in 1968 for acquisition of a surplus aircraft.

The third change in language provides for the inclusion of the activity, "Bureau program direction and management services" in this appropriation. This activity was funded previously by contributions to the Public Health Service Management Fund, but is now proposed as a separate activity under this appropriation.

### AMOUNTS AVAILABLE FOR OBLIGATION

| | 1968 | 1969 |
|---|---|---|
| Appropriation | $15,687,000 | $18,077,000 |
| Cutback from the 1968 President's budget required by H.J. Res. 888 | −440,000 | |
| Total currently authorized for obligation | 15,247,000 | 18,077,000 |
| Plus: Proposed release of reserves for increased pay and postal costs | 325,000 | |
| Total available for obligation | 15,572,000 | 18,077,000 |
| Disposition of cutback: | | |
| To be used for pay and postal costs in this account | 255,000 | |
| To be used for pay and postal costs in the PHS management fund | 70,000 | |
| To be returned to the Treasury | 115,000 | |
| Total cutback | 440,000 | |

## OBLIGATIONS BY ACTIVITY

| | 1968 estimate | | 1969 estimate | | Increase or decrease | |
|---|---|---|---|---|---|---|
| | Positions | Amount | Positions | Amount | Positions | Amount |
| 1. Grants: (a) Research | | $2,296,000 | | $2,328,000 | | +$32,000 |
| 2. Direct operations | 799 | 13,276,000 | 804 | 13,187,000 | +5 | −89,000 |
| (a) Effects of radiation on man | 133 | 3,377,000 | 133 | 3,392,000 | | +15,000 |
| (b) Development of methodology for exposure reduction and control | 108 | 1,972,000 | 113 | 2,182,000 | +5 | +210,000 |
| (c) Training | 117 | 1,572,000 | 117 | 1,586,000 | | +14,000 |
| (d) Measurement and surveillance | 279 | 4,060,000 | 279 | 4,092,000 | | +32,000 |
| (e) Technical assistance | 162 | 2,295,000 | 162 | 1,935,000 | | −360,000 |
| 3. Bureau program direction and management services | (1) | (1) | 190 | 2,562,000 | +190 | +2,562,000 |
| Total obligations | 799 | 15,572,000 | 994 | 18,077,000 | +195 | +2,505,000 |

[1] In 1968 Bureau program direction and management services was funded in the Public Health Service management fund at a level of 184 positions and $2,341,000.

## OBLIGATIONS BY OBJECT

| | 1968 estimate | 1969 estimate | Increase or decrease |
|---|---|---|---|
| Total number of permanent positions | 799 | 994 | +195 |
| Full-time equivalent of all other positions | 19 | 27 | +8 |
| Average number of all employees | 781 | 961 | +180 |
| Personnel compensation: | | | |
| Permanent positions | $6,403,000 | $8,467,000 | +$2,064,000 |
| Positions other than permanent | 181,000 | 251,000 | +70,000 |
| Other personnel compensation | 57,000 | 74,000 | +17,000 |
| Total persnnel compensation | 6,641,000 | 8,792,000 | +2,151,0000 |
| Personnel benefits | 1,011,000 | 1,220,000 | +209,000 |
| Travel and transportation of persons | 472,000 | 644,000 | +172,000 |
| Transportation of things | 135,000 | 160,000 | +25,000 |
| Rent, communication and utilities | 722,000 | 815,000 | +93,000 |
| Printing and reproduction | 110,000 | 137,000 | +27,000 |
| Other services | 430,000 | 496,000 | +66,000 |
| Project contracts | 2,042,000 | 2,072,000 | +30,000 |
| Services of other agencies | 268,000 | 280,000 | +12,000 |
| Payments to; | | | |
| Public Health Service management fund | 381,000 | | −381,000 |
| National Institutes of Health managment fund | 28,000 | | −28,000 |
| Supplies and materials | 567,000 | 628,000 | +61,000 |
| Equipment | 468,000 | 504,000 | +36,000 |
| Grants, subsidies, and contributions | 2,296,000 | 2,328,000 | +32,000 |
| Insurance claims and indemnities | 1,000 | 1,000 | |
| Total, obligations by object | 15,572,000 | 18,077,000 | +2,505,000 |

## SUMMARY OF CHANGES

| | |
|---|---|
| 1968 enacted appropriation | $15,687,000 |
| Cutback required by H.J. Res. 888 | −370,000 |
| Proposed release of reserves for increased pay and postal costs | 255,000 |
| 1968 estimated obligations | 15,572,000 |
| 1969 estimated obligations | 18,077,000 |
| Total change | +2,505,000 |

| | Base | | Change from base | |
|---|---|---|---|---|
| | Positions | Amount | Positions | Amount |
| Increases: | | | | |
| A. Built-in: | | | | |
| 1. Annualization of 13 new positions authorized in 1968 for Bureau program direction and management services | | | | $97,000 |
| 2. Annualization of civilian and military pay raises | | | | 114,000 |
| 3. One extra day of pay in 1969 | | | | 25,000 |
| 4. Bureau program direction and management services previously funded in the Public Health Service Management Fund | | | 184 | 2,341,000 |
| B. Program: | | | | |
| 1. Research grants | | $2,296,000 | | 32,000 |
| 2. Expansion of development of methodology for exposure reduction and control | 108 | 1,972,000 | 5 | 202,000 |
| 3. Expansion of Bureau program direction and management services | (184) | (2,341,000) | 6 | 100,000 |
| Total program increases | | | 11 | 334,000 |
| Decreases: | | | | |
| A. Built-in: | | | | |
| 1. Nonrecurring items of equipment | | | | −25,000 |
| 2. Nonrecurring contribution to the Public Health Service management fund | | 381,000 | | −381,000 |
| Total decreases | | | | −406,000 |
| Total net changes requested | | | +195 | +2,505,000 |

EXPLANATION OF CHANGES

*Research grants*

An increase of $32,000 is requested to support a total of 98 grants in 1969 as compared to 96 grants in 1968. Emphasis will continue on studies concerned with the effects of radiation on man.

*Development of methodology for exposure reduction and control*

An increase of $202,000 and five positions is requested for additional developmental work on the automatic collimator for medical X-ray equipment. These funds will provide for the adaption and application of the automatic collimator to additional types of medical X-rays now in use in order to significantly reduce patient exposure.

*Bureau program direction and management services*

An increase of $100,000 and six positions is requested for additional staff support to manage disease prevention and environmental control programs. Two of the positions are for improving the analytical capability within program planning and evaluation activities. Two new positions are for planning the design of environmental hazards intelligence systems by the Standards and Intelligence staff. Two additional positions will be devoted to further collection and analysis of program data as part of the Bureau management information system.

*Contribution to the Public Health Service management fund*

The $381,000 decrease for the nonrecurring contribution to the management fund is due to a change in the method of funding. In 1969, it is proposed to fund Office of the Bureau Director costs directly in the activity, "Bureau program direction and management services," in this appropriation rather than through contributions to the Public Health Service management fund.

*Introduction*

The National Center for Radiological Health has the basic mission of improving the protection of human health against radiation hazards. The discovery of X-rays and radium, the growth of electronic technologies, and developments in the application of nuclear energy have opened opportunities for progress almost without parallel in human history. The Center assists in the realization of these opportunities for progress by fostering the development of safeguards against the dangers of radiation exposure.

Some radiation exposure is essential to the betterment of human health. Diagnostic radiation possibly represents the largest single man-made source of radiation reaching the U.S. population today. Concurrently, the unproductive

fraction of this exposure should be minimized. More than 200,000 medical and dental X-ray machines are in use throughout the country and their number can be expected to increase steadily. More than half the population of the Nation is exposed each year either to X-rays or radioactive materials during the diagnosis and treatment of disease. Peaceful applications of nuclear energy, particularly for power generation, are increasing rapidly and will become a major source of potential population exposure to radiation in a few years. There also has been a rise in the number, variety, and sophistication of electronic products with a potential for dangerous radiation emission. Radiation exposure from these devices, many of which are primarily for home use, should be prevented.

As a consequence of this expansion of radiation, the chances that people may be exposed to radiation unnecessarily have substantially increased. Efforts to control unnecessary exposure must grow proportionately just to maintain the present degree of risk.

In 1969, this appropriation will provide support for a new activity—Bureau program direction and management services. This activity finances expenses of the Office of the Director, Bureau of Disease Prevention and Environmental Control, which were funded through the Public Health Service Management Fund in 1968.

1. GRANTS

| | 1968, estimate | | 1969, estimate | | Increase or decrease | |
|---|---|---|---|---|---|---|
| | Number | Amount | Number | Amount | Number | Amount |
| a. Research: | | | | | | |
| (1) Noncompeting continuations | 56 | $1,144,000 | 68 | $1,626,000 | +12 | +$182,000 |
| (2) New grants | 40 | 820,000 | 30 | 670,000 | −10 | −150,000 |
| (3) Supplementals | (4) | 32,000 | (4) | 32,000 | (−) | |
| Total | 96 | 2,296,000 | 98 | 2,328,000 | +2 | +32,000 |

The research grants program provides a means for utilizing the competence of outstanding scientists in the radiological field at leading non-governmental research centers throughout the nation.

Examples of grants concerned with the effects of radiation on man include research on effects of low-level gamma radiation on physiological performance being conducted by Dr. George M. Krise at Texas A&M College, College Station, Texas and research on radiation effects on the central nervous system and behavior by Dr. John Garcia, Massachusetts General Hospital, Boston, Massachusetts. The latest report on this latter research demonstrates that a single exposure of 10 to 50 roentgens to rats is sufficient to enable rats to detect a radiation field with their normal senses. The significance of this finding from a health standpoint is being further investigated.

Examples of studies of X-ray exposures, radionuclide exposures, environmental pathways, and protective action in environmental contamination include studies on radiation dose from diagnostic isotope procedures by Dr. Edward M. Smith, Society of Nuclear Medicine, Chicago, Illinois, and follow-up studies of irradiated Tinea Capitis cases by Dr. Roy E. Albert, New York University Medical Center New York.

Dr. Roy E. Albert's publication in *American Journal of Public Health*, Vol. 56, No. 12, Dec. 1966, entitled "Follow-up Study of Patients Treated by X-ray for Tinea Capitis" reported that "although the research project is still in progress, this follow-up study of 1908 irradiated cases of tinea capitas and 1801 non-irradiated cases of tinea capitis has thus far shown a substantially larger number of cases of cancer, mental disease, permanent damage of the scalp hair in the irradiated group compared to the controls."

In studies to develop methods to prevent radiostrontium absorption in humans, Dr. Herta Spencer, Loyola University, Chicago, Illinois, has published a report which indicates that the use of aluminum phosphate gel, a non-toxic compound at recommended doses used widely in medical practice for many years, greatly reduces the assimilation of strontium ingested by humans.

The $2,328,000 requested for 1969 is to support 30 new grants and 68 non-competing continuations, an increase of 2 projects and $32,000 over 1968.

2. DIRECT OPERATIONS-RADIOLOGICAL HEALTH

| | 1968 estimate | | 1969 estimate | | Increase or decrease | |
|---|---|---|---|---|---|---|
| | Positions | Amount | Positions | Amount | Positions | Amount |
| Personnel compensation and benefits | 799 | $7,652,000 | 804 | $7,808,000 | +5 | +$156,000 |
| Other expenses | | 5,243,000 | | 5,379,000 | | +136,000 |
| Total | 799 | 12,895,000 | 804 | 13,187,000 | +5 | +292,000 |

SUMMARY OF PROGRAM

| | | | | | | |
|---|---|---|---|---|---|---|
| (a) Effects of radiation on man | 133 | $3,377,000 | 133 | $3,392,000 | | +$15,000 |
| (b) Development of methodology for exposure reduction and control | 108 | 1,972,000 | 113 | 2,182,000 | +5 | +210,000 |
| (c) Training | 117 | 1,572,000 | 117 | 1,586,000 | | +14,000 |
| (d) Measurement and surveillance | 279 | 4,060,000 | 279 | 4,092,000 | | +32,000 |
| (e) Technical assistance | 162 | 1,914,000 | 162 | 1,935,000 | | +21,000 |
| Total | 799 | 12,895,000 | 804 | 13,187,000 | +5 | +292,000 |

| | 1968 estimate | | 1969 estimate | | Increase or decrease | |
|---|---|---|---|---|---|---|
| | Positions | Amount | Positions | Amount | Positions | Amount |
| (a) Effects of radiation on man | 133 | $3,377,000 | 133 | $3,392,000 | | +$15,000 |

The objectives of this program are to document population exposure from all sources of radiation and to provide better understanding of the dose-effect relationship, particularly regarding low-level radiation and its long-term biological effects, whether it stems from diagnostic X-rays, radionuclide treatments, a nearby nuclear facility, or color television in the living room. All of these sources are major factors or contributors to the paramount radiological health question, the cumulative health effects of radiation on man.

It is now recognized that large doses of radiation for short periods of time or smaller doses over longer periods can produce malignant as well as genetic changes. It still remains to be demonstrated whether all levels of radiation are potentially harmful, particularly when the fetus or child is exposed, and whether other environmental insults may reinforce the damage potential of ionizing radiation. Also parallel information is urgently needed to assess the public health significance of non-ionizing radiations such as microwaves and lasers. Existing programs to characterize long-term effects at low-levels of ionizing radiation with and without the introduction of other stresses will continue, and pilot studies on the effects of other forms of electro-magnetic radiation will be continued. In addition, the relationship of exposure and effects from the various types of sources to specific population groups must be delineated as it relates both to the hazards derived from the sources under study and as a factor of total exposure of the general population. In the area of medical X-ray exposure, for example, a study was completed to provide estimates of population exposure, by type of examination or procedure, for a variety of demographic and X-ray facility characteristics. Resultant data is contained in the Public Health Service Publication, "Population Exposure to X-rays—United States 1964". The information produced in this study will be chiefly used to guide the development of programs aimed at promoting more efficient use of X-rays, to formulate hypotheses for further research and to establish a baseline for evaluating program effectiveness. In addition, the study design provided a basis for estimating specific organ and genetic dose from X-ray exposure when used with models being developed through research at several universities.

Human population groups that receive unique and identifiable radiation exposures are studied to quantify long-term biological effects and to elucidate the major dose-effect phenomena. Scientific data on the relative radio-sensitivity of various systems and organs provide additional information needed to establish public health exposure guides. For example, since 1958 the Public Health Service has participated in a long-term study of the survivors and progeny of the atomic bombing of Hiroshima and Nagasaki. Of immediate interest is the fact that

results are now available from the Cooperative Thyrotoxicosis Therapy Follow-Up Study, initiated in 1961 to determine if the use of radioactive iodine presents a greater risk to patients undergoing treatment for thyrotoxicosis than does surgery. The effect of primary concern in this study was leukemia. The results of this study to date have indicated no demonstrable increase in leukemia in patients treated with radioiodine.

Experimental findings from animal studies conducted not only in our laboratories but also other laboratories provide evidence to support the hypothesis that prenatal and young age groups may be uniquely sensitive to the deleterious effects of radiation. At the Rockville, Cincinnati, and Colorado State University laboratories, using a variety of mammalian species, it has been shown that sub-lethal doses to animals result in changes to certain enzyme systems, the stress response of the reticulo-endothelial system, ultrastructure of the eye, and chromosomes of various types of cells. Efforts are underway to relate these changes to the long-term effects associated with radiation both in the adult and young animal. Some examples of specific studies recently completed or in progress are as follows:

(1) Studies at the Collaborative Radiological Health Laboratory at Colorado State University, utilizing beagles, will evaluate the long-term effects from low-level external exposure to radiation. Emphasis is being placed on the effects upon the young from irradiation during pregnancy. The study is intended to elucidate effects of radiation exposure at varying ages on several factors such as physiological functions, the aging process, and mental acuity. These studies are essential to an understanding of the factors that should be included in exposure standards related to various age groupings.

(2) In rats, whole body X-radiation combined with ethionine, an analog of an essential amino acid, has resulted in a markedly increased incidence of mammary tumors as well as liver tumors. The tumors appeared earlier in those rats receiving combined treatment. In addition, cultured cells pretreated with virus (SV–40), followed by radiation, developed a malignant potential in greater numbers than cells treated with virus or radiation only. Reversing the order of treatment gave similar results. Both studies clearly demonstrate that factors of a diverse nature (chemical and viral) can predispose animals to the carcinogenic effects of radiation, in an additive or multiplicative manner. In particular, the interaction between radiation and virus may imply that viruses harbored by a host might enter cells to which they might not ordinarily have access.

(3) Electron microscopic observations of human chromosomes have yielded considerable information about the arrangement of chromosome fibers in condensed metaphase chromosomes. Sites of X-ray induced breakage of chromosomes are being examined to determine the kinds of structural changes caused by the radiation.

(4) Experiments which have been performed to date indicate that radiation interferes with protein synthesis. This interference, more marked in prenatal vs. the adolescent animal, appears to result from a radiation induced change in normal genetic mechanisms, and thus has a potential for producing long-term deleterious effects. Comparison of results obtained from irradiated adolescent animal vs. animals irradiated prenatally suggests that the prenatal animal is considerably more sensitive to radiation than the adolescent animal.

(5) Investigations concerned with the emission of low-energy X-ray from color television receivers have demonstrated such X-rays to be more penetrating in bodily tissues than previously thought. This penetrability is due to the almost monochromatic nature of the X-rays at an energy near the operating voltage of the receiver.

An increase of $15,000 is included in the total requested for pay raises and one additional day of pay.

| | 1968 estimate | | 1969 estimate | | Increase or decrease | |
|---|---|---|---|---|---|---|
| | Positions | Amount | Positions | Amount | Positions | Amount |
| b. Development of methodology for exposure reduction and control | 108 | $1,972,000 | 113 | $2,182,000 | +5 | +$210,000 |

The objectives of this program are to evaluate and control exposures to individuals or population groups from machine-produced radiation, discrete radioactive sources, and environmental radioactivity.

The estimated 210,000 X-ray units used in the healing arts constitute one of the major man-made sources of radiation exposure to the general population in existence today. The 1964 Public Health Service survey found that there were over 143 million X-ray visits yearly—50 million dental and 93 million medical. This represents a 7.6 million increase over the previous reporting period in 1961. From the 1964 data, it has been estimated that these X-ray visits have resulted in a genetically significant dose to the population equivalent to 55 millirads per annum. As this dose utilizes a large proportion of that which is considered acceptable from all man-made sources, it is important that the increased usage of X-rays and other sources of radiation exposure in the practice of medicine be accomplished without a commensurate increase in the genetically significant dose.

Immediate progress is essential in the medical X-ray field in three areas: (a) creation of an image production system which will provide the necessary information for proper diagnostic use with a minimum of X-ray exposure (b) establishment of criteria for accepted levels of paramedical training and (c) research directed toward improvement of existing medical X-ray equipment, e.g., evaluation and demonstration of automatic collimators, as well as special purpose machines. Efforts must continue to be directed toward the improvement of equipment already in use. Activities presently underway should lead to a reduction of 35 percent in the current genetically significant dose to the population by 1971.

The increase requested of five positions and $202,000 is for adaptation and application of the automatic collimator, developed in the Center's X-ray Exposure Control Laboratory in 1967, to additional types of medical X-ray equipment in current use. The original model was designed as an attachment to existing medical X-ray equipment now on the market and for incorporation into future equipment. By automatically reducing the X-ray beam to the film size selected, much of the unnecessary exposure is eliminated in diagnostic applications. Additional developmental work is required to adapt it to the variety of existing machines now in use as well as a program of demonstration and education to encourage wide-spread acceptance and use of the device. It is currently in routine use in two hospitals on a test and demonstration basis. Data from the 1964 X-ray exposure study indicates that proper collimation of the X-ray beam is the major factor in reducing unnecessary exposures during diagnostic procedures.

The diagnostic and therapeutic uses of radioisotopes have altered the entire concept of many disease processes and places a multiplicity of new procedures in the armamentarium of the physician. It is essential that exposure to the organs directly involved as well as to those indirectly involved be known so that benefit-risk criteria can be applied effectively. It is estimated that three out of every thousand patients visiting clinics or admitted to hospitals undergo some type of diagnosis or therapy involving radioisotopes and that the demand for these services is growing at the rate of at least 15% per year. Current trends indicate that over 700,000 radioisotope administrations were preformed in 1966.

It is estimated that 2,700 medical facilities are using radium, radon and particle accelerator produced radionuclides to treat 80,000 patients per year. During 1966, 1,000 facilities were inspected by State health departments and 257 defective or obsolete medical sources, totalling 2,085 milligrams of radium, as well as 624 obsolete industrial sources were removed from use and disposed of through the Center's Southeast Radiological Health Laboratory at Montgomery, Alabama.

The Center's program to evaluate the effectiveness of the construction of existing radium sources is nearing completion. Interim destructive testing data and photographic analysis of sources have indicated certain unacceptable characteristics of construction. These data will be used to recommend standards for design and manufacture of future sources, thus reducing the chance of serious contamination from broken or defective sources. To prevent radium losses in shipment, the Center has developed a reusable shipping container which will serve as a means of eliminating this cause of environmental contamination.

National Center for Radiological Health efforts in training State personnel in evaluation survey techniques and procedures have been instrumental in reducing population exposure by correcting inadequate equipment, facilities and sources. It is estimated that, as a result of corrective activities already underway at the State level and the Center's efforts in developing less hazardous substitutes for radium, a 50% reduction in present levels of unnecessary exposure from radium can be anticipated by 1971. The Center has just completed a developmental contract with the Minnesota Mining and Manufacturing Company to produce a cesium-137 source that has identical medical characteristics as radium, but is less hazardous. The volume of commercial sales of this type of source has jumped

from less than 50 sources per year in 1963 to greater than 500 sources in 1966. A similar developmental contract with the New York Memorial Hospital is also underway to investigate less hazardous substitutes for radon-222 used in cancer therapy.

The Stanford Research Institute will complete a three-year contract in 1969 that will more precisely define the extent to which radioactive materials are being used in medicine. Based on the results of the first phase of this project, an intramural population exposure assessment study will be initiated in 1969 and continue through 1972.

With respect to environmental radioactivity, investigations will be continued at a reduced rate to better define the movement of the more important radioactive contaminants from their source, through the environment, to man in order to determine effective and feasible exposure control measures. A number of studies in this area will be brought to a satisfactory conclusion during 1968. These studies, conducted under contracts by the St. Louis County Health Department, the North Dakota State Health Department, and the University of Florida have demonstrated practical means for limiting uptake of radionuclides from the soil by forage plants under a variety of geographical and agricultural situations. Thus, information is available on agricultural methods that will reduce the transfer of radionuclides such as strontium-90 and cesium-137 from soil to milk. These techniques will be made available to the public through National Center for Radiological Health publications as soon as final reports, now in preparation, have been received from the contractors. While work will continue, as necessary, on such well-known radionuclides as strontium-90, cesium-137, and iodine-131, major emphasis will be placed on studies initiated primarily during 1968 on tritium, carbon-14, xenon, and krypton, more recently recognized as having significant health potential. Better methods of measurements and control potentials are important because of contributions to environmental tritium and carbon-14 from possible use of high-fusion-yield devices in peaceful nuclear explosive applications and the now-recognized potential hazards of inert gas (i.e. xenon, krypton) from nuclear facilities.

The recent discovery that certain color television sets are emitting X-radiation greatly in excess of the recommendations of the National Council for Radiation Protection requires prompt action in carrying out programs whereby the public may be assured that consumer products of this type can be safely used in the home. Exposure parameters from electronic products such as lasers, microwave generators, super-conducting magnets and ultra-sonic devices must be developed and related to the exposure potential in order to provide a basis for maximum health protection without denying the populace the beneficial uses of these products. To start work in this area an Electronic Products Radiation Laboratory was established during 1968. Thus far, field investigations have emphasized the color television problem and some manufacturers have improved their understanding of radiation emissions qualitatively and quantitatively. During 1969 work will be initiated on one or more classes of radiation producing electronic products on a selected basis to determine the nature of possible radiation hazards and possible methods of control.

An increase of $210,000 and 5 positions is included in the total requested; $202,000 and five positions is for further development of the automatic collimator, and $8,000 is for built-in items of increase and decrease. These include the additional day of pay, military and civilian pay increases, and non-recurring equipment cost.

| | 1968 estimate | | 1969 estimate | | Increase or decrease | |
|---|---|---|---|---|---|---|
| | Position | Amount | Position | Amount | Position | Amount |
| c. Training | 117 | $1,572,000 | 117 | $1,586,000 | ---- | +$14,000 |

Training activities include specialized training courses given at the regional laboratories and at Rockville, Maryland, and the development of curricula, course material and other training aids in support of many types of radiological health training.

The Public Health Service technical short term training courses are designed for radiological health personnel in Federal, State and local programs. The courses provide updated training in all radiological fields with special emphasis on current

problems, such as X-ray techniques. In 1968 an estimated 2100 persons will be provided such training. The planning figure for 1969 is 2200.

Development of formal radiological training programs as well as course material and training aids are available to all institutions which provide radiation protection instruction.

Contractual efforts will be continued at two leading universities directed towards development of curricula for non-medical as well as medical personnel who are to practice in the field of radiology. The first is that of Oregon State University where a program is being developed in X-ray science and engineering, including teaching, training, research, evaluation and development. Upon completion the contractor will present a plan that may be used as a model for the development of similar programs at other institutions. One of the recent benefits from this contract was the development of a low-cost X-ray circuit simulator with which standard equipment is simulated for training purposes. The second contract is with the University of California where a similar effort is underway. This one is directed towards teaching and training of undergraduate medical students, radiology residents, and nonradiology residents as well as of supporting staff of physicists, engineers and technicians.

An increase of $14,000 is included in the total requested for pay raises and one additional day of pay.

| | 1968 estimate | | 1969 estimate | | Increase or decrease | |
|---|---|---|---|---|---|---|
| | Positions | Amount | Positions | Amount | Positions | Amount |
| d. Measurement and surveillance | 279 | $4,060,000 | 279 | $4,092,000 | ..... | +$32,000 |

The Public Health Service currently maintains and operates national surveillance net works that measure environmental radioactivity, including releases from Federal test sites and ranges, in order to alert emergency protective activities and to provide a continuing record of levels and trends of radiation in the environment. The principal data from the Radiation Alert Network together with the Pasteurized Milk Network, the Institutional Total Diet Sampling Network, and others are released monthly (or more often, as required) and are printed in *Radiological Health Data.*

Changes in the relative significance of the several sources of environmental contamination have required realignment of our surveillance capabilities. Potential sources of radioactivity include both that from nuclear bomb testing and the peaceful use of atomic energy. Activities resulting in contamination such as bomb testing conducted by other nations are not subject to our control. Contamination from domestic activities, while in a strict sense controllable, introduces problems that can be critical to the Nation's health, security and economy. For example, Project Gasbuggy, for which the Public Health Service provides services to the Atomic Energy Commission on a reimbursible basis, is a potential source of contamination. In addition to radiation resulting from the detonation, the Public Health Service may also be concerned with evaluating for radioactive contamination the natural gas thus liberated. It is important that environmental contamination programs consider the health hazards from all sources, under normal peacetime conditions, and are concurrently responsive to rapid expansion necessary to carry out Federal Radiation Council recommended protective actions if major nuclear testing contaminations occur.

Programs are necessary to determine the exposure-potential of the specific effluent of nuclear facilities on environmental radioactivity. Normal effluents from these sources may add significant concentrations of the inert gases, i.e. xenon and krypton, to the environment, which is not the case from generalized fall-out from weapons testing. In at least one case, the power level of an operating reactor had to be controlled on the basis of population exposures from these gases. In addition, a check must be maintained on the effect of possible inadvertent releases from these facilities to the environment of other radionuclides, particularly iodine-131. Thus new sampling and analytical techniques must be incorporated into existing networks to evaluate the possible public health hazards.

Demands for electricity in the United States are now nearly doubling every ten years. Recent figures published by the Atomic Energy Commission show that, of 41,535 megawatts-electrical (Mwe) of new steam-electric plant additions announced by the trade press through September of 1967, 20,893 Mwe are nuclear and 20,642 are fossil fueled. The trend toward a larger nuclear share of a greatly

increased total capacity is expected to continue. The future may reflect a relative reduction in chemical pollutants resulting from conventional power plants as a result of the greater use of nuclear power sources.

An increase of $32,000 is included in the total requested for pay raises and one additional day of pay.

| | 1968 estimate | | 1969 estimate | | Increase or decrease | |
|---|---|---|---|---|---|---|
| | Positions | Amount | Positions | Amount | Positions | Amount |
| e. Technical assistance | 162 | $2,295,000 | 162 | $1,935,000 | ..... | −$360,000 |

The purpose of this activity is to provide technical assistance and specialized consultative services and support to the States in carrying out their radiological health programs. Assistance is also provided to other agencies and to industry in investigating, evaluating, and minimizing public health risks involved in consumer, industrial, military, space and other uses of ionizing radiation.

Programs are conducted to advise and assist State health authorities with respect to the surveillance and control of medical X–ray installations and the supervision of medical and dental X-ray services and methods. In addition, the States are aided in their effort to reduce the hazards associated with the medical uses of non AEC-controlled radiation sources such as radium. Related to this activity is work done to establish and implement techniques for determining, within each State, the integrity of radium source encapsulation.

Another major activity involves work with State and Atomic Energy Commission representatives in analyzing the potential health effects of proposed major nuclear installations. This activity is essential to assure an independent health appraisal of the environmental and human exposure potential of these new facilities.

Increased attention is being given to the evaluation and control of radiation emitted from electronic products manufactured directly for consumer use such as television sets, radar, microwave ovens and other electronic products which affect the population at large. Exposure parameters and certain practical control measures have been developed and are being applied to color television sets cooperatively with industry and, to some extent, the States. Measurements carried out by the Center supported by publicity given this problem through Congressional hearings and industry's own concern resulted in the correction of about 99% of of the sets initially identified as emitting excessive amounts of X-radiation. However, in studies conducted to verify these corrections, additional sources of X-rays were found which made necessary the checking of a sample of additional make and models of color TV sets. This survey of over 1,100 sets owned by Public Health Service employees in the Washington Metropolitan Area is yielding data which indicates the existence of an industry-wide problem. Continuing coordination with industry representatives as well as State health authorities will be required to assure effective control in this area.

The net budget decrease of $360,000 results from a decrease of $381,000 due to the change in financing of the management fund, offset by $21,000 for built-in items of increase and decrease. These items include the additional day of pay in 1969, military and civilian pay raises and non-recurring decreases.

### 3. BUREAU PROGRAM DIRECTION AND MANAGEMENT SERVICES

| | 1968 estimate | | 1969 estimate | | Increase or decrease | |
|---|---|---|---|---|---|---|
| | Positions | Amount | Positions | Amount | Positions | Amount |
| Personnel compensation and benefits | (184) | ($1,989,000) | 190 | $2,204,000 | +6 | +$215,000 |
| Other expenses | | (352,000) | | 358,000 | ..... | +6,000 |
| Total | (184) | (2,341,000) | 190 | 2,562,000 | +6 | +221,000 |
| **SUMMARY OF PROGRAM** | | | | | | |
| a. Program direction | (80) | (1,128,000) | 84 | 1,267,000 | +4 | +139,000 |
| b. Administrative management | (104) | (1,213,000) | 106 | 1,295,000 | +2 | +82,000 |
| Total | (184) | (2,341,000) | 190 | 2,562,000 | +6 | +221,000 |

In 1968, 184 positions and $2,341,000 for the Office of the Director, Bureau of Disease Prevention and Environmental Control were provided through the Public Health Service Management Fund. In 1969, this activity will be funded from the Radiological Health appropriation. The 1969 estimate provides an increase of 6 positions and $221,000 over the amount available for these activities in 1968. This increase includes $121,000 for built-in costs and $100,000 for a program increase. The program increase will finance 6 additional positions for executive direction and supporting program services for the Bureau. The Bureau encompasses activities carried out in five Centers—the National Centers for Chronic Disease Control, Communicable Diseases, Air Pollution Control, Urban and Industrial Health, and Radiological Health. This broad scope of both recently realigned and rapidly changing programs requires the expansion of the Office of the Director to assist in providing the necessary management and administrative support objectives.

| | 1968 estimate | | 1969 estimate | | Increase or decrease | |
|---|---|---|---|---|---|---|
| | Position | Amount | Position | Amount | Position | Amount |
| a. Program direction | (80) | ($1,128,000) | 84 | $1,267,000 | +4 | +$139,000 |

Program direction activities of the Office of the Bureau Director encompass the executive direction and leadership for the Bureau. These activities include program planning and evaluation, compliance and control, standards and intelligence, research and development, and public information activities. Program direction provides the expertise necessary in directing the broad scope of the Bureau's responsibilities to its Centers; in advising the Bureau Director on matters related to the various activities as they may affect Bureau programs; in maintaining liaison with interested groups and organizations outside the Bureau; and in participating in the development of Bureau goals and objectives. Included in program direction are the Bureau's Associate Regional Health Directors located in the Department's Regional Offices. They are responsible for coordination of technical assistance activities of the five Centers and those activities carried out by Bureau staff in Regional Offices. A program increase of four position and $64,000 is requested in 1969 for Program Direction over the 80 positions and $1,128,000 available in 1968.

Two of these positions are requested for the Office of Program Planning and Evaluation. This office leads and coordinates program planning, development of objectives, identifies program problem areas, studies new program areas in their initial development, and evaluates program accomplishments. It explores and develops methods for interrelating various program activities in order to assure an integrated effort and is responsible for the implementation of the program, planning, budgeting system for the Bureau. The increase will provide for the expansion of practices and tools of program analysis and evaluation for more extensive use by management at all levels.

The Office of Standards and Intelligence will be expanded by two positions. This office assists and advises the Bureau Director in development, coordination, and assessment of criteria and of standards promulgated for use in program operations and of surveillance and other systems for provision of data relating to such standards. The increase will provide for design, in cooperation with the Centers, of intelligence systems to identify the needs for health protection standards and the adequacy of health data sources for pollutants and hazards including chemicals, metals, synthetic materials, radiation, and excessive noise. These systems will provide the mechanism to ascertain the nature and extent of these threats to man's health and to assure that effective measures for prevention or control of such threats are promptly devised and implemented.

An increase of $75,000 is also included in the total requested for Program Direction for the full-year funding of the ten new positions authorized in 1968, pay raises, and one additional day of pay.

| | 1968 estimate | | 1969 estimate | | Increase or decrease | |
|---|---|---|---|---|---|---|
| | Positions | Amount | Positions | Amount | Positions | Amount |
| (b) Administrative management | (104) | ($1,192,000) | 106 | $1,295,000 | +2 | +$82,000 |

Administrative management is responsible for the development, coordination, direction, and assessment of management activities and for assuring consideration of management implications in program decisions. It directs those management services provided at the Bureau-level, such as financial and personnel management, supply management including contract negotiations and administration, grants administration, a management information system, and systems design and analysis.

A program increase of two positions requested in 1969 is for the Systems Staff. The Systems Staff designs, coordinates, and evaluates Bureau management systems and implements information systems in support of program planning and budgeting, and program evaluation. The increase will provide for expanded cooperation and work with other agencies and levels of government in systems consultation, training, and technical assistance, both witihn the Bureau and in relation to State, local and regional health programs and needs. This will be extended in the collaborative design and development of interrelated planning and information systems that will better support all of the needs of the Bureau.

Also included in the total for 1969 is an increase of $46,000 for full-year funding of three new positions authorized in 1968, pay raises, and one additional day of pay.

NEW POSITIONS REQUESTED, FISCAL YEAR 1969

| | Grade | Annual salary |
|---|---|---|
| Direct operations, radiological health: | | |
| Scientist | GS–14 | $15,841 |
| Radiation specialist (2) | GS–12 | 22,922 |
| Radiation specialist | GS–9 | 8,054 |
| Secretary | GS–5 | 5,565 |
| Total (5) | | 52,382 |
| Bureau program direction and management services: | | |
| Systems analyst | GS–13 | 13,507 |
| Public health program specialist | GS–13 | 13,507 |
| Public health adviser | GS–12 | 11,461 |
| Secretary | GS–5 | 5,565 |
| Secretary (2) | GS–4 | 9,990 |
| Total (6) | | 54,030 |
| Total new positions, all activities (11) | | 106,412 |

## Biographical Sketch

Name: James G. Terrill, Jr.

Position: Director, National Center for Radiological Health.

Birthplace and date: Cincinnati, Ohio, October 25, 1914.

Education: University of California, Berkeley, California, Master of Bioradiology, 1949–1951; Massachusetts Institute of Technology, Cambridge, Massachusetts, 1938–1941; University of Cincinnati, Cincinnati, Ohio, Civil Engineering, 1932–1937.

Experience: Director, National Center for Radiological Health, Rockville, Maryland, January 1, 1967, to present; Deputy Chief, Division of Radiological Health, Public Health Service, 1961–1966; Assistant Chief, Division of Radiological Health, Public Health Service, 1958–1961; Chief, Radiological Health Branch, Division of Engineering Services, Public Health Service, 1951–1958; Division of Commissioned Officers, Washington, D.C., 1947–1949; Communicable Disease Center, Public Health Service, Atlanta, Georgia, 1944–1947; Public Health Service District No. 5, San Francisco, California, 1943–1944; Public Health Service, 1940–1943; Assistant County Engineer, States Relations Division, Clermont County, Ohio, 1937–1938; Engineering Aide, Bureau of Public Roads, Roanoke, Virginia, 1935–1936.

Association memberships: American Board of Health Physics; American Board of Industrial Hygiene; American Conference of Governmental Industrial Hygienists; Environmental Engineering Intersociety Board; American Public Health Association; Board of Directors, Health Physics Society; Conference on Radiological Health; American Society of Civil Engineers; American Public Works Association; Conference of Federal Sanitary Engineers; American Hospital Association; National Committee on Radiation Protection; American Standards Association; Expert Advisory Panel on Radiation, World Health Organization;

Savannah River Advisory Board; U.S. Delegate, United Nations Scientific Committee on the Effects of Atomic Radiation (UNSCEAR); DHEW Member of Federal Radiation Council Working Group.

Special awards, citations, or publications: Public Health Service Meritorious Service Award (October 26, 1962). "Public Health Radiation Surveillance," Health Physics, 11, 917–33, September 1965; "Collaboration Between Public Health and Other Agencies in the United States," in Agricultural and Public Health Aspects of Radioactive Contamination in Normal and Emergency Situations, Rome Food and Agriculture Organization of the United Nations, 379–82, 1964; "The Public Health Service Role in Radiological Health," Industrial Medicine and Surgery, 33, 497, July 1964; "Ingestion of Radioactive Materials," American Journal of Public Health, 50, 989–994, July 1960; "Future Estimates and Economics of Waste Disposal Summary and Evaluation of Environmental Factors," in Hearings before The Subcommittee on Radiation of the Joint Committee on Atomic Energy, 86th Congress, 1st Session on Industrial Radioactive Waste Disposal, 3, 2395–2410, 1959; "Public Health Implications of Short Term Hazards," in The Shorter Term Biologic Hazards of a Fallout Field: Gordon M. Dunning, U.S. Atomic Energy Commission, and John A. Hilcken, U.S. Department of Defense, eds., Washington, D.C., GPO, 219–221, 1958; "Radioactive Waste Discharges From Nuclear Reactors," Sewage and Industrial Wastes, 30, 270–282, March 1958; "Some Public Health Aspects of Radioactive Wastes," Bulletin of the Atomic Scientists, 14, 44–45, January 1958; "Power Reactor Accidents—Role of the Public Health Service," AMA Archives of Industrial Health, 13, 446–447, May 1956.

HEALTH HAZARDS

Senator HILL. Mr. Terrill, you may proceed in your own way, sir.

Mr. TERRILL. Mr. Chairman and members of the Committee, all of the advantages of this electronics and nuclear age are not without risk. Many of the health hazards resulting from exposure to ionizing radiation have long existed while others are directly attributable to the increased use of nuclear energy and increased applications of X-rays and radioisotopes in medicine and industry. It is now recognized that certain electronic products coming into common use by large segments of the public represent radiation sources of potential health significance.

SURVEILLANCE OF RADIATION

Much has to be learned about the effects of exposure of man to long-term low-level radiation of all types. Adequate surveillance of radiation sources to detect possible contamination or exposure is critically essential. Thus, it becomes apparent that programs, geared to protection of the public from radiation hazards, be continued and increased where necessary.

LIMITING RADIATION EXPOSURE

Many of the efforts of the National Center for Radiological Health are directed toward the objective of maintaining the genetically significant exposure of the Nation's population from all sources of ionizing radiation at a level equal to or less than the natural radiation background level. It is the intent to maintain this goal without retarding necessary medical and industrial developments. Increased usage of radiation producing devices in our homes, institutions, and industry, makes it important that programs be initiated and maintained to control unproductive exposure from these sources so that the risk does not become greater than the benefit.

RADIATION FROM TELEVISION

Senator HILL. You see quite a bit in the press these days about radiation from certain television sets.

Mr. TERRILL. That is right. I think we are making some progress on that.

Senator HILL. You think we are making progress?

Mr. TERRILL. Yes. We now have ways of measuring radiation from television sets. The industry now, through our research and development of devices such as the survey meter on display here has an instrument for measuring the radiation, a tool which they didn't have until we developed this instrument.

Senator HILL. Until then they didn't have any way to measure?

Mr. TERRILL. They had methods but they took so long, the lag time of their instrumentation was such, Senator, that they, in effect, probably had negative results in many cases when the radiation was present. The instrumentation was precise but not practical.

Senator HILL. You think your instrumentation now is precise?

Mr. TERRILL. It is not precise, but it is far more practical. Their instrument required up to 200 hours to measure precisely the radiation from a color television set, and our instrumentation takes about 2 minutes to actually measure the radiation from these sets as they might come down the line or as it would occur in the home.

NUCLEAR POWER

Increasing attention is being given to the health problems introduced by usage of nuclear power. Construction plans and starts indicate that new electrical generating capacity using nuclear fuel has increased to a level approximately equal to that generating capacity being added using fossil fuel. Since the demand for electricity in the United States is nearly doubling every 10 years, the magnitude of the potential health problem associated with the use of nuclear reactors is clearly indicated. At this time, from the viewpoint of contamination from these facilities which may affect people, we must give major attention to radioactive iodine in milk as well as to tritium and krypton in a variety of environmental media, such as air, food, and water.

Senator HILL. We are moving more and more to nuclear reactors, aren't we?

Mr. TERRILL. Yes, sir. In very large units, much larger than have generally been put into use in the fossil fuel area.

CONSUMER ELECTRONIC PRODUCTS

Discovery that certain color television sets have been emitting hazardous X-radiation has underlined a public health problem requiring establishment of programs covering an additional aspect of radiological health control. Recommendations have been made to industry with respect to specific exposures, and actions have been taken by the industry and the Center to reduce these exposures. The recent Washington area survey of color television sets owned by Public Health Service employees reveals, however, a broad spectrum of possible exposure sources within color television sets.

The Center is now working jointly with the industry to develop corrective procedures. Our survey, which was conducted in an ex-

tremely short time span, was facilitated by use of a unique measuring device developed by the National Center for Radiological Health.

Senator HILL. Is that your device there?

Mr. TERRILL. This is the device I referred to earlier.

Senator HILL. How long did it take you to develop that device?

Mr. TERRILL. I would say 3 months. We really put our minds to it.

Senator HILL. You made up your mind you were going to do the job?

Mr. TERRILL. Yes, sir.

It is known that other electronic products, particularly those having high voltage circuits, emit radiations recognized as having potentially detrimental health effects. These include microwaves from radars and microwave ovens, high intensity light emissions from lasers and masers, and ultrasonic vibrations from a variety of electronic devices as yet not fully determined. It is now apparent that these several types of sources must be evaluated and steps be taken on a priority basis as resources become available to seek control methods for those radiations that can affect the public health.

Senator HILL. It is very important that we act now, isn't it?

Mr. TERRILL. It is very important that we start learning how to measure all of these radiations and particularly those that have some bearing on health.

AUTOMATIC COLLIMATOR

An increase of five positions and $210,000 is requested to speed the adaptation of our automatic collimator to additional medical X-ray machines now in general use. The collimator, which was developed by center personnel, automatically reduces the X-ray beam to film size thus eliminating much of the unnecessary exposure currently experienced in medical diagnosis.

This type of collimator is now being adapted by industry for commercial production. Two hospitals are currently testing under clinical conditions the center-built collimator. The effectiveness of these collimators in practice and the readiness of industry to manufacture them for general use will be investigated at a conference now being arranged.

Senator HILL. Will you have that conference shortly?

Mr. TERRILL. Since this was written, sir, we have had the conference. We backed it up by getting letters from individual companies indicating specifically when they intend to market some type of automatic collimator. Not all of them are precisely according to the design we developed. But we expect some of them to be on the market by the end of this year if their letters to us are indicative of their progress.

Senator HILL. You say this year. You mean the calendar year?

Mr. TERRILL. I mean the calendar year. Yes, sir. It is imperative that the scope and magnitude of our effort be modified as demanded by changing technology so that appropriate emphasis will be placed on those sources having the major potential health impact.

Programs have been developed to find solutions to the problems associated with medical and dental use of X-rays and nuclear medicine. Through improved methodology surveillance activities now provide at a reduced cost more specific information that can be directly related to the exposure of people and provide a basis for decisions with regard to protective actions which have been developed by the

Federal Radiation Council and approved by the President. On the basis of our past experience, we can learn how to measure exposures from complex sources and contaminations and develop specific procedures for their reduction.

BUREAU PROGRAM DIRECTION AND MANAGEMENT SERVICES

This year this appropriation includes a new activity—bureau program direction and management services. This finances expenses of the Office of the Director, Bureau of Disease Prevention and Environmental Control, which in 1968 were provided through the Public Health Service Management Fund. An increase of six positions and $221,000 over the comparable amount available for 1968 is requested. Dr. Prindle is here to answer any questions you may have on this activity.

I shall be pleased to answer any questions you may have on radiological health activities.

Senator HILL. In other words, the Office of the Director, Bureau of Disease Prevention and Environmental Control, I understand was financed from the management fund, is that correct?

Mr. Cardwell. May I make a comment about that, Mr. Chairman?

Senator HILL. Yes.

Mr. CARDWELL. This is an interim proposal. Last year the House Committee on Appropriations raised the question with the Department about the use of the Public Health Service management fund as a method for funding bureau direction, supervision and other administrative expenses. We explored with the Bureau of the Budget this year, when we put this budget together, alternative methods of funding these activities. The bureau felt that in the face of the then pending reorganizations of the health activities that it would be better to propose an interim arrangement.

ALTERNATE SYSTEM OF FINANCING

We are now working in collaboration with the Public Health Service on an alternate system of financing which we will present to the committee.

Senator HILL. Senator Bartlett?

Senator BARTLETT. Why would an alternate system of financing be called for?

Mr. CARDWELL. Here we are taking an organizational unit, a center, and including in its appropriation for regular program activity an appropriation request for funds that will be used at the bureau level to fund the administrative overhead and executive direction of the entire bureau. It is just an unorthodox method of financing.

Senator BARTLETT. Mr. Terrill, I hope and expect you will be before the Committee on Commerce next month to testify on the radiation bill. The Commerce Committee will consider it first and Senator Hill's Committee second. I guess that is the arrangement which was made.

PROGRAMS AND INVESTIGATIONS

You say "many of the efforts of the National Center for Radiological Health are directed toward the objective of maintaining the genetically significant exposure of the nation's population from all sources of

ionizing radiation", and so forth. What other activities are you engaged in?

Mr. TERRILL. Those are the activities that are in the ionizing radiation area. They include our medical radiation protection program, our dental radiation and industrial radiation protection program, our nuclear weapon surveillance programs.

In addition to that we are making preliminary investigations with regard to radiation emitted by lasers and microwave radiation to learn the status of the art insofar as standards and biological effects and methods of measurement of the level of the industrial and public exposure.

Senator BARTLETT. Does this work have to do with "maintaining a genetically significant exposure of the nation's population"?

Mr. TERRILL. The second group of activities?

Senator BARTLETT. Yes.

Mr. TERRILL. Not from ionizing radiation, but some of these things are related to genetic exposure but not of an ionizing nature.

### NUCLEAR POWER

Senator BARTLETT. Now you are actively engaged, you inform us, in investigating the health problems related to the uses of nuclear power. Is this all prospective? Has anything occurred in the past that would seem to make this research effort imperative?

Mr. TERRILL. A number of these, sir, have occurred in the past. One is that not all of the reactors have been successful. The principal type of reactor which has been successful and on which we have data is the so-called pressurized water reactor both in terms of those that were built by the Navy and in terms of those built for public power use. It is important that we get data on the emissions from all types of reactors and know that the radiation levels predicted by the industry, when they design these reactors, actually occur in terms of contamination.

Senator BARTLETT. You say they have not all been successful. Is this in respect to health hazards?

### CLOSING OF MICHIGAN REACTOR

Mr. TERRILL. It is true in terms of emission levels and the prospect of having exposures that were not contemplated, yes. For example, they had to shut down the reactor up in Michigan for a year while they found out why it wasn't operating properly, and to remove the foreign objects in the core.

Senator HILL. Shut down for a year, you say?

Mr. TERRILL. Yes, sir. Ideally, we would have several functions in this effort. One is to check on the actual emission levels from the reactors that expose people and to relate these to the design.

Secondly, develop a system to act under emergency conditions to protect people from excessive emission during a melt down and, thirdly, the accumulated total emission of long-lived isotopes such as krypton and xenon and tritium.

Senator BARTLETT. So far as you know are the emission levels that high at any place where nuclear reactors are operating?

### Emission Levels of California Reactor

Mr. Terrill. The only power reactor which has been operated for any period of time where the emission levels exceeded the design was at Eureka. This was a boiling water type of reactor.

Senator Bartlett. Eureka?

Mr. Terrill. California.

Senator Bartlett. What happened there?

Mr. Terrill. They changed the fuel rods from stainless steel to zirconium and now presumably this reactor will be satisfactory.

Senator Bartlett. You haven't tested it yet?

Mr. Terrill. We have run some tests, but you should test these reactors over a period of time because they are designed to operate for a number of years. They might work very satisfactorily for 6 months and not work satisfactorily from then on.

Senator Bartlett. As of now, are they operating satisfactorily?

Mr. Terrell. As far as we know, yes, sir.

### color television radiation

Senator Bartlett. You spoke about the survey made within the Washington area of colored TV sets owned by employees of the Public Health Service.

Mr. Terrill. Yes, sir.

Senator Bartlett, And you discovered, as you put it, that there was a broad spectrum of possible exposure sources within color television sets. Does this mean that those exposure levels are dangerous?

Mr. Terrill. In terms of immediate peril to people, no. In terms of making a major unnecessary contribution to the genetic level, it means yes. According to the National Council for Radiation Protection, not more than 5 percent of the natural background should be received from this source and a substantial number of the TV receivers were contributing more than that, depending upon where the people were sitting in the room and how they were operating the set.

Senator Bartlett. If a set is emitting radiation how close to it do you have to be to suffer any ill effects?

Mr. Terrill. If it is emitting radiation at the standard level, the maximum that has been set by the NCRP recommendations, in order to keep the genetic dose within the objective of the National Council on Radiation Protection, viewers should sit back 6 to 10 feet.

Senator Bartlett. It is children chiefly, I would assume, who might be closer.

Mr. Terrill. Yes, sir.

Senator Bartlett. These are the very ones who might be most affected genetically?

Mr. Terrill. Yes, sir.

### Percentage of Hazardous Sets

Senator Bartlett. Do your surveys indicate the percentage of television sets that are hazardous? If you have a hundred TV sets and you survey them all, what percentage in that hundred?

Mr. Terrill. 5 to 10 percent would be in excess of the recommended standard at this time.

Senator Hill. May I ask a question?

Would they largely be colored sets?

Mr. TERRILL. Yes, sir.

Dr. STEWART. May I interject, Mr. Chairman? I am not sure that this exchange was quite correct. From the survey we did with Public Health Service employees you cannot generalize to what percent of the Nation's color sets—is that what you were asking, Senator Bartlett?

Senator BARTLETT. Let us confine it to those that you have actually tested. I understand you can't give a figure for all the sets in the Nation.

Dr. STEWART. The intention of that survey was not to arrive at that kind of figure, but to find out whether there were other manufacturers' color sets involved in this rather than G.E., and to get some idea of it.

Senator BARTLETT. I suppose there is no confinement to G.E., is there?

Mr. TERRILL. No, sir.

### HIGH X-RAY PRODUCTION OF COLOR SETS

Senator BARTLETT. Why is it that color TV, and not black and white, is alone guilty?

Mr. TERRILL. It is principally because of the higher voltage level used in color television sets, the X-ray production being a power function of the voltage. It goes up very rapidly with the increase in the voltage across the picture tube. This of course means that there is an increase in the voltage in the rectifier and also in the shunt regulators where they are used.

Senator BARTLETT. What if a family in Indianapolis has a color TV set and read that which is being published so widely about the possible hazards and desired to have their set tested, would there be facilities available locally?

### INSTRUMENTATION FOR MEASURING RADIATION

Mr. TERRILL. This was the reason that we worked on practical instrumentation, because until we developed an instrument that the health departments and the television companies and the servicemen could use, there was no way of arriving at the level that people were being exposed to.

Senator BARTLETT. One had to subject one's self to the risk or discard the set?

Mr. TERRILL. Or turn it off, which is practically the same.

Senator BARTLETT. Leave it as a piece of furniture?

Mr. TERRILL. Yes. Some of them are supposed to be quite nice looking.

Dr. STEWART. There was one thing they could do, Senator Bartlett. In many of the surveyed sets they found that they were operating at a voltage higher than the manufacturer had recommended. The repairman could check the voltage and see that they are operating within the recommendations.

Senator BARTLETT. I feel, too, that one facet of the problem relates to servicing.

Dr. STEWART. Yes, sir.

Senator BARTLETT. Will you tell us a bit more about this unique measuring device? Did one person develop that or a group?

Mr. TERRILL. One person was particularly responsible for it.

Senator BARTLETT. Let us name him so that he can get his name in the record. He should be given some award.

DEVELOPMENT BY RICHARD STOMS, RADIATION PHYSICIST

Mr. TERRILL. Richard Stoms. He is a radiation physicist in our laboratories in Cincinnati. His assistant was Edward Kuerze. Then it was checked and calibrated by people like Henry Rechen and Roger Schneider, who checked it out with the Bureau of Standards and the industry so that we were reasonably sure that it was satisfactory. It was presented to the industry, discussed with them, adopted by some companies, and made available to manufacturers by instrument makers.

Senator BARTLETT. He and all associated with him should be singled out for special praise and commendation.

Senator HILL. How long did you say you have had it now?

Mr. TERRILL. We first used it in October 1967.

Senator BARTLETT. Brand new?

Mr. TERRILL. Brand new, yes, sir.

ELECTRONICS PRODUCTS

Senator BARTLETT. Now you said, Mr. Terrill, that it is known that other electronic products, particularly those having high voltage circuits, have potentially detrimental health effects. Will you name some of these?

Mr. TERRILL. Some of these, of course, are common ones like the medical X-ray machine, but others are radar devices and microwave ovens; radar that could even be used on small ships and microwaves that are used in communications, as well as lasers that are used to identify objects at some distance such as in surveying techniques.

LASERS

I think our concern has to also be related to lasers that are used as educational tools to teach people physics at educational institutions, and to the developing use of this type of radiation by the military. We have to coordinate with the military in such a way that the total exposure of people is known and the exposure contributions made by various groups is known.

DENTAL X-RAYS

Senator BARTLETT. I went to the dentist the other day to have some X-rays taken. I hadn't had any for a long while. As he asked me to use my finger to hold the film, I got to wondering what they did with children 3 or 4 years of age who would not be likely to hold the film in place. I asked him. "Well," he said, "we have devised a method whereby they can simply bite the film in a particular way with their jaws and it all comes out all right." He said, "Dentists used to hold the film in place with their fingers in the old days until their fingers began to drop off. They quit that in a hurry." What do you think about dental X-rays in general? Are they being properly used these days or is there too much exposure?

COLLIMATORS

Mr. TERRILL. I think that dentists would agree that the exposure levels can be reduced substantially. I also think, though, that they have done a reasonably good job in bringing the mechanical devices to the attention of the profession such as using lead aprons and making dentists conscious of the need for collimation in their X-ray machines.

We know from our surveys that 80 percent of the machines now have collimators, whereas 10 years ago 20 percent had collimators.

DENTAL X-RAY MACHINE CORRECTIONS

Senator BARTLETT. When did this public record commence?

Mr. TERRILL. I would say that it started probably in the mid fifties. In the case of dental X-ray machines we have discovered a simple way of correcting them, and that is providing them with what amounts to lead washers. We go out and survey the machine and send back a lead washer to correct it. It is quicker and more effective than making more surveys of that same machine.

Senator BARTLETT. Have most dentists adopted this?

Mr. TERRILL. Eighty percent of the machines, I think, have now been corrected.

Senator BARTLETT. Who developed this?

Mr. TERRILL. Our staff in the laboratory. All that was required was to provide a lead washer which was cheaper and more effective than writing two letters.

RADIATION CONTROL DEVELOPMENT

Senator BARTLETT. I cannot, for the life of me, understand why it is that you people have to develop the lead washer, why is it you people have to develop this measuring device, how is it that you people have to develop automatic collimators? Why in every instance does it have to be done by Government? I should think that industry would, after the hazards become known, have moved forward aggressively and as quickly as possible to make these corrections themselves. This disturbs me that even in the year 1967 and 1968, with greater and greater comprehension of radiation dangers, we have to wait, apparently uniquely, for Government to come forward with this or that method of control.

Mr. TERRELL. In these three instances, frankly, I was flabbergasted, myself. I just could not believe that there were so many dental X-ray machines that had no collimators. If they didn't, the best thing to do was to fix them, and the same way with these instruments. It is hard to believe that an industry that is so heavily involved in all kinds of instrumentation would not develop an instrument that was practical to measure X-rays. If they don't, I guess we just have to check on these things and do something about it.

Senator BARTLETT. I think you are doing a splendid job. I don't think it ought to be entirely up to you or the Government.

Mr. TERRILL. I agree that apparently in many areas industry has to be stimulated by Government to put safety devices in their equipment or consumer products. It is the same way in air pollution where we are now developing sulfur removal equipment. The same way in accidents. I don't understand it, myself.

Senator BARTLETT. Congress is often reprimanded for moving in and establishing Federal national standards to cover an area such as this. I think this is a wonderful example of why it is necessary, no matter how reluctant any of us may be to do this.

I have no further questions, Mr Chairman.

Senator HILL. Thank you very much, sir. We appreciate your statement very, very much.

Mr. TERRILL. Thank you, Mr. Chairman.

STATEMENT OF DR. CARRUTH J. WAGNER, DIRECTOR, BUREAU OF HEALTH SERVICES

ACCOMPANIED BY:

DR. JOHN W. CASHMAN, DIRECTOR, DIVISION OF MEDICAL CARE ADMINISTRATION
KENNETH W. REVELL, ASSISTANT DIRECTOR, DIVISION OF MEDICAL CARE ADMINISTRATION
RICHARD G. THOMAS, ACTING EXECUTIVE OFFICER, DIVISION OF MEDICAL CARE ADMINISTRATION
GEORGE SPATAFORE, ACTING EXECUTIVE OFFICER, BUREAU OF HEALTH SERVICES
RALPH BAHN, FINANCIAL MANAGEMENT OFFICER, BUREAU OF HEALTH SERVICES
DR. WILLIAM H. STEWART, SURGEON GENERAL
CHARLES MILLER, CHIEF FINANCE OFFICER
JAMES B. CARDWELL, DEPUTY ASSISTANT SECRETARY, BUDGET

APPROPRIATION ESTIMATE

"HEALTH SERVICES

"COMMUNITY HEALTH SERVICES

"To carry out, to the extent *authorized by law and* not otherwise provided, sections 301, [303] *304*, 310, and 311, of the Act, Executive Order 11074 of January 8, 1963, [part C of the Mental Retardation Facilities Construction Act (42 U.S.C. 2261–2267) and the Community Mental Health Centers Act (42 U.S.C. 2681–2687), $54,234,000, of which $18,000,000 shall be available until June 30, 1969, for grants for facilities pursuant to such part C of the Mental Retardation Facilities Construction Act] *and for expenses necessary in the Office of the Director, Bureau of Health Services, $59,500,000: Provided,* That [$4,075,000] *$4,320,000* may be transferred to this appropriation, as authorized by section 201(g)(1) of the Social Security Act, as amended, from any one or all of the trust funds referred to therein and may be expended for functions delegated to the Surgeon General by the Secretary under title XVIII of the Social Security Act [: *Provided further,* That there may be transferred to this appropriation from "Community mental health resource support" an amount not to exceed the sum of the allotment adjustment made by the Secretary pursuant to section 202(c) of the Community Mental Health Centers Act]. (*Additionally authorizing legislation to be proposed.*)

EXPLANATION OF LANGUAGE CHANGE

The first change recognizes the need for legislation now pending for the continuation of the Migrant Health program.

The second change deletes section 303 of the Public Health Service Act which provided authority for the award of institutional improvement grants for the care of the mentally retarded. This function will be funded in the "Social and rehabilitation service" appropriation.

The third change adds section 304 which authorizes the awarding of grants and contracts for research and demonstrations relating to health facilities and services.

The fourth change provides authority for the funding of Program Direction and Management Services for the Office of the Bureau Chief, Bureau of Health

Services. This function was previously funded in the Public Health Service Management Fund.

The fifth change deletes part C of the Mental Retardation Facilities Construction Act and the Community Mental Health Centers Act which authorizes grants for construction of facilities for the mentally retarded. Also deleted is the authorization regarding availability of funds until June 30, 1969 for grants pursuant to Part C of the Mental Retardation Facilities Construction Act. The deletion of the second proviso relating to section 202(c) of the Community Mental Health Centers Act, which authorizes, under certain conditions, the transfer of funds from the "Community mental health resources support" appropriation for the construction of mental retardation facilites also relates to the transfer of mental retardation functions. The Mental Retardation program will be funded in the "Social and rehabilitation service" appropriation.

AMOUNTS AVAILABLE FOR OBLIGATION

| | 1968 | 1969 |
|---|---|---|
| Appropriation | $54,234,000 | $59,500,000 |
| Trust fund transfers | 4,075,000 | 4,320,000 |
| Transfer to "General Services Administration" | −28,000 | ---------- |
| Transfer from "National Institute of General Medical Sciences" | 34,000 | ---------- |
| Comparative transfer to "Social and Rehabilitation Service" | −28,927,000 | ---------- |
| Comparative transfer from: | | |
| "Hospital construction activities" | 9,589,000 | ---------- |
| "Comprehensive health planning and services" | 5,000,000 | ---------- |
| Cutback required by H.J. Res. 888 | −426,000 | ---------- |
| Total currently available | 43,551,000 | 63,820,000 |
| Proposed supplemental appropriation | 5,681,000 | ---------- |
| Proposed release of reserves: | | |
| For the National Center for Health Services Research and Development | 146,000 | ---------- |
| For increased pay costs | 280,000 | ---------- |
| Total available for obligation | 49,658,000 | 63,820,000 |
| Disposition of cutback: | | |
| To be used for pay costs in this account | 280,000 | ---------- |
| To be used for the National Center for Health Services Research and Development | 146,000 | ---------- |
| Total cutback | 426,000 | ---------- |

OBLIGATIONS BY ACTIVITY

| | 1968 estimate | | 1969 estimate | | Increase or decrease | |
|---|---|---|---|---|---|---|
| | Positions | Amount | Positions | Amount | Positions | Amount |
| 1. Medical care administration and community health: | | | | | | |
| (a) Grants: | | | | | | |
| (1) Research | ---------- | $6,760,000 | ---------- | $7,800,000 | ---------- | +$1,040,000 |
| (2) Training and fellowships | ---------- | 1,050,000 | ---------- | 1,100,000 | ---------- | +50,000 |
| (3) Migrant health services | ---------- | 7,200,000 | ---------- | 8,100,000 | ---------- | +900,000 |
| (b) Direct operations | 602 | 13,891,000 | 698 | 15,723,000 | +96 | +1,832,000 |
| Subtotal | 602 | 28,901,000 | 698 | 32,723,000 | +96 | +3,822,000 |
| 2. National Center for Health Services Research and Development: | | | | | | |
| (a) Grants and Contracts | ---------- | 20,000,000 | ---------- | 27,720,000 | ---------- | 7,720,000 |
| (b) Direct operations | 51 | 757,000 | 130 | 1,901,000 | +79 | +1,144,000 |
| Subtotal | 51 | 20,757,000 | 130 | 29,621,000 | +79 | +8,864,000 |
| 3. Program direction and management services | (1) | (1) | 96 | 1,476,000 | +96 | +1,476,000 |
| Total, comparable new obligational authority | 653 | 49,658,000 | 924 | 63,820,000 | +271 | +14,162,000 |

[1] In 1968, Bureau program direction and management services was funded in the Public Health Service management fund at a level of 96 positions and $1,359,000.

OBLIGATIONS BY OBJECT

| | | 1968 estimate | 1969 estimate | Increase or decrease |
|---|---|---|---|---|
| Total number of permanent positions | | 653 | 924 | +271 |
| Full-time equivalent of all other positions | | 28 | 36 | +8 |
| Average number of all employees | | 630 | 871 | +241 |
| 11 | Personnel compensation: | | | |
| | Permanent positions | $6,352,000 | $9,327,000 | +$2,975,000 |
| | Positions other than permanent | 218,000 | 292,000 | +74,000 |
| | Other personnel compensation | 40,000 | 40,000 | |
| | Total personnel compensation | 6,610,000 | 9,659,000 | +3,049,000 |
| 12 | Personnel benefits | 760,000 | 1,007,000 | +247,000 |
| 21 | Travel and transportation of persons | 864,000 | 1,202,000 | +338,000 |
| 22 | Transportation of things | 64,000 | 121,000 | +57,000 |
| 23 | Rent, communications, and utilities | 224,000 | 370,000 | +146,000 |
| 24 | Printing and reproduction | 98,000 | 198,000 | +100,000 |
| 25 | Other services | 364,000 | 471,000 | +107,000 |
| | Project contracts | 4,837,000 | 5,402,000 | +565,000 |
| | Services of other agencies | 400,000 | 400,000 | |
| | Payment to "Public Health Services" management fund | 250,000 | | −250,000 |
| 26 | Supplies and materials | 89,000 | 133,000 | +44,000 |
| 31 | Equipment | 88,000 | 137,000 | +49,000 |
| 41 | Grants, subsidies, and contributions | 35,010,000 | 44,720,000 | +9,710,000 |
| | Total obligations | 49,658,000 | 63,820,000 | +14,162,000 |

*Summary of Changes*

| | |
|---|---|
| 1968 enacted appropriation | $54,234,000 |
| Proposed supplemental | 5,681,000 |
| Transfer from "National Institute of General Medical Sciences" | 34,000 |
| Comparative transfer of Mental Retardation Activities to "Social and Rehabilitation Service": 1968 appropriation | −28,927,000 |
| Transferred from "Social Security trust fund accounts" | 4,075,000 |
| Transferred to "Operating expenses, Public Buildings Service", General Services Administration | −28,000 |
| Comparative transfer from: | |
| "Hospital Construction activities" | 9,589,000 |
| "Comprehensive health planning and services" | 5,000,000 |
| Cutback required by HJR 888 | −426,000 |
| Proposed release of reserves for increased pay and postal costs | 280,000 |
| Proposed release of reserves for proposed supplemental for National Center for Health Services Research and Development | 146,000 |
| 1968 estimated obligations | 49,658,000 |
| 1969 estimated obligations | 63,820,000 |
| Total change | +14,162,000 |

| | Base | | Changes from base | |
|---|---|---|---|---|
| | Positions | Amount | Positions | Amount |
| Increases: | | | | |
| A. Built in: | | | | |
| 1. Annualization of 72 new positions and program costs authorized in 1968 | | | | $317,000 |
| 2. Annualization of pay raise | | | | 120,000 |
| 3. 1 extra day of pay in 1969 (260 days in 1968, 261 days in 1969) | | | | 34,000 |
| 4. Within-grade and reclassification costs | | | | 202,000 |
| 5. Bureau program direction and management services previously funded in the Public Health Service management fund | | | 96 | 1,359,000 |
| B. Program: | | | | |
| 1. Medical care administration and community health: | | | | |
| (a) Research grants | | $6,760,000 | | 1,040,000 |
| (b) Research training and fellowships | | 1,050,000 | | 50,000 |
| (c) Migrant health grants | | 7,200,000 | | 900,000 |
| (d) Health insurance and field operations | 257 | 4,045,000 | 50 | 461,000 |
| (e) Health economics | 41 | 1,482,000 | 6 | 200,000 |
| (f) Group practice | 3 | 100,000 | 15 | 400,000 |
| (g) Rural health program | 3 | 187,000 | 20 | 279,000 |
| (h) Initiation of family planning services program | | | 5 | 200,000 |
| 2. National Center for Health Services, Research and Development: | | | | |
| (a) Grants and contracts | | [1] $20,000,000 | | 7,720,000 |
| (b) Direct operations | 51 | [1] 757,000 | 79 | 1,131,000 |
| 3. Program direction and management services | 96 | [1] 1,359,000 | | 29,000 |
| Total program increases | | | 271 | 12,410,000 |
| Decreases: | | | | |
| A. Built in: | | | | |
| 1. Nonrecurring items of equipment | | | | −30,000 |
| 2. Nonrecurring contribution to Public Health Service management fund | | | | −250,000 |
| Total, decreases | | | | −280,000 |
| Total, net changes requested | | | +271 | +14,162,000 |

[1] Adjustments to reflect programs previously funded in other accounts.

EXPLANATION OF CHANGES

1. *Medical Care Administration and Community Health*

*Research grants*

The $1,040,000 increase will provide support for 2 new research centers, expansion of the 3 research centers established in 1968, and supplementals for approved research grants.

*Research training grants and fellowships*

The $50,000 increase for research training will provide support for 39 ongoing research training grants.

*Migrant health grants*

An increase of $900,000 is requested to expand and intensify health services for migrant workers by strengthening the medical, dental and hospital components of the 115 migrant health projects.

*Health insurance and field operations*

An increase of 45 positions and $361,000 is requested to expand staff capabilities to assist major American cities in improving health care for the poor and minority groups.

An increase of 5 positions and $100,000 is requested to develop community profiles and expand the health resources inventory.

*Health economics*

An increase of 6 positions and $200,000 is requested to support economic studies of the rising costs of medical care and the future role of local and state-supported health facilities.

*Group practice*

An increase of 15 positions and $400,000 is requested to initiate studies and demonstrations to encourage the development of group practice.

*Rural health program*

An increase of 20 positions and $279,000 is requested to provide consultative services and technical assistance in the development of health services in rural areas.

*Family planning services program*

An increase of $200,000 and 5 positions is requested to initiate a program of family planning services.

2. *National Center for Health Services Research and Development*

An increase of $7,720,000 provides for the funding of additional contracts and grants under this activity. The $1,131,000 increase provides improved staff support for operation of the center.

3. *Program Direction and Management Services*

An increase of $29,000 is requested for contractual services.

EXPLANATION OF TRANSFERS

| | 1968 estimate | 1969 estimate | Purpose |
|---|---|---|---|
| Transfer from: Social Security trust funds | $4,075,000 | $4,320,000 | To implement Public Health Service functions related to title XVIII of the Social Security Act. |
| Transfer from: National Institute of General Medical Sciences. | 34,000 | ---------- | Transfer of scientific evaluation funds in support of the health services research study section and a part of the Public Health Service reorganization. |
| Transfer to: "Operating expenses, public buildings service," General Services Administration. | −28,000 | ---------- | Rental of space. |
| Comparative transfer to: | | | |
| "Social and Rehabilitation Service": | | | |
| 1968 appropriation | −11,427,000 | ---------- | Transfer of menta! retardation activities as part of the reorganization of the Department of Health, Education, and Welfare. |
| Proposed supplemental | −6,600,000 | ---------- | |
| Unobligated balance transferred | | −17,500,000 | |

COMMUNITY HEALTH SERVICES

| | 1968 estimate | | 1969 estimate | | Increase or decrease | |
|---|---|---|---|---|---|---|
| | Position | Amount | Position | Amount | Position | Amount |
| Personnel compensation and benefits | 653 | $7,370,000 | 924 | $10,666,000 | +271 | +$3,296,000 |
| Other expenses | ---------- | 42,288,000 | ---------- | 53,154,000 | ---------- | +10,866,000 |
| Total | 653 | 49,658,000 | 924 | 63,820,000 | +271 | +14,162,000 |

GENERAL STATEMENT

The appropriation is divided into three major program components: "Medical Care Administration and Community Health", covers activities directed toward improving the quality, quantity, effectiveness, and availability of health and health protection services in all settings. It includes new approaches for planning and organizing for the delivery of health services in urban and rural areas as well as to migrant workers and their families. It also includes the provision of professional and technical support to the Social Security Administration in its administration of Title XVIII of P.L. 89-97 (the Social Security Amendments of 1965). It serves as a focal point within the Public Health Service for drawing upon the many skills and resources needed to implement the Medicare and Medicaid programs.

The National Center for Health Services Research and Development provides the focal point within the Public Health Service for health services research activities and is consistent with the President's directive to establish such a center. Included in its functions are the development of information systems, the

development of research resources, and the financing of large scale research in the organization and delivery of health services and in the improvement of medical facilities design. In 1968 this activity was carried in Hospital Construction activities, Comprehensive Health Services and the Public Health Service management fund.

Program Direction and Management Services covers the immediate office of the Bureau Director. This office provides program direction and management services in the application and utilization of the Bureau of Health Services resources towards the achievement of its goals. This activity was previously carried in the Public Health Service Management Fund.

To carry out these activities, we are requesting a budget of 924 positions and $63,820,000.

| | 1968 estimate | 1969 estimate | Increase |
|---|---|---|---|
| Research grants | $6,760,000 | $7,800,000 | +$1,040,000 |

ESTIMATED GRANT REQUIREMENTS

| | 1968 estimate | | 1969 estimate | | Increase or decrease | |
|---|---|---|---|---|---|---|
| | Number | Amount | Number | Amount | Number | Amount |
| Noncompeting continuations | 59 | $4,241,000 | 57 | $3,789,000 | −2 | −$452,000 |
| New grants | 27 | 1,369,000 | 27 | 1,369,000 | | |
| Supplementals | | 150,000 | | 450,000 | | +300,000 |
| Subtotal | 86 | 5,760,000 | 84 | 5,608,000 | −2 | −152,000 |
| Research centers: | | | | | | |
| Noncompeting continuations | | | 3 | 1,500,000 | +3 | +1,500,000 |
| New | 3 | 1,000,000 | 2 | 692,000 | −1 | −308,000 |
| Subtotal | 3 | 1,000,000 | 5 | 2,192,000 | +2 | +1,192,000 |

Improvement of health services depends increasingly upon special research and development efforts addressed to selected problems inherent in the medical care process and administrative patterns and procedures that affect organizational delivery of care, its accessibility, quality and capability to provide a continuation of preventive, curative, and restorative services such as: the evaluation and improvement of procedures and regimens for patient care; economic analysis of costs and benefits of services; and the patterns of utilization of services by special groups and by the general population under varying urban and rural conditions.

During 1969, additional research needed for improving the delivery of health services to the community will be stimulated. Priorities for research will parallel priorities for program development. Thus special effort will be made to further research on the planning and organization of health services; quality of care; and cost of care.

We will encourage studies of the impact of cultural, economic, and political influences on the feasibility and success of health planning; studies of health needs in communities with limited fiscal resources; and studies of community readiness to improve health services, focusing on such variables as citizen awareness, leadership awareness, etc. New knowledge is also needed with respect to the roles and relationships of the various health resources within the community, and new methods of achieving full coordination and utilization of total resources need to be explored. For example, there are still many unanswered problems in achieving fully satisfactory integration of medical services provided in the hospital, the extended care facility, nursing home, physician's office and patient's home. Likewise, successful integration of special programs dealing with particular population groups such as school children, or agricultural migrants with other existing community programs requires further research. Ways of reducing fragmentation of health services through such methods as regionalization and metropolitan organization must be studied more intensively than they have been to date.

High priority will be given research proposals dealing with the quality of health care. While some progress has been made in developing methods of assessing quality of hospital services, far less work has been done with respect to

evaluation of the quality of out-of-hospital care. Studies, experimenting with a variety of approaches, are particularly needed in this area. These should include attention to care in individual and group office practice, in extended care facilities, and in the home, as well as in hospitals.

In 1968, three Health Services Research Centers are being established in medical or health service institutions. We expect from 10 to 15 applications for these awards. The centers will provide a setting in which a multidisciplinary approach to the problems of the medical care will be pursued. The Center will serve as a long-term site for medical and health related investigative teams to conceptualize, operate, and evaluate new or different ways of providing health services.

The basic characteristic of the centers is purposeful experimentation—setting up new services, operating them under controlled conditions, and evaluating the results against appropriate criteria. In 1969, it is anticipated that two new Health Services Research Centers will be established.

At the same time we will continue to encourage new independent research project proposals, since there is no substitute for original creative ideas of imaginative investigators. The increase of $1,040.000 will provide support for non-competing continuations and supplementals for approved research grants. Support of new grants will remain at the 1968 level.

| | 1968 estimate | 1969 estimate | Increase |
|---|---|---|---|
| Research training and fellowships | $1,050,000 | $1,100,000 | +$50,000 |

To carry on a successful program of research in community health and medical care administration, an adequate supply of competent investigators is essential. However, there is a limited availability of academic curricula in the various disciplines needed for training graduate students to do research in these areas, as well as limited financial support for students.

Currently, we are supporting 9 training programs at the level of $800.000 designed to prepare students for careers in research in community health and medical care administration. We expect to award 30 research fellowships in 1968 amounting to $250,000. Students are supported directly by our research fellowship program; the research training grants program provides curriculum development and also provides faculty and student support to the university.

The 1969 research fellowship request is $250,000. The 1969 research training grant request is $850,000, an increase of $50,000, which is needed to provide support for ongoing research training grants.

| | 1968 estimate | 1969 estimate | Increase |
|---|---|---|---|
| Migrant health services | $7,200,000 | $8,100,000 | +$900,000 |

An increase of $900,000 is requested to enable the Migrant Health Program to serve an increased number of migrant farm workers and families.

Migrant agricultural laborers and their families are among the most deprived groups in the nation. The purpose of this program is to raise the level of migrant health to that of the general population. At present less than 1 out of every 3 migrants is receiving health care at some time during the year through the migrant health program. Moreover, a program to provide needed hospital in-patient care for migrants has been in operation a little over one year. The increase requested for 1969 will enable some progress toward the program's goal by: (1) increasing the number of migrants reached; (2) increasing the quality and quantity of out-patient care being received by migrants; and (3) increasing the current level of in-patient hospital care.

In 1969, 115 projects in 36 States and Puerto Rico will continue to be supported. The typical project provides family health service clinics, home nursing visits to families in migrant camps, health education and the services of sanitarians working with migrants and property owners to upgrade living conditions.

Through a program initated in 1967, 55 migrant health projects will be providing in-patient hospital care for migrant workers and their families. An intensified program of early casefinding, out-of-the-hospital medical care, and a more

person-oriented program of predischarge planning will continue in each of these project areas.

The number of migrants living and working for 6 or more months of the year in counties which provide ready access to personal health care is approximately 310,000. The total number of patient visits for medical care is expected to grow to 230,000 in 1969, as compared to 216,000 in 1968. Dental visits will increase from 25,000 to 27,000. Approximately 128,000 sanitation inspections and follow-up visits will occur in 1969, an increase of 2,000 over the previous year.

The in-patient hospital component will provide hospital care for approximately 3,600 patients in 1969, as opposed to 3,400 in 1968. This will be an increase of approximately 1,000 hospital days for a total of 21,000.

MEDICAL CARE ADMINISTRATION AND COMMUNITY HEALTH PROGRAM—DIRECT OPERATIONS

| | 1968 estimate | | 1969 estimate | | Increase or decrease | |
|---|---|---|---|---|---|---|
| | Positions | Amount | Positions | Amount | Positions | Amount |
| Personnel compensation and benefits | 602 | $6,746,000 | 698 | $7,965,000 | +96 | +$1,219,000 |
| Other expenses | | 7,145,000 | | 7,758,000 | | +613,000 |
| Total | 602 | 13,891,000 | 698 | 15,723,000 | +96 | +1,832,000 |
| Subactivities: | | | | | | |
| (1) Health insurance and field operations | 257 | 4,045,000 | 307 | 4,860,000 | +50 | +815,000 |
| (2) Standards and methods | 24 | 1,250,000 | 24 | 1,259,000 | | +9,000 |
| (3) Health economics | 41 | 1,482,000 | 47 | 1,725,000 | +6 | +243,000 |
| (4) Group practice | 3 | 100,000 | 18 | 500,000 | +15 | +400,000 |
| (5) Nursing home services | 27 | 792,000 | 27 | 804,000 | | +12,000 |
| (6) Home health services | 22 | 671,000 | 22 | 681,000 | | +10,000 |
| (7) Adult health protection | 42 | 1,455,000 | 42 | 1,475,000 | | +20,000 |
| (8) State and urban health services | 87 | 1,557,000 | 87 | 1,604,000 | | +47,000 |
| (9) Health communications | 32 | 942,000 | 32 | 956,000 | | +14,000 |
| (10) Health services for migrant workers | 50 | 845,000 | 50 | 876,000 | | +31,000 |
| (11) Rural health | 3 | 187,000 | 23 | 466,000 | +20 | +279,000 |
| (12) Family planning services | | | 5 | 200,000 | +5 | +200,000 |
| (13) Physical fitness program | 14 | 315,000 | 14 | 317,000 | | +2,000 |
| (14) Management fund | | 250,000 | | | | −250,000 |
| Total, Direct operations | 602 | 13,891,000 | 698 | 15,723,000 | +96 | +1,832,000 |

The major thrust of these direct operating programs is toward providing professional and technical assistance to States, communities, providers of health care, medical and health organizations, and other federal units. Our ability to provide the ever-increasing and complex assistance necessary to foster the development, improvement, and expansion of needed community health and medical care activities is dependent upon a variety of approaches. Primary among these approaches is a well-trained and widely dispersed staff, supplemented by program-directed studies and demonstrations carefully targeted at situations requiring prompt action.

HEALTH INSURANCE AND FIELD OPERATIONS

| | 1968 estimate | 1969 estimate | Increase |
|---|---|---|---|
| Positions | 257 | 307 | +50 |
| Amount | $4,045,000 | $4,860,000 | +815,000 |

During fiscal year 1968, all hospitals, extended care facilities, and home health agencies certified to provide service under Title XVIII, P.L. 89–97, will be resurveyed and recertified by State agencies (6,872 hospitals, 4,223 extended care facilities, and 1,849 home health agencies as of October 1967). Regional staff of this Division will review certifications by the States and advise the Social Security Administration concerning the professional quality of the State certification effort.

In addition to this complete resurvey cycle, there will be a very heavy consultation workload resulting from those providers of service which are certified either with deficiencies or with a special certification. As of October 15, 1967, the number of providers with deficiencies found were:

Non-accredited general hospitals—2,298 out of 2,693.

Extended Care Facilities—3,470 out of 4,223.
Home Health Agencies—705 out of 1,860.

Through training, consultation, and technical assistance, we will assist State agencies to provide the necessary consultation to the providers to correct their deficiencies. The certification of those providers which do not correct deficiencies as required by P.L. 89–97 and regulations will be terminated. Much professional time will be required to assure that every provider is given all possible assistance to meet and continue to meet the standards established for the Health Insurance for the Aged Program.

Current position levels will permit the Division to continue its professional assistance under Title XVIII of P.L. 89–97. Providers of service will be assisted to improve their capability to provide care of high quality. State agencies will be helped to improve their performance in certification, consultation, and coordination. States will also be assisted to effectively utilize the "Partnership for Health" programs to improve medical care administration at State and local levels. In addition, regional staffs will expand their activities in relation to Title XIX.

Title XVIII is designed to provide assistance to the elderly in paying for high quality medical care. Title XIX is designed to assist those who are indigent or medically indigent. However, financial considerations are not the only barrier to care.

Both programs are limited in their effectiveness by the nature of the systems through which medical care is provided. The limitation of the systems are especially evident in our major cities, where services are fragmented, not available, or incomplete. Changes in the systems will be an evolutionary process over a long period of time. During this time period, the poor will not receive the medical care they need. For many reasons, these people are not able to use effectively the services available.

The increase requested provides for trained health personnel for assignment to selected cities to work with local public health departments, voluntary agencies, planning agencies, hospitals, universities, and medical societies. Assignees will function primarily as communicators and coordinators. They will need to be informed about resources available and how they can be utilized. They will need to be knowledgeable about the ways in which health services are organized, financed and delivered. They will need close supervision and support from regional offices.

Assignees will work with a wide range of organizations and groups. In one situation, an assignee could help inventory existing services, find ways and means to gain access to those services, help to relate the city plans to the area wide plans, help prepare proposals to take advantage of existing programs, e.g., establishment of a group practice, obtain support to demonstrate a new method of providing services in a ghetto or deprived area. An assignee to a health center could provide professional health advice concerning staffing, administration, scope of services, payment for services, and other aspects of medical care administration. The assignee could serve on task forces to plan, survey, analyze problems, and prepare operational plans for the health component of the total effort. Each assignment will have to be tailored to meet the unique requirements of the local situation.

An increase of 45 positions and $361,000 is requested for this activity.

*Collection and analysis of health services and resources data*

At the present time, information on all of the health resources and services in the United States does not exist in any single source. Data of this type are essential for program planning and evaluation at the Federal, State and local level. Such information is especially necessary in order to carry out Division responsibilities related to the Health Insurance for the Aged and Federal-State Medical Assistance programs (Titles XVIII and XIX, P.L. 89–97). This activity has the primary responsibility for obtaining, preparing and maintaining the health service and resource inventory and statistical data in support of the Division's programs, for assisting the States in their data collection activities, and for the development of methodology and preparation of health profiles for major communities in the country.

During fiscal year 1968, expansion of the health resources and services inventory continued. This includes data on licensed long-term care facilities, home health agencies, homemaker-home health aide agencies, and hospital characteristics. Also data will be obtained on community laboratories, emergency health services,

community health and health related agencies in approximately 300 communities, and on certain socio-economic and demographic characteristics of all counties and approximately 2,500 cities in the United States.

In fiscal year 1968 procedures will be completed for the development of basic health resources profiles for communities and will be applied to test communities.

The program increase of 5 positions and $100,000 requested for fiscal year 1969 is required to test and expand the development of community profile methodology and prepare profiles for communities in several States.

Both community profiles and sound planning at the Federal, State and local level are dependent on a broad data base.

The data available through the expanded health resources inventory in fiscal year 1969 will provide a base for preliminary development of indices of levels of community health services and for initial work on procedures for the development of models which will be used to predict the potential effectiveness of new or improved health service delivery systems.

In addition to the above program increases, the estimate also includes $354,000 for built-in costs related to (1) the annualization of the increased pay costs, (2) the annualization of 44 new positions in 1968, and (3) within grade promotions.

STANDARDS AND METHODS

| | 1968 estimate | 1969 estimate | Increase |
|---|---|---|---|
| Positions | 24 | 24 | |
| Amount | $1,250,000 | $1,259,000 | +$9,000 |

While it is important to stimulate the development of sufficient resources to assure adequate availability of health services, it is equally important to assure that the new and existing health care resources meet and maintain acceptable levels of quality. This requires the definition of adequate and acceptable and feasible standards of quality and the development of methods for their adoption, maintenance, and evaluation. Finally, the delivery of quality health care depends upon the appropriate, effective and efficient use of health services.

STANDARDS OF PATIENT CARE

The Medicare program has provided the mechanism for defining and applying, for the first time on a national basis, standards of quality for hospitals, extended care facilities, home health agencies, and independent laboratories. Particular emphasis in 1968 was placed on the development of definitive guidelines for State agencies in methods of certification to assure uniformity in the application of standards. In 1969 a complete survey training program package will be disseminated to all States.

In 1967, a revision of the independent laboratory standards required development of policies and guidelines for establishing personnel testing procedures, as well as performance evaluation and proficiency testing programs to be implemented by the States. The Division was responsible for arranging for the development of an examination for laboratory directors not meeting stated educational requirements, conducting the examination, and evaluating the results. The examination was first given to 450 laboratory directors in June 1967. A second examination was conducted early in 1968 to allow some 220, most of whom were those unable to pass certain sections of the initial examination, to attempt to qualify. In addition, the development of proficiency testing on a nationwide basis is a real breakthrough as a way to evaluate laboratory performance and to qualify laboratories which otherwise would have been unable to serve beneficiaries. Planning for this has been done jointly with National Communicable Disease Center, in relation to the new Federal licensing program for laboratories in inter-state commerce.

Review, interpretation, and revision of standards, policies, and methods of provider certification continued to be of major importance in 1968. To assure that the standards and policies of provider certification were consistent with accepted professional practice, special studies were conducted in (1) analyzing characteristics of providers in the various categories of certification; (2) the range of deficiencies reported; and (3) the adequacy of State agency performance.

UTILIZATION REVIEW

In order to participate in Medicare, hospitals and extended care facilities must have a utilization review plan that meets basic standards. Utilization review serves both as a mechanism to control utilization of service and to provide a process of continuing education for physicians and it also facilitates continuity of care. For most hospitals and extended care facilities this function is new and has been adopted as a direct result of Medicare. Policies and procedures for its application have been formulated to promote flexibility and experimentation. Potentially, its importance extends far beyond the control purposes for Medicare; it can become an important means to promote community-wide concern with quality, effective utilization of all health care resources and stabilization of medical care costs. In 1968 particular attention was given to equipping State agency staff to work with the institutions in implementing plans for utilization review. This involved development of guidelines and conducting training courses for State personnel. For example, in cooperation with the National Institutes of Mental Health and the American Psychiatric Association, guidelines and training materials were developed for psychiatric utilization review. Intensive efforts were also made to provide training for State personnel with special emphasis upon cooperation between State agencies and fiscal intermediaries in improving the utilization review process.

ADMINISTRATION OF MEDICAL ACTIVITIES

Another area of program activitiy in 1968 was to work for improved ambulatory care services. Several projects are demonstrating new or improved methods of organization or evaluating existing methods and systems.

Work also continued in 1968 toward improving the process of medical care administration. A series of 8 case studies was supplied to various medical care teaching programs. These cases have proved popular and are being used in more than 25 programs. Two cases, studying implementation of Title XVIII in Illinois and of Title XIX in California, will assess State administration of these programs and provide guidance on needed improvement for other States.

In 1969 the above activities will continue with special emphasis on (1) evaluation and improvement of standards and policies in Medicare, and (2) more intensive program in carrying out the professional health aspects of Title XIX by providing consultation and assistance in such areas as quantitative and qualitative broadening of the medical assistance programs in the States, adequate standards, program evaluation, and experimentation in improved delivery of services.

An increase of $9,000 is requested for built-in costs relating to the annualization of increased pay costs and within grades.

HEALTH ECONOMICS

| | 1968 estimate | 1969 estimate | Increase |
|---|---|---|---|
| Positions | 41 | 47 | 6 |
| Amount | $1,482,000 | $1,725,000 | +$243,000 |

The rising costs of medical care are having a serious effect on both the consumer and the provider of health services. The ability of consumers to purchase adequate medical care is restrained, and providers of medical care are finding it increasingly difficult to give adequate care at reasonable prices.

Both the Consumer Price Index and its medical care component have been rising continuously for over two decades; however, medical care prices have been increasing much faster than consumer prices in general.

In 1969 activities which will be directed toward the problem of this upward trend are as follows: the program will (a) intensify its studies and analyses of the economic components of the health care delivery systems to develop new ways for providers of service to do their job more efficiently and (b) develop new ways for consumers of health services to procure health care at reasonable prices through an investigation of present and potential insurance mechanisms which can lower the economic barriers to health services.

In 1968 an extensive study on the socio-economic characteristics of the nursing home is being completed. Similar studies of the home health agency are cur-

rently being initiated. In 1969, the increase will allow for the initiation of the intensive phase of the home health studies to reveal the significant economic components of a home health agency and how they interrelate to perform efficiently or inefficiently in terms of the total health care system.

The utilization of municipal hospitals has declined substantially. While, at the same time many private hospitals are overcrowded. Economic questions to be decided in changing from old to new programs extend from the cost effectiveness of new combinations of services and settings to financial gains or losses in disposing of obsolete plants and facilities. Staff and contract studies of selected municipal systems facing the problem of evolving new patterns of services will be made to determine the true extent of the problem and possible solutions.

Because of the national trend toward comprehensive health programs there is an immediate need for: (1) cost determinations of the various components of comprehensive health services, and (2) cost-benefit analyses of alternative methods of organizing health care.

To meet these needs, studies will be initiated in 1969 to determine the cost of the components of comprehensive health services; such as costs per hospital day and stay, costs per nursing home day and stay, and costs per home health day and stay. Using the per day costs, cost-benefit analyses of alternative methods of organizing health care will be performed. For example, the costs and benefits of the current uncoordinated health system will be compared to the costs and benefits of an interrelated system with centralized administration. An evaluation of alternative methods for estimating a region's health services needs will be made.

LOWERING THE ECONOMIC BARRIERS TO HEALTH CARE

Present health insurance programs do not provide coverage to large segments of our population such as the poor and individuals with certain diseases and conditions. It appears that those who most need health insurance do not have it. These gaps in coverage must be identified and analyzed.

State expenditure patterns for health services need to be studied in order to maximize the use of the health dollar. By focusing on these expenditure patterns in 1969 we will be able to spend available resources more effectievly and identify the greatest areas of need for new dollars. In 1968 a methodology is being developed to identify both private and public health expenditure patterns. A demonstration of this methodology is needed in 1969 to implement this tool.

There is very little information on the effects on cost through the utilization of an extended care facility or a home health agency. In 1968 we are supporting a study with the Kaiser Foundation Research Institute to add a benefit to their comprehensive pre-paid group practice plan for extended care facility and home health services. Investigation of the same type of utilization and cost data in a different setting was initiated in St. Louis in 1968. The overall purposes of these projects are to obtain (1) the medical needs for and cost of home health services and extended care services by specific age and sex groups; (2) the optimum balance between the use of home health services, hospital services and extended care services in a continuum of medical care and (3) the effects of the provision of extended care and home health services on the utilization and costs of services now provided.

Cost-sharing provisions have important implications for public policy. Under a recent amendment to the Social Security Act, States will have the option of using such provisions in their assistance programs for the medically indigent. Cost-sharing provisions may also have a large contribution to make in solving the overall problem of the rising cost of medical care. To date there is very little empirical data available about the effects of cost-sharing provisions, and especially their effects on over-or under-utilization of services. We propose to investigate and develop empirical data about these effects.

In order to carry out these activities, we will require increases of 6 positions and $200,000. The estimate also includes $43,000 for built-in costs related to the annualization of 10 new positions in 1968, the annualization of the pay increase costs, and within grade costs.

GROUP PRACTICE

| | 1968 estimate | 1969 estimate | Increase |
|---|---|---|---|
| Positions | 3 | 18 | +15 |
| Amount | $100,000 | $500,000 | +$400,000 |

In 1967, the President's National Conference on Medical Care Costs and the National Conference on Group Practice were held. Both stressed that comprehensive group practice provides a significant system for achieving greater effectiveness. Also in 1967 the Mortgage Loan Insurance Program was enacted and this division assigned a small staff to work with the Department of Housing and Urban Development.

The increase requested provides for four areas of activity to encourage the growth of group practice and to better understand its organizational advantages.

GENERAL PROMOTIONAL OF GROUP PRACTICE

In order to promote the growth of group practice, the division proposes to:

(a) Implement specific recommendations as cited in the Report of the National Conference on Group Practice;

(b) Develop liaison and effective working relations with national and State agencies, including voluntary and tax-supported health agencies and organizations, labor unions, management organizations, and other groups;

(c) Conduct regional conferences to educate and inform local communities about activities, of the Federal government and voluntary agencies, which affect development of group practice programs and facilities;

(d) Encourage an additional series of conferences with special interest groups, including conferences with national voluntary and private agencies whose interest in problems of health and health services may be enlisted in behalf of group practice.

CONSULTATION SERVICES TO COMMUNITIES AND INDIVIDUALS

Consultation will be provided in the fields of clinic and hospital administration, data and records organization, and health services systems, ancillary and medical staff organization and fiscal and funding techniques. Consultation will also be provided in study design and program evaluation in order to broaden knowledge of the full potentials of group practice.

STUDIES AND DEMONSTRATION

Studies and demonstrations will be initiated in the following areas:

(a) Exploration of the most efficient organization patterns for group practice.

(b) Studies of the utilization and cost of services not universally available in either prepaid or fee-for-service groups.

(c) Explorations of use of supporting personnel.

(d) Studies of the utilization of services by patients of group practices.

COORDINATION WITH FEDERAL AGENCIES

There is close coordination with the Department of Housing and Urban Development in the operation of the Mortgage Loan Insurance Program for Group Practice Facilities Title XI, National Housing Act. Primary responsibility for the operation of this program belongs to D/HUD but much of the promotional work, assistance to prospective sponsors of group practice facilities, and evaluation of the applications are provided by the Public Health Service.

To assure standard policies and coordination of effort relating to the formation and financing of group practice, there has to be liaison with other Federal Government programs which deal with group practice. There are two major and several small Federal programs which pay for health care delivered by group practices. The primary programs are Medicare and Medicaid, and among the others are the medical care programs of OEO, VA, Military Medicare, and SRS. Through contact with prepaid group practices, a continuous effort will be made to bring reimbursement policies and other policy and regulatory requirements onto common ground.

The requested increase provides for 15 positions and $400,000.

NURSING HOMES AND RELATED FACILITIES

| | 1968 estimate | 1969 estimate | Increase |
|---|---|---|---|
| Positions | 27 | 27 | |
| Amount | $792,000 | $804,000 | +$12,000 |

The primary objective of this program is to improve patient care and services in nursing homes, extended care facilities, and other related facilities.

The 1968 program was directed toward three existing problem areas by: (1) strengthening of State licensure, survey, inspection and certification programs, (2) improving manpower skills, and (3) demonstration of the effectiveness of working relationships between nursing homes and hospitals, health departments, and other health related agencies.

The primary emphasis of the 1968 and 1969 program is the implementation of the State-PHS Cooperative Nursing Home Program. The long-range aim of this program is to establish a national program for continued training and certification of the approximately 400 existing State survey and inspection personnel. A conference will be held early in 1968 to acquaint State licensure officials with the aims of the program and procedures for implementing it. Training conferences including State officials will be initiated before the end of 1968.

To improve manpower skills, continued emphasis is being placed on enhancing the competence and effectiveness of administrative, professional, and other nursing home personnel: Curricula and training guides for in-service and preservice training programs are being further developed and tested and their use promoted. The program is continuing to promote short-term training of administrators to upgrade managerial skills and training of professionals needed as consultants to nursing homes.

To help bring nursing homes into the mainstream of health services, the program is presently supporting five projects to demonstrate working relationships between nursing homes and other community resources. Four of the projects are State-wide: Louisiana (State Department of Hospitals); Tennessee (State Hospital Association); Nebraska (State Health Department); and Hawaii (State Hospital Association.) The fifth project (Atlanta, Georgia), being conducted by the Community Council of the Atlanta Area, covers the city and adjacent counties. These five projects will reach an estimated 600 nursing homes. It is anticipated that these projects will become self-supporting, as in the experience of an earlier project in Waltham, Massachusetts. As of July 1, 1967, the Waltham project was continued independent of Federal assistance with nine of the original fourteen nursing homes continuing to work with the community hospital.

An increase is requested to provide $12,000 for built-in costs related to the annualization of pay increase costs and within grades.

HOME HEALTH AND RELATED SERVICES

| | 1968 estimate | 1969 estimate | Increase |
|---|---|---|---|
| Positions | 22 | 22 | |
| Amount | $671,000 | $681,000 | +$10,000 |

Home Health Agencies are an expanding national resource with the potential for improving the quality and delivery of health care in the community and for alleviating some of the problems contributing to the rising costs of medical care.

In 1969, the Division will: promote the development of new programs in those areas not covered by these services; and increase the range and quality of services offered by existing agencies; and encourage the amalgamation or coordination of small or inadequate agencies into vital community programs.

There are currently about 1,850 home health agencies certified for participation in Medicare. These agencies are unevenly distributed throughout the Nation, with small communities and rural areas especially in the midwest and south having no home health service. In twelve States, less than 50% of the population live in counties with home health agencies. Even in areas with home health programs, the population needing care is greater than that currently being served.

In 1969, the principal target for new services will be hospitals which could develop effective programs.

CONSULTATION

A major area of responsibility is the provision of technical assistance, professional consultation and information to States and localities on the conduct of their programs financed in part through grants from the Comprehensive Planning and Health Services Program.

### HOME HEALTH PROGRAM EVALUATION

To facilitate planning and evaluation of home health services programs, support is being provided for a feasibility study of home health agency statistical and business office procedures.

### IMPROVING MANPOWER SKILLS

Providing good care and a sufficient range of services requires more adequate manpower than is currently available to Home Health Agencies. The program in 1968 continued its support to home health training centers with emphasis on efforts to assist the centers to find other appropriate sources of funds.

In 1968 the program supported a workshop at the University of Kansas Medical Center to develop guidelines for curriculum to teach home care in medical schools. Likewise, the importance of physical therapy in public health and medical care programs is emphasized through 1968 support of a contract for the development of guidelines in the basic curriculum of physical therapy.

### PATIENT EVALUATION

Selecting patients able to benefit from home health care requires knowledge of medical, nursing, and social factors pertaining to each patient. In 1968, several contracts were carried out and a study group conference, including representatives from seven projects where methods of patient evaluation are being studied, was held to develop common definitions and methods for effective patient evaluation, the use of which we expect to promote in 1969.

An increase of $10,000 is requested to provide for built-in costs related to annualization of pay increase costs and within grades.

### ADULT HEALTH PROTECTION AND AGING

| | 1968 estimate | 1969 estimate | Increase |
|---|---|---|---|
| Positions | 42 | 42 | |
| Amount | $1,455,000 | $1,475,000 | +$20,000 |

If we examined today any average group of one thousand Americans over the age of 45 who have no symptoms of illness and consider themselves "well" we would expect to find 115 cases of hypertension, including vision impairment; 73 cases of coronary heart disease; and 20 cases of diabetes; as well as significant numbers of other controllable or curable diseases such as breast and cervical cancer and kidney disease. Very few, if any, of this same group will do anything about their health problems until they reach a stage when extensive use of expensive facilities and scarce health personnel are required.

During 1969, in an effort to develop solutions to these problems we will continue a three-pronged approach: development of automated multiphasic screening, referral and follow-up programs for adults; stimulation of changes in what and how health practitioners are taught and development of continuing education programs for those who are now in practice; and development of activities and services designed to educate and motivate people so that they will take positive action to protect their health.

### AUTOMATED MULTIPHASIC SCREENING AND REFERRAL AND FOLLOW-UP

This method of health assessment services combines, through use of the computer, automated laboratory and functional testing with medical historytaking. The physician is provided with data on the patient before the first visit, thus reducing the physician time required to complete a physical examination. Furthermore, the cost to the economy per amount of service given is reduced by organizing to achieve efficient use of health resources. And, finally, an automated multiphasic screening center organized to serve thousands of persons is in a far more favorable position to improve quality and efficiency than is the private office or small laboratory which now provides most of the technical services.

Automated laboratory and related individual health data-gathering services have been successfully demonstrated in a prepaid health plan at the Kaiser-Permanente Health Foundation. Our activities for the last several years, there-

fore, have been directed toward testing and refining the system for application in various organizational settings to the community at large. Four demonstration programs currently are underway: the City of Milwaukee Health Department, Tulane University in New Orleans, the Brookdale Hospital Center in Brooklyn and the Rhode Island State Health Department. By the end of 1969, the four projects will be operating at a capacity of approximately 100,000 examinations per year.

In 1969, we will continue to develop and evaluate this new system of getting people to health care. We will analyze initial findings with respect to community acceptance—lay and professional—of automated multiphasic screening and referral services and information on the success of follow-up techniques as they relate to physicians and participants.

Of special significance will be evaluation of project efforts to provide these preventive services to economically deprived groups. Some of these activities will be supported in cooperation with other government programs having related interests.

### TRAINING AND ORIENTATION OF PROFESSIONAL HEALTH PERSONNEL

Contracts have been developed with three schools of medicine to stimulate interest in developing undergraduate medical curricula which provide orientation in comprehensive management of the aging patient. These include the schools of medicine of the University of Missouri and Tufts University and the Mount Sinai School of Medicine of the University of New York. It is expected that each of these schools will develop a "blueprint" for a teaching program in comprehensive patient care and that these, in turn, will be used to modify existing teaching programs.

For several years initial support has been provided for centers for continuing education in applied gerontology as components of university-based schools of continuing education. These centers have been established at the University of Oklahoma and University of Georgia; and are in process at Boston University and the University of Nebraska.

At the University of Pennsylvania School of Social Work, a program now in its second year is providing supervised field experience for students in work with the aged. The Pennsylvania project has been most successful in generating interest among both faculty and students in this area, and serves as a demonstration to other schools.

In 1969 these training and orientation activities will be continued with emphasis on the health and functional effectiveness of the "whole patient" rather than with the various disease processes which may affect him.

### ENCOURAGING INDIVIDUAL ACTION

Periodic health assessment services, however accomplished, can only be successful if individuals are motivated to seek them.

The automated multiphasic screening and referral centers have as an integral part of their programs, specific activities directed at informing the public of the need for preventative health services.

Four pilot projects, begun in 1967 and 1968, will continue to develop and test a method of providing personal health counseling to individuals applying for Social Security retirement benefits as a way of motivating them to take positive action to protect their health. Each project is designed to secure information regarding common health maintenance practices and the attitudes about such practices held among a group of the elderly who have a high risk of developing chronic diseases.

By late 1969, sufficient experience will have been gained in counseling various groups to make a comprehensive assessment of the value of this approach. Based upon this assessment the feasibility of personal health counseling as a service for the aging at the time of social security application will be determined.

An increase of $20,000 is requested to provide for built-in costs relating to the annualization of pay increase costs and within grades.

### STATE AND URBAN HEALTH SERVICES

| | 1968 estimate | 1969 estimate | Increase |
|---|---|---|---|
| Positions | 87 | 87 | |
| Amount | $1,557,000 | $1,604,000 | +$47,000 |

One of the major problems in the urban health area is in the failure to relate effectively new or developing health programs with the existing ones. This is a problem which will immediately confront the persons we are proposing to assign to metropolitan areas in connection with the Health Insurance and Field Operations program. This problem is also being accentuated by such new urban development programs as Model Cities and Neighborhood Health Centers. To help offset this problem, our 1968 and 1969 program will be directed to the following areas:

Contracts and staff efforts will be used to explore specific methods of linking and phasing health program components with the total model cities program. Concurrent with the study of linkages between health and other programs, the implications that occur for health programs when these non-health community service programs are modified will be examined. Examples of projects already undertaken are: 1) the initiation of an urban renewal relocatees project for development of an integrated health component in the urban renewal process in order to provide health services through existing resources for individuals in need of care, and to integrate the health services needs into the total plan; 2) the documentation of the development of a neighborhood health center which includes the range of considerations that went into the specific services offered, the internal organization of the center and relationships with organizations providing services supportive of those in the center. Work will continue on these areas in 1969.

Planning for the program, organizational, financial, and staff relationships necessary to obtain the maximum delivery of services from fixed or limited resources will be a major activity. This form of detailed operational planning will be concerned with health services provided in or related to specific 1) facilities, e.g. multipurpose centers, 2) programs, e.g. ambulatory care, or 3) population groups e.g. the poor in limited geographic areas of major cities.

In 1969, emphasis will also be given to the further development and community testing of methods for predicting the effect of alternative program plans on the efficiency and utilization of health service resources. The development of criteria with respect to accessibility, acceptability, and other factors affecting utilization for use by the community health planner will be a part of this activity.

An increase of $47,000 is requested to provide for built-in costs related to within grades and the annualization of pay increase costs.

HEALTH COMMUNICATIONS

| | 1968 estimate | 1969 estimate | Increase |
|---|---|---|---|
| Positions | 32 | 32 | |
| Amount | $942,000 | $956,000 | +$14,000 |

The mission of the Health Communications program is to bring about broad, effective consumer participation in improving the organization, delivery ,and utilization of personal health services.

The program will work with States in helping selected communities: (a) obtain data on present consumer participation; efforts that have been made to improve consumer participation; (b) develop measurable objectives and relevant plans of action; (c) complete a substantial educational program to improve opportunities for consumer action, and (d) evaluate the effect of the program.

To help communities obtain data needed to plan and carry out programs for improving use of home health services, extended care facilities, and other services, a protocol and related survey instruments are being developed through a contract with the Boston Medical Foundation. The preliminary survey package will be completed before the end of 1968.

To insure practicability and reliability, these instruments will be field-tested early in 1969. Then communities across the country will be encouraged to make use of the revised materials in developing services that are client-oriented and in developing effective consumer education activities regarding use of health services.

To develop innovative approaches for bringing about widespread use of significant findings about information and referral services, a pilot seminar was conducted in January 1968. Persons who have conducted successful projects were brought together with representatives of agencies contemplating establishment of such a service, and with experts in principles and methods of com-

munity organization. Guidelines developed in this seminar will be published before the end of 1968.

In 1969, these guidelines will serve as a focus for discussion in conferences to be conducted in several regions.

To promote effective patient education practices, a procedure is being developed for systems analysis of staff-patient communications in the Outpatient Clinic of the PHS Hospital in Baltimore. Through contract, present communications patterns and their impact on patient understanding and action are being determined. Out of this experience will come a model procedure which may be used by other clinics to study and improve their patient education practices. Development of this procedure is scheduled for completion by the end of 1968.

In 1969 widespread use of this model procedure will be promoted, starting with emphasis on its use in other PHS hospitals.

To improve the recruitment, selection, training, supervision, and utilization of indigenous health auxiliaries, guidelines are being developed in cooperation with the OEO-sponsored neighborhood health center at Columbia Point in Boston. This project is scheduled for completion in April, 1969. Use of the guidelines will then be promoted throughout the country.

An increase of $14,000 is requested to provide for built-in costs related to within grades.

HEALTH SERVICES FOR MIGRANT WORKERS

| | 1968 estimate | 1969 estimate | Increase |
|---|---|---|---|
| Positions | 50 | 50 | |
| Amount | $845,000 | $876,000 | +$31,000 |

Program staff will be utilized to meet the need for consultation and technical assistance to projects and other organizations which can contribute to improving health services for migrants. Staff trained in community organization, medicine, nursing, sanitation, health education, hospitalization and other fields, working as a team at headquarters and regions will promote interagency, intergovernmental and interarea planning and program development to improve health conditions and services for the migrant and his family. Coordinating and cooperative efforts will include those with the Office of Economic Opportunity and the Department of Labor. The staff will continue their direct consultation and technical assistance in the development of migrant health programs. They will also serve as focal points for program planning, including the collection and dissemination of pertinent information, and the technical review of project reports and applications.

Conferences and seminars of project workers from different locations will be held in 1969. The Midcontinent Regional Stream Conference in 1969 will result in better coordination between the projects, develop improved methods of identifying migrants and their migration patterns, and improve continuity of migrants' health care.

An increase of $31,000 is requested to provide for built-in costs related to within grades and annualization.

RURAL HEALTH

| | 1968 estimate | 1969 estimate | Increase |
|---|---|---|---|
| Positions | 3 | 23 | +20 |
| Amount | $187,000 | $466,000 | +279,000 |

Approximately 54 million Americans (30 percent of our population) live in rural areas. The incomes of approximately 15 million of these rural citizens are below the poverty level.

During 1968, the Rural Health program began demonstrating methods and techniques to improve health levels in selected rural areas. In four States, contracts with State or local organizations to enable multicounty areas to organize their total resources, identify gaps in service, establish priorities, and plan remedial programs were started.

The San Luis Valley in Colorado has developed an application for demonstrating a rural neighborhood health services program. This neighborhood health

program would provide a wide range of preventive and remedial health services to a rural population characterized by poverty and limited health resources.

In Alabama, in cooperation with the State Health Department and the University of Chicago, a demonstration of the effectiveness of several methodologies for extending family planning services to rural poor families is being conducted. This project includes the use of indigenous health aides as a contact for family planning information and educational purposes.

Another effort involves a cooperative agreement with the State of Pennsylvania in which a rural health specialist was assigned to assist in the development of a Statewide rural health program. In Mississippi, we are supporting the development of comprehensive health services for a five-county area in the Mississippi Delta.

The program in 1969 will demonstrate at the community level various methods and techniques to improve rural health services. Examples of these projects include improved organization of emergency transportation services; improved communications between rural medical practitioners and medical centers; and various arrangements for establishing comprehensive health center services to operate successfully in a rural setting.

The requested increase in 1969 will provide personnel to provide technical assistance to rural communities in self-help projects. Regional offices will be strengthened to promote rural health services. This staff will provide rural communities with information of existing rural health programs, projects, and methods in other areas, and assist in planning, developing, and implementing programs for health services.

The requested increase will provide for 20 new positions and $279,000.

FAMILY PLANNING

| | 1968 estimate | 1969 estimate | Increase |
|---|---|---|---|
| Positions | | 5 | +5 |
| Amount | | $200,000 | +$200,000 |

Although family planning services are becoming increasingly available in many areas of the country, all women of child-bearing age who desire these services are not making use of them. In view of this fact, we must immediately begin a program to examine and evaluate the existing systems for providing family planning services. We must determine the most effective methods of providing services which are accessible to and will be used by those persons desiring assistance in family planning, and then promote their adoption in communities.

The intent of the proposed program is to promote actively, insofar as the limited resources permit, the integration of family planning services into the basic core of comprehensive health services. We will concentrate on determining the most effective methods of organizing and delivering family planning services and promoting their adoption to assure maximum economy of operation combined with high accessibility and usage by those who desire them. A primary concern would be the development of comprehensive family planning programs which would not be limited purely to assistance in planning family size. To be truly effective, these services must be concerned with decreasing the infant mortality rate through prevention of premature births, decreasing the number of predictably defective infants, and the encouragement of proper child spacing and of maternity during the most favorable child-bearing age period.

As a step toward these objectives, major emphasis in 1969 would be placed on evaluation of various approaches to providing effective family planning services as an integral part of comprehensive health services. This program is not intended to provide family planning services, but is designed to lead to the development and promotion of model techniques for the organization and delivery of family planning services. The program would concentrate on all health-related aspects of family planning to promote and assist in the improvement of existing programs providing family planning services, and to encourage the development of systems of services which would ensure effective provision of family planning assistance to all persons desiring it.

With 5 positions and $200,000, conduct of studies and support of research and demonstration projects designed to evaluate current family planning programs and evaluate new concepts in the provision of family planning services will be

initiated. In addition, staff will provide technical assistance to organizations wishing to initiate or improve family planning programs. It would also stimulate use of other existing mechanisms for application in the family planning areas, e.g., training grants, research grants, special grants.

Specific examples of the type of effort to be undertaken in 1969 are:

1. Test and evaluate alternative methods of providing family planning services. We would determine the most effective approaches to providing these services by varying such factors as the organizational framework of a family planning program, the stage in family formation when services are offered, the physical location of service facilities, etc.

2. Conduct special studies to determine how family planning services can best incorporate or be used to complement programs dealing with related socio-medical problems. These could include counseling to prevent conception of predictably defective offspring, and programs dealing with the problems of early marriage, divorce, sterility, and breakdown of the family structure.

3. Support demonstration projects which investigate the application of modern demographic techniques to the allocation and development of family planning services. In a State such as North Carolina in which good records are available, the demographic data could be analyzed in depth, birth and fertility rates calculated, and projections made to guide the State in the provision and optimum placement of family planning services.

An increase of 5 positions and $200,000 is requested to initiate this activity.

PHYSICAL FITNESS PROGRAM

| | 1968 estimate | 1969 estimate | Increase |
|---|---|---|---|
| Positions | 14 | 14 | |
| Amount | $315,000 | $317,000 | +$2,000 |

During 1969 the President's Council on Physical Fitness will place its major stress upon further refinement and strengthening of its ongoing programs. This effort will lie in four major areas:

Presidential Physical Fitness Award Program.
Physical Fitness Clinics Program.
Physical Fitness Demonstration Center Program.
Physical Fitness Information Program.

The Presidential Physical Fitness Award Program will be continued, but the numbers of participants will be increased.

The Clinics program stresses the development of leadership qualifications of persons already participants in fitness programs. It also endeavors to bring increased numbers of persons into the fitness field in official leadership capacities.

The Physical Fitness Demonstration Centers program stresses the development of improved physical fitness programs at schools throughout the country.

The Physical Fitness Information program will include two national advertising campaigns which will continue to popularize physical fitness and exercise activities and continue the emphasis currently being placed on fuller utilization of the nation's schools for fitness purposes.

The Council plans to expand its efforts to utilize private nongovernmental resources in carrying forward present and newly developed programs. Cooperative efforts with private resources will be carried out on a public service basis, with the President's Council providing the technical knowledge and guidance on a consultation basis. Among those activities will be local action programs aimed at the summer physical fitness and sports activities of disadvantaged youth in the large urban areas of more volatile circumstance. Pilot activity in the same substantive area for the disadvantaged adult population members will also be developed in conjunction with and using private resources.

An increase of $2,000 is requested for built-in costs relating to the annualization of pay costs.

NATIONAL CENTER FOR HEALTH SERVICES RESEARCH AND DEVELOPMENT

| | 1968 estimate | | 1969 estimate | | Increase or decrease | |
|---|---|---|---|---|---|---|
| | Positions | Amount | Positions | Amount | Positions | Amount |
| Personnel compensation and benefits | 51 | $624,000 | 130 | $1,421,000 | +79 | +$797,000 |
| Other expenses | | 20,133,000 | | 28,200,000 | | +8,067,000 |
| Total | 51 | 20,757,000 | 130 | 29,621,000 | +79 | +8,864,000 |
| Subactivities: | | | | | | |
| Grants and contracts | | 20,000,000 | | 27,720,000 | | +7,720,000 |
| Direct operations | 51 | 757,000 | 130 | 1,901,000 | +79 | +1,144,000 |
| Total | 51 | 20,757,000 | 130 | 29,621,000 | +79 | +8,864,000 |

The 1968 estimate shown above is composed of funds from the following sources:

| | Positions | Amount |
|---|---|---|
| Grants and contracts: | | |
| Hospital construction activities | | $9,173,000 |
| Supplemental, proposed for separate transmittal, community health services | | 5,827,000 |
| Comprehensive health planning and services | | 5,000,000 |
| Total, grants and contracts | | 20,000,000 |
| Direct operations: | | |
| Hospital construction activities | 30 | 416,000 |
| Public health service management fund | 21 | 341,000 |
| Total, direct operations | 51 | 757,000 |
| Grand total | 51 | 20,757,000 |

*The Health Services Crisis*

We face a national crisis in our health services—so concludes the President's National Commission on Health Manpower after an extensive study by outstanding medical and lay leaders. The crisis is due primarily to defects in the organization and management of health services, rather than a lack of biomedical knowledge or even of a sufficient number of physicians. "*Unless we improve the system* through which health care is provided, care will continue to become less satisfactory, even though there are massive increases in cost and in numbers of health personnel." [1]

More specifically, the crisis consists of several issues. These are:

1. Absence or declining availability of health services to the poor, the medically indigent, and those living in rural areas.
2. Uncontrolled increases in costs of care.
3. Shortages of professional health manpower with particular reference to distribution and utilization.
4. The paradox of fragmentation of the advanced diagnostic and treatment capabilities made possible by progress in the specialized biomedical sciences.

By themselves research or demonstration of modification in isolated elements of the system cannot meet the needs. A broad scale effort is indicated. Even without fiscal constraints, merely to continue to multiply untested and uncoordinated programs would not serve usefully to correct the defects, in time, or at all. The large number of health programs now in being, most of them no older than the 88th Congress, provide a broad range of authority, and in some cases even sufficient funds, to supply more effective and available service programs than they do.

The Congress has recognized the necessity to bring the existing programs into coordinated focus, and at the same time use the opportunity to improve medical care services to the poor, moderate inflation of medical care cost through provision of more economical services and offset manpower shortages. As the Senate report on the Public Health Service Amendments (now P.L. 90–174) dated November 4, 1967, states:

[1] Report of the National Advisory Commission on Health Manpower, Volume I. November 1967, p. 2.

"Despite our increasing investment in behalf of health, we spend relatively little in research and development to improve our efficiency and effectiveness."

Both the House report, dated August 3, 1967, and the Senate report quoted above state:

"The cost of health care will continue to rise, at least for the next decade. Every saving will not only benefit the consumer directly, but also the Government, to the extent that health care costs are covered by Government programs of payment, such as Medicare and Medicaid."

And the House report goes on to add:

"There are numerous industrial management problems for the health service industry. Many involve the application of new technology to patient care and management; and many involve organization for the efficient delivery of services to patients."

It was the foregoing points as well as the problems of extraordinarily high infant mortality, inadequate and improper distribution of health facilities, and insufficient application of existing knowlege to prevention of disease and early death that the President had in mind when he said in his Health and Education Message on February 4, 1967:

"Research and development could help eliminate these conditions by pointing the way to better delivery of health care."

It was in response to stimuli such as these that the President directed the establishment of a National Center for Health Services Research and Development in his Health and Education Message of February 1967.

The establishment, financial implementation, and broad functioning of the National Center for Health Services Research and Development has been emphatically endorsed by the Health Manpower Commission:

"Financial support should be made available for large-scale experimental projects of integrated health service systems under a variety of auspices including physicians in private practice, universities, hospitals, voluntary agencies, and government. These systems should include, but not be limited to, programs which are comprehensive, serve a cross-section of socio-economic groups on a community or areawide basis, and emphasize organized services for ambulatory patients." [2]

*Functions and Responsibilities of the National Center for Health Services Research and Development*

a. The general scope and function

In order to attack these problems meaningfully, such a Center has to be realized in a number of dimensions. First, it needs to have a capability to collect, analyze and distribute information in regard to research in this area. It needs to be able to stimulate and fund the specific kinds of strategic and catalytic research and demonstration required, either large scale, involving whole care systems, or significant critical elements. It must be able to support the training of specialized people to undertake research leadership or carry out specific aspects of research designs. And it must be able to transmit the research information of value and utility into actual operational channels.

In the same House and Senate reports, areas of effort for a Center for Health Services Research and Development are blocked out:

"Increases in efficient utilization of health personnel are, in the view of the Committee, one of the most essential tasks to which this program should be directed."

"This new program of health service research and development offers a vehicle through which alternative means for maintaining and increasing the availability of good health care can be achieved; the productivity of health manpower can be increased; better hospitals and nursing homes can be designed, and a full range of alternatives to costly institutional care can be developed. Organizational and administrative practices in the health service industry must be updated and brought into line with the most modern practices in other sections of the economy."

"The application of computer technology to automation of many aspects of the patient care system . . ."

"Efforts must be encouraged to develop, to test, and to demonstrate new measures, devices, apparatus and other novel means to improve techniques of prevention, diagnosis, treatment and control of diseases and disabilities of man."

[2] Report of the National Advisory Commission on Health Manpower, Volume I, November 1967, p. 85.

"The design of hospitals could be improved—to deal with specialized tasks:"

"The design and initial operation of a health service system could be planned in cooperation with developers of 'new towns'."

"Research studies are needed to investigate the comparative cost of alternative methods of providing and financing health services."

It would be the purpose of the Center, therefore, to follow these lines. Existing research efforts to improve clinic organizational patterns, or design new structures, must go on and should continue to be funded, along with modest experimental forms of health services delivery or improved systems of medical communications. However, without a conscious attempt to fit the elements together, direct the kinds of experiments, and draw the lessons, these solitary efforts will be fruitless.

Large scale, major experiments and demonstrations need not be funded entirely from this one source, but individually funded projects from a variety of sources can be fitted together to have a central focus. Overall, some central planning, evaluation, direction and supervision must enter. This is a role the Center can play, as well as supplying modest additional funding for a part of the comprehensive program not covered by other grants.

In addition to coordination activities, research in the delivery of health services is the other great key to meeting our objectives. Systems research, demonstration of new and more efficient methods of practice and health care organization are crucial.

To show how services can be improved:

To show how services can be provided more effectively;

To show how facilities can be planned, designed and constructed less expensively and more appropriately; and

To show how costs can be controlled.

Major research in this area must include demonstrations of improved health services to the poor, more effective programs to attack infant mortality, and innovations in health facility construction and design. New Staffing patterns, new types of manpower, and more appropriate criteria for selecting locations for the provision of health services are required. Development of improved techniques for cost control is also an essential element in ensuring efficiency in the operation of the total health services system. The research described above will help produce these techniques and assist in restraining the inflationary spiral of reimburseable costs. Other useful research findings can be quickly put to work by promoting and stimulating their application in alternate types of health services and by incorporating them into the operation of such activities as the Regional Medical Program and Comprehensive Health Planning and Services.

b. Outline of areas of program concern and operation

*Program Areas*

1. *Information and intelligence*
   a. Information Clearinghouse—collection, storage, retrieval, analysis, and dissemination of information on all health services research and development here and abroad.
   b. Identification of additional information needed to change or improve service designs.
   c. Collection and correlation of existing information for planning and organization design.
2. *Planning*
   a. Synthesis of activities among agencies and departments.
   b. Establishment of priorities.
   c. Direction of cooperative and joint activities.
3. *Research and Development*
   a. Investigation of institutional and professional relations and roles.
   b. Investigation of sociological and economic questions of patient care.
   c. Methodological studies.
   d. Technological development (multiphasic screening, automated laboratories, information and data processing, etc.).
   e. Hospital and medical facility design and operation.
4. *Analysis and Evaluation*
   a. Determination of preconditions for establishment of service programs—requirements in knowledge, experience, or manpower in order to provide services to the poor, the old, the handicapped, or other groups.

b. Development of operational definitions of service activities.

c. Determination of types of training and types of people needing training in order best to carry out service programs.

d. Evaluation of program output: institutional, areawide, State, Federal.

5. *Demonstration*

a. Application of what is known in better design in elements or composites of a medical care system.

b. Application of new knowledge about disease into more efficient patterns of service.

c. Experimentation with different forms of structure and organization to establish more economical methods of health services delivery.

6. *Training*

a. Establishment of programs to train health services research workers in academic and in service settings offering opportunities to learn by doing.

b. Provision of technical assistance to communities and organizations participating in systems modification to ensure appropriate development.

c. Establishment of extension service type of technical assistance from conjoint university centers.

*Operations areas*

1. *Intramural Activities*

a. Research and development activities.

b. Planning, coordination and policy formulation.

c. Information and intelligence—jointly with National Center for Health Statistics.

d. Grant and contract management.

2. *Extramural Activities*

a. Project grants.

b. Institutional and other highly-organized and goal-oriented grants. Regional centers will be established to parallel and extend functions described above.

The centers are intended to develop long-term programs which apply research, development and demonstration to selected areas of health services for the purpose of producing evidence of marked improvement in their effectiveness and efficiency. They will also provide training opportunities in the field. Because of differences in regional needs or regional systems of health care, the centers will be free to create laboratory conditions for exploring regional possibilities.

c. Contracts. Contracts will be used to support focussed research carried on by private industry, group practice clinics, universities, and public and private nonprofit agencies.

*Utilization of 1969 Funds Requested*

Public Law 90–174 authorizes total appropriations of $20,000,000 to carry out its provisions during fiscal year 1968. An appropriation of $29,621,000 for the National Center for Health Services Research and Development is requested for 1969.

This request represents an increase of $8,864,000 over the amount available in 1968. Of this total increase, $7,720,000 represents an increase for grants and contracts under the program of the Center; and $1,144,000 represents an increase in the amount for direct operations of the Center. Of the total increase for direct operations, $797,000 is for personal costs, $334,000 for other expenses, and $13,000 for mandatory costs. The increase in personnel is for 79 new positions.

The Center will be established in fiscal year 1968 with a minimal staff of 51 positions transferred from various other operations. The 79 new positions will place the Center on an effective basis. Increased staff will permit an orderly expansion of activities to produce positive and recognizable results in improved health services.

Because the Center is beginning a new program to bring about major improvements in health services, 24 new positions are requested to augment the number of experienced scientists and program managers in the Center. These positions will be used to determine the greatest needs for research, demonstration, and training and to develop program concepts and policies needed for

effective operation of the Center program. The increase will also permit expansion of grants and financial management activities.

Both intramural and extramural research programs will be established by the Center. The development and review of research projects demands the most competent available scientific and technical talent. Thirty positions are requested to provide initiative in the design and establishment of intramural research, to stimulate, develop, and analyze the proposals of grant and contract applicants.

To maximize the benefits gained from the research, an increase of 25 positions is requested for program coordination, evaluation and reporting. They will be responsible for a program to help reduce Federal health services research overlap and will administer at least four regularly constituted scientific review groups. They will also carry out an evaluation program on research efforts so that positive results can be applied to service programs.

PROGRAM DIRECTION AND MANAGEMENT SERVICES

| | 1968 estimate | | 1969 estimate | | Increase or decrease | |
|---|---|---|---|---|---|---|
| | Positions | Amount | Positions | Amount | Positions | Amount |
| Personnel compensation and benefits | 96 | $1,192,000 | 96 | $1,280,000 | | +$88,000 |
| Other expenses | | 167,000 | | 196,000 | | +29,000 |
| Total | 96 | $1,359,000 | 96 | $1,476,000 | | +117,000 |

The 1968 estimate of 96 positions and $1,359,000 for this activity represents funds previously shown under the Health Service activity of the Public Health Service Management Fund and is shown here in the estimate for purposes of comparability.

The purposes of this activity are to provide program direction and management services in the application and utilization of the Bureau of Health Services resources toward achievement of its goals. The programs within the Bureau are primarily designed to improve the organization and delivery of health services for the people of the United States.

The 1969 increase of $117,000 provides funds for mandatory increases totalling $88,000. These mandatory costs include annualization of new positions authorized in 1968, $43,000; statutory salary increases, $22,000; one day of extra pay, $6,000; and annualization of the 1968 pay raises, $17,000. The program increase of $29,000 is to provide for increased contractual requirements.

NEW POSITIONS REQUESTED, FISCAL YEAR 1969

| | Grade | Annual salary |
|---|---|---|
| Medical care administration and community health programs: | | |
| Health insurance and field operations: | | |
| Public health program specialist | GS–13 | $13,507 |
| Public health program specialist (28) | GS–12 | 320,908 |
| Public health program specialist (10) | GS–11 | 96,570 |
| Public health program specialist | GS–9 | 8,054 |
| Clerical assistant | GS–4 | 4,995 |
| Clerical assistant (9) | GS–3 | 40,216 |
| Total (50) | | 484,250 |
| Health economics: | | |
| Public health program specialist | GS–14 | 15,841 |
| Statistician | GS–14 | 15,841 |
| Public health program specialist | GS–13 | 13,507 |
| Clerical assistant (3) | GS–5 | 16,695 |
| Total (6) | | 61,884 |
| Group practice: | | |
| Medical officer | GS–15 | 19,017 |
| Administrative officer | GS–14 | 15,841 |
| Public health program specialist | GS–14 | 15,841 |
| Public health program specialist (4) | GS–13 | 54,028 |
| Public health program specialist (3) | GS–12 | 34,383 |
| Clerical assistant | GS–6 | 6,137 |
| Clerical assistant (2) | GS–5 | 11,130 |
| Clerical assistant (2) | GS–4 | 9,990 |
| Total (15) | | 166,367 |
| Rural health: | | |
| Public health program specialist | GS–14 | 15,841 |
| Public health program specialist (2) | GS–13 | 27,014 |
| Public health program specialist (15) | GS–12 | 171,915 |
| Clerical assistant (2) | GS–3 | 8,932 |
| Total (20) | | 223,702 |
| Family planning: | | |
| Public health program specialist | GS–13 | 13,507 |
| Do | GS–12 | 11,461 |
| Do | GS–11 | 9,657 |
| Clerical assistant (2) | GS–3 | 8,932 |
| Total (5) | | 43,557 |
| National Center for Health Services Research and Development: | | |
| Associate director | 208(g) | 24,717 |
| Chief of branch | GS–17 | 23,788 |
| Chief of branch (2) | GS–16 | 41,964 |
| Scientist | GS–16 | 20,982 |
| Medical staff assistant | GS–16 | 20,982 |
| Chief of section (4) | GS–15 | 73,616 |
| Chief of branch | GS–15 | 18,404 |
| Deputy chief of branch | GS–15 | 18,404 |
| Health program adviser (5) | GS–14 | 79,205 |
| Scientist (3) | GS–14 | 47,523 |
| Management analyst | GS–14 | 15,841 |
| Public health program specialist (8) | GS–13 | 108,056 |
| Public health program specialist (4) | GS–12 | 45,844 |
| Public health program specialist (3) | GS–11 | 28,971 |
| Public health program specialist (4) | GS–9 | 32,216 |
| Public health program specialist (4) | GS–7 | 26,936 |
| Clerical assistant (14) | GS–6 | 85,918 |
| Clerical assistant (11) | GS–5 | 61,215 |
| Commissioned officers: | | |
| Director grade (3) | | 46,575 |
| Senior grade (2) | | 23,631 |
| Full grade (2) | | 15,572 |
| Senior assistant grade (3) | | 22,248 |
| Total (79) | | 882,608 |
| Program direction and management services: The 1969 column carries 96 positions for "Program direction and management services." There are no new positions reflected in the 1968 column for this activity since they are being carried in the close-out account for the Public Health Service management fund. The 96 positions are therefore not new positions and have been excluded from this schedule. | | |
| Total new positions, all activities (175) | | 1,862,368 |

BIOGRAPHICAL SKETCH

Name: Carruth J. Wagner, M.D.
Position: Assistant Surgeon General, Director, Bureau of Health Services.
Birthplace and date: Omaha, Nebraska, September 4, 1916.
Education: University of Omaha, A.B. 1938; University of Nebraska College of Medicine, B.S. 1938, M.D., 1941, Honorary Degree D. Sc. 1966.
Experience: Director, Bureau of Health Services, PHS (Assistant Surgeon General) Silver Spring, Maryland, January 1, 1967– ; Chief, Bureau of Medical Services, PHS (Assistant Surgeon General) Silver Spring, Maryland, December 21, 1965 to December 31, 1966; Chief, Division of Indian Health, Bureau of Medical Services, PHS (Assistant Surgeon General) Silver Spring, Maryland, August 1, 1962 to December 20, 1965; Chief, Division of Health Mobilization, Office of the Surgeon General, PHS, Wash. D.C., July 1960 to July 31, 1962; Special Assistant in Charge of Health Mobilization, Bureau of State Services, PHS, Wash. D.C., February 1959 to July 1960; Deputy Chief, Division of Hospitals, PHS, Wash. D.C., November 1957 to February 1959; Director, Training and Professional Standards, Division of Hospitals, PHS, Wash. D.C., February 1957 to November 1957; U.S. Public Health Service Hospital, San Francisco, California; Deputy Chief, Surgical Service, July 1955 to February 1957; U.S. Public Health Service Hosiptal, Staten Island, N.Y.; Chief Orthopedic Service July 1953 to July 1955; Resident, Shriners' Hospital for Crippled Children, Philadelphia, Penna., July 1952 to July 1953; U.S. Public Health Service Hospital, Staten Island, N.Y.; Chief, Orthopedic Service, July 1951 to July 1952; Resident in Surgery, U.S. Public Health Service Hospital, San Francisco, California 1943–48; Chief, Orthopedic Services, 1948–51; Deputy Chief, Surgical Service, 1949–51, Served in U.S. Coast Guard, 1943 and 1946; Intern, U.S. Public Health Service Hospital, Seattle, Washington, 1941–42; Resident, Surgery, June–Dec. 1942.
Memberships: *Diplomate:* American Board of Surgery; American Board of Orthopedic Surgery; *Fellow:* American Medical Association; American College of Surgeons; American Academy of Orthopedic Surgeons; American College of Nursing Home Administrators; *Member:* American Association for Surgery of Trauma; Washington Orthopedic Club; American Society for Surgery of the Hand; Alpha Omega Alpha; American Legion: American Management Association; U.S. Section of the International Society of Orthopedic Surgery and Traumatology; American Public Health Association; Association of Military Surgeons; The International Platform Association.
Awards: Special Pfizer Award of Merit Citation conferred by U.S. Civil Defense Council, October 16, 1962; Meritorious Service Award of the American Academy of General Practice, April 1965.

PREPARED STATEMENT

Senator HILL. Now Dr. Wagner, Bureau of Health Services.
We will be happy to have you proceed now, sir.
Dr. WAGNER. Mr. Chairman, I have a statement which, with your permission, I will submit for the record and summarize it briefly.
Senator HILL. You may proceed in your own way.
(The statement follows:)

Mr. Chairman and Members of the Committee, The Bureau of Health Services administers some of the principal programs through which the Federal Government is now attempting to improve the availability, accessibility, efficiency and effectiveness of medical care.

THE PROBLEM

We are dealing directly with the most basic of health care problems:
The rising costs of services.
The lack of availability of health care to many of our people.
The duplications, overlaps, and inefficient utilization of scarce resources in the health care system.
The delay in application of the fruits of research and new and innovative health protection and treatment techniques.

In the last two years, substantially higher amounts of public funds have been pumped into the health services systems than in previous years. Total expenditures now approach $50 billion annually. Greatly increased demand for

services and the limited capacity of the systems to increase output have together resulted in strong inflationary pressures. Hospital costs have risen by about 16 percent in each of the last two years and average per diem costs, now averaging about $65, will probably reach $100 in the next five years. Physicians' fees increased 7.8 percent in 1966 and 6.1 percent last year—twice the rise in the overall consumer price index.

The sharply higher costs of services have not resulted in significantly greater availability of high quality care. Nor have substantial changes in mortality data been demonstrated. Increasing numbers of people are becoming concerned about their difficulty in securing good medical care for themselves and their families, at reasonable cost and at minimum inconvenience.

The telling statistics of disease prevalence and lagging progress in the United States, in relation to other countries, find their way into print with increasing frequency.

About 96 million Americans have one or more chronic diseases or impairments. Infant mortality is higher than in many other less affluent countries. It is estimated that life expectancy today could be five years or more longer than it is if we could apply fully the current state of the health care arts across the country. The mortality rate is 2 to 1 or higher among nonwhites than it is among whites for tuberculosis, influenza, pneumonia and other diseases. Maternal mortality rates among nonwhite mothers are four times those among white mothers.

Millions of Americans still seek medical care only in cases of complicated and serious illness; many not until the last or critical state of illness.

The statistics that document the inefficiencies in our health care system continue to accumulate. Three national conferences and two major reports last year noted, among other matters, the substantial overutilization of hospitals caused by the benefit structure of prepayment and insurance policies. The inefficient use of physicians, nurses, and other scarce health manpower has long concerned the chairman and members of this committee, as well as many others.

In the Bureau of Health Services, we are deeply involved in programs to help ease these problems.

### PROVISION OF HOSPITALS AND RELATED HEALTH FACILITIES

The Division of Hospital and Medical Facilities supports construction and modernization of hospitals and related health facilities. The $2.9 billion it has provided in capital subsidy over its lifetime has gone far toward meeting critical needs in new health facilities and has rendered the facility deterioration problem less severe than it otherwise would have been. As a concomitant of its capital subsidy efforts, the program has brought about improved standards for design and construction in all States and has established State Hill-Burton and area-wide agencies which, in planning systematically for each State's health facility needs, set the stage for the present comprehensive health planning movement. Only since the inception of this program has there been a consistent effort to plan health facility construction in the light of actual community needs.

The Division of Health Mobilization (whose appropriation request is heard by the Subcommittee for Independent Offices and the Department of Housing and Urban Development) utilizes the latest findings concerning the delivery of health services to assist States and communities in achieving better readiness to provide health services in national emergencies or disasters.

### DIRECT HEALTH SERVICES TO LEGALLY DESIGNATED BENEFICIARY GROUPS

Our programs which provide direct health services to legally designated beneficiary groups are administered by the Division of Direct Health Services, the Division of Federal Employee Health, and the Division of Indian Health (the latter's appropriation request being heard by another committee). These programs incorporate the latest improved methods into their own health care systems and are serving increasingly as intramural laboratories for health services research and demonstration. We are just commencing to realize the potential of these programs as a means for discovering improved methods and for establishing models of excellence as examples to other providers of health services.

### COMMUNITY HEALTH SERVICES

With your permission Mr. Chairman, I would now like to address myself specifically to the appropriation entitled Community Health Services.

During the past year we have been involved in programs—such as Medicare and the migrant health program—which have helped large numbers of people meet their own health care needs. We have encouraged activities to help hospitals, extended care facilities and nursing homes, home health agencies, and independent laboratories provide quality health services. We have worked to enable communities to better organize their health services according to their own particular needs. Examples of this activity include participation with the Department of Housing and Urban Development in the group practice mortgage loan program, involvement in the health demonstrations authorized by the Appalachian Regional Development Act, and programs to assist urban and rural communities. We are exploring how automated multiphasic screening may be interwoven most effectively into the community health system; how indigenous aides, such as family planning educators, neighborhood workers and health assistants, can be useful members of a health team; and what are various economic ramifications of health services.

All these activities are interdependent and interrelated. All have been of immediate and long-range benefit both to the people and to the communities in which they live. Each has been approached from the viewpoint of increased effectiveness and efficiency of operation, for its impact on medical care costs, and for its fitting into a picture of comprehensive care. But, during the course of our work, we have identified areas where these and related activities need strengthening. Particularly, many poor are not receiving health services they need; families of migrant workers are out of the main stream of health care services; communities are having to face up to the problem of determining what health resources are really needed; the effective use of health personnel, the quality of care, and rising health care costs—all of these are major concerns. In 1969 we propose to step up our attack on some of these weak points.

### HEALTH SERVICES FOR THE POOR

The poor in both urban and rural areas are not receiving the health services they need. Programs enacted in recent years for the financing of health care have eased some of their problems, but a more complete solution will depend upon the better organization of health services. We have placed a high priority on helping communities with this problem. One avenue of approach will be to make personnel available for a period of time to especially hard-pressed communities who request such assistance. These personnel would help to evolve approaches responsive to the community's needs and desires, and to turn these ideas into workable programs which can be supported by already existing funding mechanisms.

The migrant agricultural families are a particularly hard-to-reach low-income group with pressing health problems. The 115 projects now supported in 36 States and Puerto Rico reach about one-third of the migrant labor force sometime during the year. The requested increase will allow a modest expansion in outpatient visits and days of hospitalization.

### COMMUNITY HEALTH RESOURCES

A problem of increasing importance to communities is how to determine what health resources they need. Two programs are affecting the way communities look at this problem. One is the Partnership for Health program which encourages a broad planning overview on an areawide, as well as State, basis. The second is Medicare. Through its wide scope of benefits for hospital and out-of-hospital services, Medicare has shown that a range of resources is needed to assure the provision of services in the most appropriate setting while still assuring continuity of care. Communities need the kind of data which will give them a better picture of their resources and services in order to consider essential interrelationships between resources and to pinpoint real needs. We expect to refine methodology during the coming year which will be of assistance to communities in carrying out this essential task.

### GROUP PRACTICE

Group practice of medicine has adequately demonstrated its capacity as one approach to meeting the critical problems of effective use of health personnel and quality of care. We will increase our activities in stimulating interest in group practice, will provide consultation to interested parties and will encourage needed studies and demonstrations.

RISING HEALTH CARE COSTS

The problems caused by rising health care costs pervade all thinking and planning. More precise information and understanding about economic factors involved in health care will help immeasurably in handling this problem. Toward this end, we will explore the economic aspects of home health services, a service spotlighted by Medicare; costs involved in various components of comprehensive health services and how various organizational patterns affect these costs; and the feasibility of expanding health insurance, including voluntary plans, to cover persons and benefits heretofore considered uninsurable.

FAMILY PLANNING

Family planning is no longer synonymous with preventing unwanted children, but is a part of comprehensive personal health services. As such, attention must be given to how it can best be integrated into the total pattern of comprehensive community health services. And with organization and delivery of health services the direct concern of this Division, we must learn what approaches to the organization and delivery of family planning services will yield the greatest return per unit of resource invested, be it dollars or manpower.

IMPROVEMENT OF HEALTH SERVICES

Efforts to improve health services must be buttressed continually through new knowledge and understanding. We plan continued research efforts addressed to selected problems inherent in the medical care process and administrative patterns and procedures that affect organization for the delivery of care, its accessibility, its quality, evaluation, economic analysis of costs and benefits of services and utilization of services by special groups.

In 1968, several Health Services Research Centers are being established in communities around the country, after the pattern of the highly successful clinical research centers. These will be centers of excellence in medical care administration and community health in which multidisciplinary staffs will carry out focused patient and population-oriented programs of research, development, demonstration and evaluation in fashions not possible under the usual research grant mechanism. We expect to fund two more of these centers in 1969.

NATIONAL CENTER FOR HEALTH SERVICES RESEARCH AND DEVELOPMENT

It is now generally recognized that the provision of health services constitutes one of the Nation's three or four major "industries." This enterprise not only creates and protects the health status of the country, but it is also the third largest employer. This enormous industry has grown, until very recently, with scant utilization of scientific principles. Within the past year, however, the Congress and the President have acted to establish a new and more effective program of research, development, and demonstration to assist the health industry in this regard.

In his 1967 Health and Education message the President directed that a National Center for Health Services Research and Development be established in the Department of Health, Education, and Welfare. The Congress responded by enacting Section 304 of the Public Health Service Act which establishes broad authority for research, development, demonstrations, and related training in health services. The National Center constitutes a basic resource for developing in the health services industry a scientific capability similar to that which has contributed so significantly to the advancement of biomedical knowledge and technique. In reporting the new health services research legislation mentioned above, the House Committee on Interstate and Foreign Commerce said: ". . . . given adequate funding and careful management, this area of research may prove as important to the health of individual citizens of our country as the basic biomedical research which over the past decade added immensely to the ability of the medical professions to save lives and prevent disease".

The ultimate goal of the Center is to aid the practitioners and institutions of the health services industry—such as the individual practitioner, group practices, hospitals and clinics, health professional schools, official and voluntary health agencies, third party payors—to create greater capability for self-analysis, experimentation, and orderly self-improvement. The criteria to measure achieve-

ment of this goal are (1) the distribution of effective services to all individuals and families, and (2) accomplishment of such distribution at lowest costs in money, manpower, facilities, and materials.

The problem of introducing desirable changes into health service agencies and practices is much more complex than comparable innovations in the biomedical area. There are three distinct stages through which service improvements have to be carried before they become operational. The first stage is *research* to determine whether an improvement is technically possible. The next step is *development* to create and test a prototype "model". The final step is simultaneous *demonstration* in several locations to observe its feasibility and acceptance under varying practical conditions. By providing financial support for each of these stages, an innovation is moved progressively from theoretical experimental concepts to a practical, professionally accepted idea or method.

The existing supply of individuals qualified to conduct research, development, and demonstration projects in health services is very limited. It is therefore essential to institute and support training programs both in academic and service settings. The individuals trained in these programs will go to work in the research and development components of health service agencies and programs, or in universities involved in health services research and development.

The National Center will make grants and contracts to support research, development, demonstration, and training projects addressed to problems and opportunities in all major aspects of health services. Representative projects will include studies of:

1. need and demand for health services
2. actual utilization of available services and the factors affecting utilization
3. the organization and arrangements for delivery of services, including evaluation of the quality and effectiveness of services
4. types and magnitude of manpower, facilities, and financial resources which would be needed to meet specific levels of utilization and quality of services
5. the design, layout, and operation of hospitals and other medical and health service facilities and their equipment.
6. the development and utilization of automatic and specialized equipment in screening, diagnosis, patient monitoring and general patient care, and in collecting, storing, and transmitting information amon practitioners, within hospitals, and in health service systems
7. the analysis of economic factors affecting demand, costs, methods of payment, investment, and cost/benefit ratios
8. the description and analysis of health services as a system
9. the development of more effective approaches and methods of research, development and demonstration.

Center scientists, representatives of other cognizant Federal agencies, and distinguished non-Federal scientists will all cooperate in planning and developing this program. In this way, the best professional and scientific advice in the country will be sought, and coordination of Federal programs will be attained. As part of its program development process, the Center will support intramural studies and projects needed to determine research opportunities and priorities. Certain types of experimental service projects will be carried out in Federal hospitals and health service programs which afford environments favorable to study of complex health operations.

In establishing priorities for work, the Center will emphasize areas in which there are large unresolved problems or particular opportunities for constructive progress. At present, high priority will be given to the increased delivery and utilization of health services by low income individuals, the aged, and those living in remote and rural areas. Analysis of the cost structure and cost-producing factors in health services will have high priority, as will studies which give an overall picture of the industry and produce valuable information for policy-making and further planning of research and development operations.

An amount of $29,621,000 is requested under Section 304 of Public Law 90–174 for administration by the National Center in fiscal year 1969. Of this amount, $27.720,000 is for grants and contracts and $1,901,000 is for direct operations.

PROGRAM DIRECTION AND MANAGEMENT SERVICES

Finally, a new activity appears for the first time under this appropriation. This account was formerly shown as an activity within the Public Health

Service Management fund and financed from the various appropriations within the Bureau. The purposes of this activity are to provide effective program direction and management services for the various programs within the Bureau.

In summary, we are requesting $63.8 million, an increase of 12.5 million above the 1968 comparable level. This is made up of $3.5 million for Community health and medical care programs and $8.9 million for the National Center for Health Services Research and Devolpment.

Mr. Chairman, I would be pleased to answer any questions regarding this program or the budget.

PROBLEMS

Dr. WAGNER. The Bureau of Health Services administers some of the principal programs through which the Federal Government is now attempting to improve the availability, accessibility, efficiency, and effectiveness of medical care.

We are dealing directly with the most basic of health care problems: the rising costs of services; the lack of availability of health care to many of our people.

In the rural communities only one-half of health facilities exist for these people as compared to people in urban centers.

Senator HILL. What percent of people would you classify today in rural areas?

Dr. WAGNER. 54 million, about 30 percent of the population, sir, are in the rural areas.

The duplications, overlaps, and inefficient utilization of scarce resources in the health care system.

For example, in one large metropolitan area 70 percent of the physicians don't have a hospital affiliation.

Senator HILL. Seventy percent, you say?

Dr. WAGNER. Right. In many of the hospitals the obstetrical services and pediatric services are not in full utilization. There is very expensive equipment which is duplicated in many facilities and is not at full-capacity utilization.

The delay in application of the fruits of research, and new and innovative health protection and treatment techniques.

In the last 2 years, substantially higher amounts of public funds have been pumped into the health services systems than in previous years. Total expenditures now approach $50 billion annually.

DISEASES AND MORTALITIES

Senator HILL. I notice a statement here that 96 million Americans, about half of our population, have one or more chronic diseases or impairments. Infant mortality is higher than many other less affluent countries.

Dr. WAGNER. Yes, sir.

Senator HILL. To what do you ascribe that?

CHRONIC DISEASES

Dr. WAGNER. Through the efforts that have been made, people are living longer and we are getting into the area where chronic disease problems are a primary problem. I think our system has not developed its full capacity to detect these conditions at a stage that the state of the art would permit their control, at least as efficiently as we would like to see it.

Senator HILL. And as could be done?

Dr. WAGNER. As could be done, yes.

INFANT MORTALITY

Senator BARTLETT. How about the infant mortality?

Dr. WAGNER. I think that infant mortality rests upon the basic principle that there are certain population groups, disadvantaged, either economically or otherwise, who don't have access to the best and most comprehensive health services so that the infant mortality in this group is increased.

You must realize, of course, that health services is only one single element of a rather enormous and complicated social network which affects the health of the people, the nutritional aspect and lack of knowledge of modern health practice, housing, sanitation, and other types of things which are important.

Senator HILL. Things that we have been talking about this morning?

Dr. WAGNER. Right, sir.

Senator BARTLETT. In respect to infant mortality, don't we rate about 11th among the nations of the world?

Dr. WAGNER. Yes, about 15th in the latest report, sir.

HOSPITAL COSTS

Greatly increased demand for services, and the limited capacity of the systems to increase output have together resulted in strong inflationary pressures. The hospital costs have risen about 16 percent in each of the last 2 years and average per diem charges, now averaging about $65, will probably increase to $100 in the next 5 years.

Senator HILL. Increase how much you say?

Dr. WAGNER. Will probably increase to about $100 in the next 5 years.

Senator BARTLETT. It has been said that in the Washington area costs in three hospitals will be around $100 a day by 1970.

Dr. WAGNER. There are individual instances where their costs are already $100 a day in the large cities.

Senator BARTLETT. Quite a few.

Dr. WAGNER. I think if a sample is taken of the kind of treatment that many of the patients are receiving, there are many cities where the $100 per diem charge is not unusual.

Senator BARTLETT. What does a fellow who becomes ill, has no health insurance, has an income of $8,000 a year, do in such a circumstance?

Dr. WAGNER. He borrows the money and pays for it.

Senator BARTLETT. What if he cannot borrow the money?

Dr. WAGNER. Or, what is more tragic, he denies himself the care that he should have and his family is entitled to have.

PHYSICIANS' FEES

The physicians' fees increased about 7.8 per cent in 1966, and 6.1 per cent last year, twice the rise in the average overall consumer price index.

MEDICAL SERVICES

The sharply higher costs of services have not resulted unfortunately in significantly greater availability of high quality care. Nor have substantial changes in the mortality data been demonstrated. Increasing numbers of people are becoming concerned about their difficulty in

securing good medical care for themselves and their families at reasonable cost and at minimum inconvenience.

### DISEASES AND MORTALITY

The telling statistics of disease prevalance and lagging progress in the United States which were mentioned by the chairman are finding their way, I think, increasingly into the public print and people are becoming increasingly concerned about it.

About 96 million Americans have one or more chronic diseases or impairments. Infant mortality is higher than in many other less affluent countries. It is estimated that life expectancy today could be 5 years or more longer than it is if we could apply fully the current state of the health care arts across the country. The mortality rate is 2 to 1 or higher among nonwhites than it is among whites for tuberculosis, influenza, pneumonia, and other diseases. Maternal mortality rates among nonwhite mothers are four times those among white mothers.

Millions of Americans still seek medical care only in cases of complicated and serious illness; many not until the last or critical state of illness.

Senator HILL. Which, of course, is most unfortunate.

Dr. WAGNER. Very unfortunate, not only from the standpoint of their health, but the cost-benefit relationship of these resources.

### INEFFICIENCIES IN HEALTH CARE SYSTEM

The statistics that document the inefficiencies in our health care system continue to accumulate. Three national conferences and two major reports last year noted, among other matters, the substantial overutilization of hospitals caused by the benefit structure of prepayment and insurance policies. The inefficient use of physicians, nurses, and other scarce health manpower has long concerned the chairman and members of this committee, as well as many others.

Senator HILL. That is one of our big problems today.

Dr. WAGNER. That is correct, sir.

In the Bureau of Health Services, we are deeply involved in programs to help ease these problems.

### PROVISION OF HOSPITALS AND RELATED HEALTH FACILITIES

The Division of Hospital and Medical Facilities supports construction and modernization of hospitals and related health facilities. The $2.9 billion it has provided in capital subsidy over its lifetime has gone far toward meeting critical needs in new health facilities and has rendered the facility deterioration problem less severe than it otherwise would have been. As a concomitant of its capital subsidy efforts, the program has brought about improved standards for design and construction in all States and has established State Hill-Burton and areawide agencies which, in planning systematically for each State's health facility needs, set the stage for the present comprehensive health planning movement. Only since the inception of this program has there been a consistent effort to plan health facility construction in the light of actual community needs.

### Division of Health Mobilization

The Division of Health Mobilization (whose appropriations request is heard by the Subcommittee for Independent Offices and the Department of Housing and Urban Development) utilizes the latest findings concerning the delivery of health services to assist States and communities in achieving better readiness to provide health services in national emergencies or disasters.

### direct health services to legally designated beneficiary groups

Our programs which provide direct health services to legally designated beneficiary groups are administered by the Division of Direct Health Services, the Division of Federal Employee Health, and the Division of Indian Health, the latter's appropriation request being heard by another committee.

Senator Hill. That comes under Interior.

Dr. Wagner. Yes sir.

Senator Hill. It used to come under this Committee, but some years ago they moved it to Interior.

Senator Bartlett. We gave them a good hearing.

Senator Hill. Oh, yes, you always do.

Dr. Wagner. These programs incorporate the latest improved methods into their own health care systems and are serving increasingly as intramural laboratories for health services research and demonstration. We are just commencing to realize the potential of these programs as a means for discovering improved methods and for establishing models of excellence as examples to other providers of health services.

### community health services

The remaining activities of the Bureau directed toward the organization and improvement of services are contained in the appropriation before you entitled "Community health services." This appropriation is divided into three major program components.

### Medical Care Administration

"Medical care administration and community health" covers activities directed toward improving the quality, the quantity and the effectiveness and availability of health and health protection services in all segments. They include new approaches for planning and organizing of delivery of health services in rural and urban areas as well as to migrant workers and their families.

### Professional and Technical Support to Social Security Administration

It also includes the provision for professional and technical support to the Social Security Administration's management of title 18 of Public Law 89–97. It serves as a focal point within the Public Health Service for drawing on many skills and resources needed to implement the medicare and medicaid programs.

In 1969 the medical care and community health program will stimulate interest in improvement of health services to the poor in urban and rural areas, group practice family planning and health economics.

NATIONAL CENTER FOR HEALTH RESEARCH AND DEVELOPMENT

The National Center for Health Research and Development provides a focal point within the health service for health service research activities. Included in its function are development of information systems, development of research resources, the financing of large-scale research in the organization and delivery of health services, and in the improvement of medical facilities design.

In 1968 this activity was carried in the Hospital Construction Activity, Comprehensive Health Services, and Public Health Service management fund. We are extremely excited about this program, Mr. Chairman, because we see in this the answer to many of the problems that are gaining considerable recognition in the task of organizing the delivery of care to all the people. It is an extremely interesting area for research because the implicit utility theory which states that what works is retained by society probably applies, I think, to most activities.

In the health activity, in the health area, the organization and delivery of care, where many ambiguities exist between what definitely works and what definitely does not work usually calls for a practice which is based upon value systems rather than upon quantifiable standards and where the input-output relationships are not very clear.

To bring about a change in this kind of system, I think the health services researchers would direct themselves to what doctors do, what the tasks are, how these functions relate to the health of people, and relating health in the system to all of the other things that are extremely important.

In fact, I think that the research in this area is at about the stage that biomedical research was many years ago. The payoff with increasing support in this research, as we increase support of biomedical research, is going to be very large.

PROGRAM DIRECTION AND MANAGEMENT SERVICE

The final item in this appropriation, Mr. Chairman, is the program direction and management services which covers the immediate Office of the Bureau Director. This Office provides program direction and management services in the application and utilization of the Bureau of Health Services resources toward the achievement of its goal. This activity was previously carried in the Public Health Service management fund.

BUDGET REQUEST

In summary, in this appropriation title we are requesting $63.8 million, an increase of $13 million above the 1968 comparable level, made up of $4.1 million for community health and medical care programs and $8.9 million for the National Center health research and development.

I have Dr. Cashman here, Director of the Division of Medical Care Administration.

We will be very happy to answer any questions you may have.

Senator HILL. All right, Doctor.

Dr. CASHMAN. I will be happy to answer any questions you might have.

Senator HILL. Do you have any statement you would like to make?

Dr. CASHMAN. Dr. Wagner included our request in his statement.

### Weak Points in Welfare System

Senator Hill. Is there anything you would like to add?

Dr. Cashman. I think merely to strengthen what he said. In our activities we have identified a number of weak points in our health care system. Certainly there are large segments of our population who are not recipients of the best we have to offer. We have a specific example in the migrants. I think more and more as we look at the problem of delivering health services, we are impressed with the fact that we must quickly try to determine ways in which we can identify real needs for resources so that we can develop the most economic methods possible. I think the same thing applies to the use of personnel. We have to think of more efficient ways of using them, better ways of using our health professionals and new ways of developing new kinds of people.

It is of little value to have facilities which are not delivering high quality care. There is great emphasis these days on the quality of care available in communities.

All of these things are related to the rising cost of care. These are the areas to which our requested increase will be directed.

### Personnel Usage and Usage

Senator Hill. We do have a definite shortage of personnel; don't we?

Dr. Cashman. Yes, sir. There is a current shortage due to the way we are using them.

Senator Hill. You think we can use them more effectively?

Dr. Cashman. We have some prejudice in that regard, Senator. We feel that the group practice of medicine makes very efficient use of not only the professional, but——

Senator Hill. You think a team is better?

Dr. Cashman. Yes, sir. I think that many people feel that the team is better. We had a most exciting conference on group practice which the Secretary called last fall at which a number of leaders around the country met to discuss this issue. As you are aware, the Housing and Urban Development Department administers the program for mortgage loan insurance for group practice. I think it is quite significant that in the few short months since the regulations have been out we have had 1,300 inquiries about this.

Senator Hill. You have had that many?

Dr. Cashman. That many phone calls and letters. We have given a number of official consultations. We have had 11 formal proposals. A number of these have been approved. We would have many more if money were a little less tight.

### Effect of Budget Bureau's Reduction in Request

Senator Hill. Talking about money, you got about a $33 million reduction from your request, didn't you?

Mr. Bahn. Yes, sir, between the Department and the Bureau of the Budget.

Senator Hill. How is it going to affect you?

Dr. Wagner. I think it will slow down the achievement of the objectives.

Senator Hill. The very things we have been talking about.

Dr. WAGNER. That is correct.

Senator HILL. You are not going to be able to move forward as you feel you should efficiently and effectively move, is that right?

Dr. WAGNER. That is right.

### COMMUNITY ASSISTANCE

Senator HILL. Is there any one item more particularly important than any other?

Dr. WAGNER. It makes a package, Mr. Chairman, a balanced program. Two things are extremely important, we think. One is that every effort be made to get into the community and try to assist the community in solving its problems, particularly for those people who are deprived of medical care right now. As it has been pointed out to this committee by many people, the Federal Government is most effective in our pluralistic system in influencing the system which is already in existence. For the majority of people this can be done through consultation, through regulations, through support, through grants, this type of thing. But there is a certain segment of the population, the deprived population, where we don't have a system for providing care.

Senator HILL. It does not exist, does it?

Dr. WAGNER. No, sir. We have to go in and create a system, create the institutions on which such a system can be developed. I think some magnificent efforts are being done through Dr. Cashman's Division. To do it most effectively, we need additional knowledge of how to bring about the social engineering which is essential if the most efficient use of the resources is going to be made in terms of the health of the people and in terms of the activity which we previously measured ours against. Here we need research and a great deal of research, and we need research in the community and various segments of that community, the universities, hospitals, various group practices and various other arrangements to bring out how they see the need as translated in terms of effective demand and the way resources can be better grouped together to meet those demands.

### BUDGET REDUCTIONS LIMITS NUMBER OF COMMUNITIES

Senator HILL. How much will this reduction of some $33 million affect your ability to meet this need?

Dr. WAGNER. As it relates to the care of the poor, I think that the reduction will be reflected in the number of communities in which we can get people to work to bring about a more rational approach to the problems, and to provide a portal of entry to the health care system for these people.

### BACKLOG OF UNFUNDED PROJECTS

There is a great social interest in the country on the part of the kind of people who will go out and work in these communities. As it relates to research I think we will have backlog of unfunded projects.

Senator HILL. You have a backlog?

Dr. WAGNER. Yes.

### Reductions in National Center for Health Services Research and Development

Dr. Stewart. If I recall correctly, about half of the $33 million was in the National Center for Health Services Research and Development. It is this organizational unit that will be supporting the kind of research that Dr. Wagner is talking about and at less than the level we proposed.

I just want to emphasize how important we think it is to get this research going. I don't think at the present moment we have any solution to many of the problems until we get further knowledge.

Senator Hill. You know you have the problem, but until you get further knowledge, you don't have the solutions?

Dr. Stewart. That is correct. The problems are not going to go away. They are going to get worse. They affect everybody in the country.

### Health Service Problems in Urban Slum Areas

Dr. Cashman. The people in some of our urban slum areas have a different way of looking at health services. You take the young Negro girl who is 10 years old. Perhaps the greatest hazard she has in the next 10 years of her life is homicide. She does not think of using health services in the same way your grandchild and mine looks at them. One of the things we are trying to do in getting experienced health professionals into the cities is to see how we can overcome this kind of problem. How can we get them to tell us what they think their needs are so that we can give priority to the things they think are important? Also, how can we educate them in the proper use of health services? And in addition, it is a splendid thing that we do have a pluralistic society, because we can move on a broad front with a number of programs. Sometimes, however, the numbers are so great that we need somebody to help interpret the programs and show people how to use the resources that are available.

Senator Hill. That is important.

Dr. Cashman. Yes, sir.

Senator Hill. Anything you would like to add?

Dr. Wagner. No, sir.

Senator Hill. I want to thank you very much for your testimony. It is fine testimony. It is deeply appreciated.

## Patient Care and Special Health Services

STATEMENT OF DR. JOHN J. WALSH, DIRECTOR, DIVISION OF DIRECT HEALTH SERVICES

ACCOMPANIED BY:

DR. HARRY G. TRAUTMAN, CHIEF DENTAL OFFICER, COAST GUARD

ABRAHAM WOLFTHAL, ASSISTANT DIRECTOR, DIVISION OF FEDERAL EMPLOYEE HEALTH

ANDREW J. CARDINAL, EXECUTIVE OFFICER, DIVISION OF DIRECT HEALTH SERVICES

DR. CARRUTH J. WAGNER, DIRECTOR, BUREAU OF HEALTH SERVICES

GEORGE SPATAFORE, ACTING EXECUTIVE OFFICER, BUREAU OF HEALTH SERVICES

RALPH BAHN, FINANCIAL MANAGER, BUREAU OF HEALTH SERVICES

DR. WILLIAM H. STEWART, SURGEON GENERAL

CHARLES MILLER, CHIEF FINANCE OFFICER

JAMES B. CARDWELL, DEPUTY ASSISTANT SECRETARY, BUDGET

### Appropriation Estimate

"[HOSPITALS AND MEDICAL CARE] *PATIENT CARE AND SPECIAL HEALTH SERVICES*

"For carrying out the functions of the Public Health Service, not otherwise provided for, under the Act of August 8, 1946 (5 U.S.C. 7901), and under sections 301, 311, 321, 322, 324, 326, *328*, 331, 332, 502, and 504 of the Act, section 810 of the Act of July 1, 1944, as amended (33 U.S.C. 763c), the Act of July 19, 1963 (Public Law 88–71), and Private Law 419 of the Eighty-third Congress, as amended: [$63,230,000] *$71,193,000*, of which $1,200,000 shall be available only for payments to the State of Hawaii for care and treatment of persons afflicted with leprosy: *Provided*, That when the Public Health Service establishes or operates a health service program for any department or agency, payment for the estimated cost shall be made by way of reimbursement or in advance for deposit to the credit of this appropriation."

### APPROPRIATION LANGUAGE CHANGES

*The first change* reflects the revised appropriation title, in keeping with the broadened scope of programs funded.

*The second change* adds section 328 which provides for the mutual interchange and cooperative use of Federal and non-Federal health resources, including staff and physical resources, on a reciprocal or reimbursable basis, in the interests of benefitting the patient care, training and research objectives of the participating agencies or organizations.

## AMOUNTS AVAILABLE FOR OBLIGATION

| | 1968 | 1969 |
|---|---|---|
| Appropriation | $63,230,000 | $71,193,000 |
| Transfer to "Operating expenses, Public Buildings Service", General Services Administration | −10,000 | |
| Advances and reimbursements from: | | |
| Federal funds | 13,011,000 | 13,933,000 |
| Non-Federal funds | 424,000 | 423,000 |
| Cutback from the 1968 President's budget required by H.J. Res. 888 | −82,000 | |
| Total currently authorized for obligation | 76,573,000 | 85,549,000 |
| Plus: | | |
| Proposed release of reserves for increased pay and postal costs | 82,000 | |
| Proposed transfer of reserves created by H.J. Res. 888 from "National Heart Institute" for increased pay and postal costs | 1,893,000 | |
| Total available for obligation | 78,548,000 | 85,549,000 |
| Disposition of cutback: To be used for pay and postal costs in this account | 82,000 | |

## OBLIGATIONS BY ACTIVITY

| | 1968 estimate | | 1969 estimate | | Increase or decrease | |
|---|---|---|---|---|---|---|
| | Positions | Amount | Positions | Amount | Positions | Amount |
| Operation of hospitals and clinics | 6,238 | $69,711,000 | 6,287 | $75,145,000 | +49 | +$5,434,000 |
| Medical care for special groups: | | | | | | |
| (a) Coast Guard medical services | 144 | 2,290,000 | 148 | 2,432,000 | +4 | +142,000 |
| (b) Federal employee health services | 347 | 2,889,000 | 379 | 4,017,000 | +32 | +1,128,000 |
| Special health services: | | | | | | |
| (a) Emergency and rehabilitative services | 54 | 1,373,000 | 54 | 1,670,000 | | +297,000 |
| (b) Payments to Hawaii | | 1,200,000 | | 1,200,000 | | |
| Personnel detailed to other agencies | 72 | 1,085,000 | 72 | 1,085,000 | | |
| Total | 6,855 | 78,548,000 | 6,940 | 85,549,000 | +85 | +7,001,000 |

## OBLIGATIONS BY OBJECT

| | 1968 estimate | 1969 estimate | Increase or decrease |
|---|---|---|---|
| Total number of permanent positions | 6 855 | 6,940 | +85 |
| Full-time equivalent of all other positions | 98 | 93 | −5 |
| Average number of all employees | 6,697 | 6,866 | +169 |
| Personnel compensation: | | | |
| Permanent positions | $48,363,000 | $51,366,000 | +$3,003,000 |
| Positions other than permanent | 920,000 | 860,000 | −60,000 |
| Other personnel compensation | 1,820,000 | 1,820,000 | |
| Total personnel compensation | 51,103,000 | 54,046,000 | +2,943,000 |
| Personnel benefits | 6,866,000 | 7,140,000 | +274,000 |
| Travel and transportation of persons | 800,000 | 876,000 | +76,000 |
| Transportation of things | 753,000 | 779,000 | +26,000 |
| Rent, communications, and utilities | 1,238,000 | 1,464,000 | +226,000 |
| Printing and reproduction | 301,000 | 343,000 | +42,000 |
| Other services | 4,513,000 | 5,609,000 | +1,096,000 |
| Project contracts | 127,000 | 418,000 | +291,000 |
| Services of other agencies | 1,897,000 | 1,881,000 | −16,000 |
| Payment to "Public Health Service management fund" | 485,000 | | −485,000 |
| Supplies and materials | 6,641,000 | 7,691,000 | +1,050,000 |
| Equipment | 2,633,000 | 4,098,000 | +1,465,000 |
| Grants, subsidies, and contributions | 1,551,000 | 1,564,000 | +13,000 |
| Subtotal | 78,908,000 | 85,909,000 | +7,001,000 |
| Deduct quarters and subsistence charges | −360,000 | −360,000 | |
| Total obligations by object | 78,548,000 | 85,549,000 | +7,001,000 |

*Summary of changes*

| | |
|---|---|
| 1968 enacted appropriation | $63,230,000 |
| Transferred to "Operating expenses, Public Buildings Service," General Services Administration | −10,000 |
| 1968 estimated reimbursements | 13,435,000 |
| Cutback required by HJR 888 | −82,000 |
| Proposed release of reserves for increased pay and postal costs | 82,000 |
| Proposed transfer of reserves created by HJR 888 from "National Heart Institute" for increased pay and postal costs | 1,893,000 |
| 1968 estimated obligations | 78,548,000 |
| 1969 appropriation estimate | 71,193,000 |
| 1969 estimated reimbursements | 14,356,000 |
| 1969 estimated obligations | 85,549,000 |
| Total change | +7,001,000 |

| | Base | | Changes from base | |
|---|---|---|---|---|
| | Positions | Amount | Positions | Amount |
| Increases: | | | | |
| A. Built-in: | | | | |
| 1. Annualization of Pay Act increases | | | | $455,000 |
| Operation of hospitals and clinics | | | | (429,000) |
| Coast Guard | | | | (13,000) |
| Federal employee health | | | | (6,000) |
| Emergency and rehabilitative services | | | | (7,000) |
| 2. Annualization of new positions authorized in 1968 | | | | 156,000 |
| 3. Net additional cost | | | | 582,000 |
| Within grades | | | | (409,000) |
| Reclassifications | | | | (173,000) |
| 4. Net additional cost of incentive pay and longevity increases | | | | 214,000 |
| Operation of hospitals and clinics | | | | (199,000) |
| Coast Guard | | | | (15,000) |
| 5. Social security contributions | | | | 54,000 |
| Operation of hospitals and clinics | | | | (49,000) |
| Coast Guard | | | | (5,000) |
| 6. Annualization of 1968 wage board increases | | | | 180-000 |
| 7. Payments to employee compensation fund | | | | 23,000 |
| 8. 1 extra day's pay in 1969 (260 days in 1968; 261 days in 1969) | | | | 104,000 |
| 9. Contract medical care price increases | | | | 210,000 |
| 10. Adjustment of minimum rates and rate ranges of nurses | | | | 145,000 |
| B. Program: | | | | |
| 1. Operation of hospitals and clinics: | | | | |
| (a) Staffing for outpatient clinics | 613 | $5,595,000 | 43 | 341,000 |
| (b) Contractural services | | 1,892,000 | | 540,000 |
| (c) Maintenance and repairs | | 670,000 | | 213,000 |
| (d) Supplies | | 3,872,000 | | 620,000 |
| (e) Subsistence | | 1,177,000 | | 150,000 |
| (f) Equipment | | 352,000 | | 398,000 |
| (g) Preventive medicine | | | 6 | 64,000 |
| (h) Multiphasic screening program | 46 | 405,000 | | 1,479,000 |
| (i) Minor increases in other objects | | | | 31,000 |
| Subtotal, operation of hospitals and clinics | | | 49 | 3,836,000 |
| 2. Medical care for special groups: | | | | |
| (a) Coast Guard medical services | 144 | 2,290,000 | 4 | 109,000 |
| (b) Federal employee health services | 347 | 2,889,000 | 32 | 1,122,000 |
| 3. Special health services: | | | | |
| (a) Emergency and rehabilitative services | 54 | 1,153,000 | | 516,000 |
| Subtotal program increases | | | 85 | 5,533,000 |
| Gross increases | | | 85 | 7,706,000 |
| Decreases: | | | | |
| A. Adjustment for elimination of a reimbursable project | | | | −220,000 |
| B. Nonrecurring contribution to PHS management fund | | | | −485,000 |
| Total decreases | | | | −705,000 |
| Total net changes requested | | | +85 | +7,001,000 |

EXPLANATION OF CHANGES

*Operation of hospitals and clinics*

*Clinic staffing.*—An increase of $341,000 and 43 positions is requested to provide for increased patient workloads in the outpatient clinics.

*Contractual services.*—The program increase of $540,000 is made up of the following: An increase of $477,000 is requested for contractual medical and dental services. This will provide additional consultant visits to the outpatient clinics, equalization of fee schedules of contract physicians and dentists to the prevailing rates, and support of price and workload increases for medical and dental laboratory services to the hospitals and clinics. A further increase of $63,000 will enable the hospitals and clinics to purchase additional laundry and other services arising from increased workloads.

*Maintenance and repairs.*—The increase of $213,000 will permit us to upgrade our substandard maintenance program.

*Supplies.*—Of the $620,000 increase requested in the supply category, $91,000 will be expended on linen, $94,000 on family planning services, $30,000 on outpatient offices, $124,000 on disposable supplies, and $281,000 on hospital and clinic supplies.

*Subsistence.*—The increase of $150,000 will permit an increase in unit ration allowance of fifteen cents in the general hospitals and thirteen cents in the Carville hospital. This will provide $1.28 per ration in the general hospitals and $1.44 in the Carville hospital.

*Equipment.*—The increase of $398,000 will provide funds for modernization of two outpatient clinics ($170,000) and funds for the most essential additional equipment for the hospitals and clinics ($228,000).

*Preventive medicine.*—An increase of $64,000 and 6 positions is requested to initiate preventive medicine programs at two of our larger clinics.

*Multiphasic screening program.*—The requested increase of $1,479,000 will provide for the completion of the second phase of the program to develop and demonstrate new, automated screening procedures at the Staten Island hospital.

*Minor increases in other objects.*—An increase of $10,000 will be used to cover the cost of rental space for the San Diego clinic. The increase in other objects is $21,000.

*Medical care for special groups*

*Coast Guard medical services.*—The increase of $109,000 and 4 positions will provide increased medical and dental support to present and proposed medical and dental facilities.

*Federal employee health services program.*—An increase of 32 positions and $1,122,000 in reimbursable funds will be used to operate 12 new health units requested by Federal agencies.

*Special health services*

*Emergency health services.*—The requested increase of $403,000 for expansion of this program is primarily for project contracts. It will also provide for the dissemination of health educational material to the public through its information clearinghouse.

*Rehabilitation medicine.*—The requested $3,000 will provide funds for supplemental research grants.

*Poison control.*—The $110,000 requested will permit immediate retrieval of information on poisons, toxic agents, and related exposures by means of a computer, establishment of a second regional laboratory, and the support of new research projects and supplemental grants.

EXPLANATION OF TRANSFERS

| 1968 estimate | Purpose |
|---|---|
| Proposed transfer from "National Heart Institute", $1,893.000. | To cover cost of the Civilian and Uniformed Services Pay Acts of 1967 and additional costs of Social Security contributions. |
| Transfer to "Operating expenses, Public Buildings Service," General Services Administration, $10,000. | Transfer of rental costs for Division of Federal Employee Health. |

JUSTIFICATION—PATIENT CARE AND SPECIAL HEALTH SERVICES

| | 1968 estimate | | 1969 estimate | | Increase or decrease | |
|---|---|---|---|---|---|---|
| | Position | Amount | Position | Amount | Position | Amount |
| Personnel compensation and benefits | 6,855 | $57,969,000 | 6,940 | $61,186,000 | +85 | +$3,217,000 |
| Other expenses | | 20,939,000 | | 24,723,000 | | +3,784,000 |
| Subtotal | 6,855 | 78,908,000 | 6,940 | 85,909,000 | +85 | +7,001,000 |
| Deduct quarters and subsistence charges | | −360,000 | | −360,000 | | |
| Total | 6,855 | 78,548,000 | 6,940 | 85,549,000 | +85 | +7,001,000 |
| Reimbursable obligations | | −13,435,000 | | −14,356,000 | | −921,000 |
| Direct obligations | | 65,113,000 | | 71,193,000 | | +6,080,000 |

GENERAL STATEMENT

A total of 11 hospitals, 28 outpatient clinics, and 124 outpatient offices will be operated to furnish medical and dental care to legal beneficiaries of the Public Health Service. The major beneficiary groups are American seamen, Coastguardsmen and their dependents, Bureau of Employees' Compensation cases, and persons afflicted with leprosy. Among these, the largest single category is the American seamen who receive comprehensive medical care in Service facilities for all conditions. Medical care is also provided to foreign seamen and beneficiaries of other Federal agencies on a reimbursable basis.

Though the primary mission of this program is to provide comprehensive health services to its beneficiaries, it also has responsibility for the training of health services personnel, conducting clinical and health services research, and participation in community health service programs. This broad responsibility is in keeping with the recognition by many authorities, including the National Commission on Community Health Services, that the hospital is, and should be, the focal point for all health services.

1. *Operation of hospitals and clinics.*—Under this activity are operated 10 general hospitals, and the National Leprosarium at Carville, La. Average daily inpatient loads and annual total outpatient visits are expected to be as follows:

| | 1967 actual | 1968 estimate | 1969 estimate |
|---|---|---|---|
| Average daily patient load: | | | |
| Hospital patients, by type of hospital: | | | |
| General hospitals | 2,214 | 2,210 | 2,195 |
| Leprosarium | 279 | 270 | 270 |
| Total | 2,493 | 2,480 | 2,465 |
| Annual total outpatient visits: | | | |
| Hospital outpatient visits | 794,807 | 808,000 | 815,000 |
| Outpatient clinic visits | 749,064 | 804,000 | 844,000 |
| Outpatient office visits | 62,740 | 64,000 | 65,000 |
| Annual total outpatient visits | 1,606,611 | 1,676,000 | 1,724,000 |

The estimates for 1969 provide for an increase in staff for the outpatient clinics to accommodate the increased patient workload, thereby permitting the maintenance of the current staffing ratio. Provision is also made for improvement of patient supplies and subsistence, contractual services and the acquisition of additional equipment.

During 1968 considerable progress was made in the implementation of the hospital and clinic modernization program. Newly modernized clinics at Tampa and New York City are scheduled to begin operation this year. All general hospitals are expected to be under the first phase of the Architectural and Engineering contract by August 1, 1968. The Architectural and Engineering phase of the Carville modernization will be completed during 1969 and construction will begin in 1970. The contracts for the first phase of the San Francisco Architectural and Engineering effort will be signed by April 1, 1968.

2. *Medical care for special groups—(a) Coast Guard medical services.*—Medical services are provided for Coast Guard personnel at shore stations and on

vessels. The estimates provide for increased staff and funds to improve medical and dental care.

(*b*) *Federal employee health services.*—The Public Health Service is responsible, under law, for providing all Federal agencies with recommendations and evaluations of proposed Federal employee health services. The activity also provides clinical health services to Federal employees on a reimbursable basis. On July 1, 1967, this program covered 100,000 employees served in 62 clinics. This activity is also responsible for the internal safety program for employees at Public Health Service installations and facilities. The reimbursable operations will increase by 32 positions and $1,122,000 in 1969.

3. *Special health services*—(*a*) *Emergency and rehabilitative services.*—This activity includes the Emergency health services, Rehabilitation medicine and Poison control programs.

(*b*) *Payments to Hawaii.*—Grants are made to Hawaii to defray the cost of care and treatment of persons afflicted with leprosy. Average daily patient load is expected to be 250 in 1969, compared with 254 in 1967 and 251 in 1968.

4. *Personnel detailed to other agencies.*—Medical, dental, and other professional personnel are detailed to certain other Federal agencies on a reimbursable basis.

1. OPERATION OF HOSPITALS AND CLINICS

| | 1968 estimate | | 1969 estimate | | Increase or decrease | |
|---|---|---|---|---|---|---|
| | Positions | Amount | Positions | Amount | Positions | Amount |
| Personnel compensation and benefits | 6,238 | $52,468,000 | 6,287 | $54,899,000 | +49 | +$2,431,000 |
| Other expenses | | 17,603,000 | | 20,606,000 | | +3,003,000 |
| Subtotal | 6,238 | 70,071,000 | 6,287 | 75,505,000 | +49 | +5,434,000 |
| Deduct quarters and subsistence charges | | −360,000 | | −360,000 | | |
| Total | 6,238 | 69,711,000 | 6,287 | 75,145,000 | +49 | +5,434,000 |
| Reimbursable obligations | | −9,663,000 | | −9,682,000 | | −19,000 |
| Direct obligations | | 60,048,000 | | 65,463,000 | | +5,415,000 |

*Basic program and workloads*

The 1969 estimates reflect the continued operation and improvement of eleven hospitals—ten general hospitals and the leprosarium at Carville, Louisiana.

Care is also provided to beneficiaries of this program in 28 outpatient clinics, in the private offices of 124 contract physicians, in other Federal hospitals, and in community hospitals. In 1967, outpatient visits to the clinics and physicians totaled 811,804. In 1968 and 1969, the estimates provide for 868,000 and 909,000 visits respectively.

These hospitals and clinics are the primary source of medical care for an estimated 410,000 beneficiaries. The major groups served are American seamen, whose care and cure has been the mission of these installations since 1798, Coast Guardsmen and their dependents, Federal employees injured in the course of their work, and, at the Carville Hospital, patients suffering from leprosy.

The hospitals of this system provide an economical means of furnishing care on a reimbursable basis to the legal beneficiaries of other Federal agencies that lack health facilities in the areas served by the ten general hospitals.

The requested increases will permit an improvement in outpatient care staffing levels to keep pace with a growing patient load, the inauguration of new preventive medicine programs, and the completion of equipment purchases for the clinics at Tampa and Chicago. The increases will also permit the purchase of the additional equipment to permit the application of new and improved scientific techniques in all programs. In addition, these increases will make possible an improved level of professional and contractual services, the meeting of supply needs, the strengthening of our facilities' maintenance and repair program, and the further development of our multiphasic health screening program.

Increases totaling $5,434,000 for positions, supplies, and other expenses are requested for the operations of hospitals and clinics activity, as explained below:

DIRECT CARE

*Increased staff in the outpatient clinics*

| | |
|---|---|
| Positions: | |
| 1968 | 613 |
| 1969 | 656 |
| Change | +43 |
| Amount: | |
| 1968 | $5,595,000 |
| 1969 | 5,936,000 |
| Change | +341,000 |

An increase of $341,000 and 43 positions is requested in the outpatient clinic facilities to meet an increased outpatient workload, thereby permitting the maintenance of the current staffing ratio.

*Contractual services*

| | |
|---|---|
| 1968 | $1,892,000 |
| 1969 | 2,432,000 |
| Change | +540,000 |

The justification of the $540,000 increase is as follows:

*Consultants to clinics.*—The amount of consultative services provided the outpatient clinics is inadequate. An increase of $115,000 will significantly improve the quality of patient care by permitting more frequent and more diversified utilization of consultants by the clinics.

*Contract physicians and dentists.*—An increase of $301,000 is requested for the equalization of fee schedules of contract physicians and dentists to the prevailing rates.

*Contract medical and dental laboratory services.*—The provision of medical care requires increasingly frequent use of complex special laboratory services. Examples are hormone assays, neurological tests, and dental prostheses. It is estimated that an additional $61,000 is required to support these necessary services.

*Miscellaneous contractual services.*—An additional $51,000 is requested to support the cost of providing increased laundry and other miscellaneous services in the hospitals. The request is based on a projected increase of 1,000 admissions and 7,000 outpatient visits for 1969. A further increase of 40,000 visits to outpatient clinics and offices is projected for 1969. This will require an additional $12,000.

*Maintenance and repair*

| | |
|---|---|
| 1968 | $670,000 |
| 1969 | 883,000 |
| Change | +213,000 |

Based on the University of Oklahoma-VA formula, the Division's maintenance and repair needs are $1,084,000 annually. This is a formula for mathematically computing a reasonable daily maintenance cost based on square foot area, type of construction, and percent of utilization. The requested increase of $213,000 will raise our funding from 60% to 80% of the recommended level and permit us to substantially upgrade our current substandard maintenance program.

*Supplies*

| | |
|---|---|
| 1968 | $3,872,000 |
| 1969 | 4,492,000 |
| Change | +620,000 |

The justification of the $620,000 requested for supplies is as follows:

*Patient supplies.*—Inadequate supply funding remains a major problem in the hospitals and clinics. The use of desirable, but more expensive items, such as, oral hypoglycemic agents for diabetics, now routinely used in modern medical practice, is significantly restricted in the hospital system because of cost. The increased cost of many routine supply items contributes to the problem. New modalities of treatment and diagnosis, such as renal dialysis, are extremely expensive.

The requested increase of $281,000 will alleviate to some extent the undesirable restrictions in patient care mentioned above. Increases of $.12 per inpatient day and $.10 per outpatient visit projected for 1969 will result in an estimated increased cost of $281,000.

*Outpatient offices.*—The requested increase of $30,000 will cover the estimated workload of 65,000 outpatient visits.

*Linen.*—An additional $91,000 is requested for linen for hospitalized patients, for outpatient departments of hospitals, and outpatient clinics. Based on current experience, the minimum requirement for linen will be $.17 per inpatient day and $0.2 per outpatient visit in 1969.

*Family planning supplies.*—The requested increase of $94,000 will provide support for the continuation and expansion of the family planning program. It is estimated that in 1969, family planning services will be provided to 11,000 female beneficiaries at an annual cost of $14 per beneficiary.

*Disposable supplies.*—The requested increase of $124,000 will permit the utilization of standard disposable supply items. In contrast to current medical and hospital practice, our facilities do not use disposable supply items to any significant extent. In order to improve the efficiency of operations, patient care, and professional practice, it is necessary that our facilities adopt, where feasible, this important practice.

SUBSISTENCE

| | 1968 | | 1969 | | Change | |
|---|---|---|---|---|---|---|
| | Ration cost | Amount | Ration cost | Amount | Ration cost | Amount |
| General hospitals, and Carville employees and guests | $1.13 | $1,048,000 | $1.28 | $1,185,000 | +$0.15 | +$137,000 |
| Carville hospital, patients only | 1.31 | 129,000 | 1.44 | 142,000 | +.13 | +13,000 |
| Total | | 1,177,000 | | 1,327,000 | | +150,000 |

The requested increase of $150,000 will provide for: (1) the full year cost of increased raw food prices that have been experienced in the first half of fiscal year 1968 ($.10 in the general hospitals and $.08 at Carville); and, (2) an increase of $.05 per ration to improve the quality of selective menus. Even with these increases, and after allowing for the advantages of bulk and Federal purchasing procedures, our ration allowance does not compare favorably with community hospitals.

*Equipment*

| | |
|---|---|
| 1968 | $352,000 |
| 1969 | 750,000 |
| Change | +398,000 |

The outpatient clinics in Tampa and Chicago will undergo relocation and modernization in 1969. The amount required to re-equip these facilities is $170,000.

The estimate of current additional equipment needs in our facilities is $3,500,000. This is in addition to our replacement equipment program. The requested increase of $228,000 will provide $580,000 for additional equipment.

*Preventive medicine*

| | |
|---|---|
| Positions: | |
| 1968 | |
| 1969 | 6 |
| Change | +6 |
| Amount: | |
| 1968 | |
| 1969 | $64,000 |
| Change | +64,000 |

Prevention of disease is a prime objective of all medical care programs. Resources applied to this aspect of medical care potentially produce the greatest benefits both from a financial and a social point of view. Since preventive medicine is practiced by each specialty in the hospital and clinic system, there is an urgent need to coordinate these services so that each patient receives preventive services according to his need.

The requested increase of $64,000 will permit initiation of preventive medicine programs by providing staff in two medical care facilities. Staff responsibilities will include: (1) formalizing a program of preventive care for different age groups and occupations; (2) developing an effective occupational health program;

(3) coordinating the clinic programs with local community programs; (4) performing special studies on the medical needs of the various beneficiary groups; (5) follow-up medical care; and (6) providing certain direct preventive services to beneficiaries.

*Multiphasic screening program*

| | |
|---|---|
| Positions: | |
| 1968 | 46 |
| 1969 | 46 |
| Change | ---------- |
| Amount: | |
| 1968 | $405,000 |
| 1969 | 1,884,000 |
| Change | +1,479,000 |

Funds requested in 1969 for the Multiphasic screening program will permit completion of the second phase of this program in the Staten Island PHS Hospital. This will bring the facility to full operational status, including conversion to a totally automated system. Of the amount requested, $1,039,000 is needed to achieve maximum automation in multiphasic screening. The remainder of the funds will support necessary personnel, supplies, and other expenditures to conduct the screening activities. When fully operational, the facility will be capable of examining up to 50,000 individuals per year. It will provide the Public Health Service with a laboratory in which to develop and evaluate new screening procedures and to evaluate and demonstrate new methods in the prevention of disease.

*Other changes.*—Mandatory increases in the amount of $2,077,000 and an increase in other objects of $31,000 have been partially offset by the decrease resulting from the nonrecurring contribution to the PHS Management Fund.

COMPARATIVE STATEMENT OF REIMBURSEMENTS

| | Actual, 1967 | | | Estimate, 1968 | | | Estimate, 1969 | | |
|---|---|---|---|---|---|---|---|---|---|
| | Average daily load | Rate per day | Amount | Average daily load | Rate per day | Amount | Average daily load | Rate per day | Amount |
| Operation of hospitals and clinics: | | | | | | | | | |
| Special study | 43 | $45.00 | $706,300 | 43 | $45.00 | $708,200 | 43 | $45.00 | $706,300 |
| Veterans | 31 | 27.00 | 307,287 | 40 | 27.00 | 395,300 | 40 | 27.00 | 394,200 |
| Foreign seamen | 22 | 45.00 | 353,565 | 19 | 45.00 | 312,900 | 19 | 45.00 | 312,100 |
| Immigration | 1 | 27.00 | 10,260 | 1 | 27.00 | 9,900 | 1 | 27.00 | 9,900 |
| Division of Indian Health | 14 | 27.00 | 144,558 | 14 | 27.00 | 138,300 | 14 | 27.00 | 138,000 |
| Department of State (dependents) | | 46.00 | 3,174 | | 46.00 | 3,200 | | 46.00 | 3,200 |
| Other (including emergency) | 26 | 27.00 | 256,986 | 26 | 27.00 | 256,900 | 26 | 27.00 | 256,200 |
| Department of Defense (Armed Forces) | 122 | 27.00 | 1,189,917 | 124 | 27.00 | 1,225,400 | 126 | 27.00 | 1,241,700 |
| Department of Defense (dependents) | 197 | 46.00 | 3,248,635 | [1] 194 | 46.00 | 3,266,200 | [1] 195 | 46.00 | 3,274,100 |
| Coast Guard, U.S. Public Health Service and Environmental Science Services Administration (dependents) | 67 | 1.75 | 43,489 | 69 | 1.75 | 44,200 | 69 | 1.75 | 43,800 |
| Coast Guard, USPHS, and ESSA (officers) | | 1.00 | 12,028 | | 1.00 | 14,000 | | 1.00 | 14,000 |
| Outpatient visits | | | 93,974 | | | 100,000 | | | 100,000 |
| Miscellaneous | | | 1,387,277 | | | [2] 3,405,500 | | | 3,185,500 |
| Total, PHS hospitals | 523 | | 7,757,450 | 530 | | 9,880,000 | 533 | | 9,679,000 |
| Other inpatient and outpatient care | | | 2,756 | | | 3,000 | | | 3,000 |
| Subtotal, operation of hospitals and clinics | | | 7,760,206 | | | 9,883,000 | | | 9,682,000 |
| Operation of health units | | | 1,551,131 | | | 2,467,000 | | | 3,589,000 |
| Personnel detailed to other agencies | | | 874,663 | | | 1,085,000 | | | 1,085,000 |
| Total, all reimbursements | | | 10,186,000 | | | 13,435,000 | | | 14,356,000 |

[1] This is a weighted estimate on the following individual rates: Obstetrical and maternity services: 1st 5 days of stay, $60; 6th and subsequent days of stay: mother, $45; infant, $10; other than obstetrical and maternity service, $45.

[2] Includes $220,000 reimbursement from Division of Community Health Services for Selective Service rejectee program in 1968.

2. MEDICAL CARE FOR SPECIAL GROUPS

| | 1968 estimate | | 1969 estimate | | Increase or decrease | |
|---|---|---|---|---|---|---|
| | Positions | Amount | Positions | Amount | Positions | Amount |
| (a) Coast Guard medical services: | | | | | | |
| Personnel compensation and benefits | 144 | $1,745,000 | 148 | $1,840,000 | +4 | $+95,000 |
| Other expenses | | 545,000 | | 592,000 | | +47,000 |
| Total | 144 | 2,290,000 | 148 | 2,432,000 | +4 | +142,000 |

The budget estimate provides for medical services to Coast Guard personnel aboard their vessels, and at air and other shore stations. Not included are costs funded by the Coast Guard such as space, utilities, medical and dental equipment. mobile dental units, furniture, office appliances, pay allowances and travel of Coast Guard personnel assigned to the program, etc.

Medical facilities at Coast Guard units are classified as infirmaries, dispensaries, or sick bays. The larger shore units have infirmaries staffed with medical and dental officers of the Public Health Service. Dispensaries are facilities at intermediate size shore units at which either or both medical and dental officers are assigned to duty. Sick bays are facilities aboard vessels and at smaller shore units. Sick bays are usually manned by hospital corpsmen, but vessels may have a medical officer assigned.

Full-time medical, dental, and ancillary staff are assigned where there are sufficient concentrations of personnel to make the operation of such facilities more economical to the Government. Small concentrations of personnel are provided medical and dental services by local contract physicians and dentists. Mobile dental units with a Public Health Service dental officer assigned are also used to provide dental services to Coast Guard personnel. The major problem of the Coast Guard medical program is provision of adequate medical and dental care to personnel widely dispersed in numerous small units, many of which are geographically and medically isolated.

The increase of $95,000 in personnel compensation and benefits consists of $33,000 in mandatory costs and $62,000 for program increases.

The four positions and $62,000 requested are in support of the aviation medicine program and dental program. Specifically two positions—one medical and one dental officer—are in support of a newly instituted major aviation training command at the Coast Guard Air Station, Mobile, Alabama. One medical officer position is required to provide flight surgeon training to meet the aviation medicine and dental requirements. One dental officer position is required to provide dental care to Coast Guardsmen located in remote areas in the Midwestern Coast Guard districts where dental facilities are not available.

In addition to the program increases, $33,000 is requested for mandatory items as follows:

| | |
|---|---|
| (1) Annualization of pay increase costs | $13,000 |
| (2) Increase in incentive pay | 15,000 |
| (3) Increase in social security contributions | 5,000 |

An increase of $45,000 for supplies is requested for the following:

| | |
|---|---|
| Annual operation, Vietnam | $15,000 |
| Family planning | 30,000 |

An increase of $2,000 in other services is also being requested for contract physicians.

| | 1968 estimate | | 1969 estimate | | Increase or decrease | |
|---|---|---|---|---|---|---|
| | Positions | Amount | Positions | Amount | Positions | Amount |
| (b) Federal employee health services: | | | | | | |
| Personnel compensation and benefits | 347 | $2,258,000 | 379 | $3,007,000 | +32 | +$749,000 |
| Other expenses | | 631,000 | | 1,010,000 | | +379,000 |
| Total | 347 | 2,889,000 | 379 | 4,017,000 | +32 | +1,128,000 |
| Reimbursable obligations | | −2,467,000 | | −3,589,000 | | −1,122,000 |
| Direct obligations | | 422,000 | | 428,000 | | +6,000 |

Responsibility for Federal employee health is assigned to the Public Health Service under P.L. 658, August 8, 1946 (5–U.S.C.–7901); the President's policy on Federal employee occupational health, and the Bureau of the Budget Executive Circular No. A–72, June 18, 1965.

The services authorized include emergency diagnosis and treatment of injury or illness occurring during working hours; pre-employment examinations; in-service examinations as the department or agency head determines to be necessary; administration of treatments and medications under certain circumstances; preventive services to appraise and report work environment health hazards, health education, and specific disease screening examinations and immunizations; and referral to private physicians, dentists, and other community health resources. The goal specified is the provision of these services for all Federal employees who work in groups of 300 or more.

The Division of Federal Employee Health has established the following objectives:

a. To provide consultation on the organization and establishment of employee health services to any Federal agency requesting advice; to provide standards and criteria for the furnishing of such employee health services; and, when requested, to assist agencies of the Government in the evaluation of such services.

b. To organize, administer, and operate Federal employee health service programs for participating Federal agencies on a reimbursable basis.

c. To organize and implement an improved occupational safety program for the Public Health Service employees.

An increase of 32 positions and $1,122,000 in reimbursable funds will provide occupational health programs in 12 new health units servicing an additional 25,000 Federal employees during 1969. The increase of $6,000 in appropriated funds is for annualization of Pay Act increases.

3. SPECIAL HEALTH SERVICES

| | 1968 estimate | | 1969 estimate | | Increase or decrease | |
|---|---|---|---|---|---|---|
| | Positions | Amount | Positions | Amount | Positions | Amount |
| (a) Emergency and rehabilitative services: | | | | | | |
| Personnel compensation and benefits | 54 | $606,000 | 54 | $548,000 | ..... | −$58,000 |
| Other expenses | ..... | 767,000 | ..... | 1,122,000 | ..... | +355,000 |
| Total | 54 | 1,373,000 | 54 | 1,670,000 | ..... | +297,000 |
| Reimbursable obligations | ..... | −220,000 | ..... | ..... | ..... | +220,000 |
| Direct obligations | ..... | 1,153,000 | ..... | 1,670,000 | ..... | +517,000 |
| Subactivities: | | | | | | |
| Emergency health services | 33 | 537,000 | 33 | 945,000 | ..... | +408,000 |
| Rehabilitation medicine | 7 | 166,000 | 7 | 164,000 | ..... | −2,000 |
| Poison control | 14 | 450,000 | 14 | 561,000 | ..... | +111,000 |
| Health referral | ..... | 220,000 | ..... | ..... | ..... | −220,000 |
| Total | 54 | 1,373,000 | 54 | 1,670,000 | ..... | +297,000 |

*Emergency health services*

As a result of increased support, in 1968 there has been significant expansion in the activities of the Emergency health services. Effective liaison with the Department of Transportation has been developed in the emergency medical service aspects of the highway safety program. Consultation and technical assistance have been provided to State and community agencies, both public and private, as well as professional organizations with responsibilities in emergency care.

Emergency health services personnel participated in the Public Health Services survey of emergency medical services in 77 major cities during the civil disturbances in the summer of 1967. In the critical area of education and training for emergency care, regional forums involving professional and lay participants have been conducted. A contract has been awarded to the National Academy of Sciences to develop guidelines for a national training manual to be used for training personnel who provide initial emergency care. The development and testing of such a manual will also be supported by the emergency health services program.

Other projects, to be supported by contracts, will include surveys of State and community emergency plans, development and testing of a model plan, and research and demonstration projects in emergency care.

A program increase of $403,000 is requested. Of the increase, $80,000 is required for the information clearinghouse activity and to permit field activities and consultation required as a result of our responsibilities to and joint activities with the National Highway Safety Bureau, Department of Transportation. An additional $112,000 is requested to organize and support State-wide workshops, training programs, and other educational efforts. Finally, an additional $211,000 is requested to support local research and demonstration programs in such vital areas of emergency health services as organization, planning, equipment needs, staffing requirements, and other aspects for the improvement of the delivery of such medical services. The remaining $5,000 increase is for annualization of the 1968 pay increases.

*Rehabilitation medicine*

The rehabilitation medicine program is concerned with the medical aspects of rehabilitation of all the disabled population, and has three functions: extramural, intramural, and liaison. Medical rehabilitation must precede and complement the vocational and educational rehabilitation of the potentially employable as well as constitute a major component of the comprehensive care of every disabled person.

In addition to contracts in conjunction with the extramural program, studies are conducted through research grants. It is in this element of the program that $3,000 is requested to increase supplemental research grants. In addition, an increase of $1,000 is for annualization of the pay increases. These increases are offset by a non-recurring decrease of $6,000.

*Poison control*

It is planned to computerize information on approximately 40,000 items containing poisonous substances to permit immediate retrieval in cases of emergency as well as allow rapid updating of the data bank. This information is used to answer the more than 160,000 calls made each year to poison control centers. Improvements in record keeping are contemplated to permit fuller utilization of the massive amount of clinical information collected after each episode of poisoning. For these efforts, $20,000 is requested. An additional $35,000 is requested to permit the establishment of a second specialized regional laboratory facility. This contracted service will provide surrounding States with qualitative and quantitative analytic capabilities not currently available, but necessary for proper diagnosis and treatment. An increase of $45,000 is requested to support several additional research projects directed to establishing better methods of diagnosis and treatment, including evaluative studies of special antidotes. Finally, $10,000 is requested to increase supplemental research grants.

RESEARCH GRANTS

| | 1968 | | 1969 | | Change | |
|---|---|---|---|---|---|---|
| | Grants | Amount | Grants | Amount | Grants | Amount |
| Rehabilitation medicine: | | | | | | |
| Continuations: | | | | | | |
| Noncompeting | 1 | $23,000 | 2 | $79,000 | 1 | $56,000 |
| Competing (renewals) | | | | | | |
| New | 1 | 56,000 | | | −1 | −56,000 |
| Supplemental | | 3,000 | | 6,000 | | 3,000 |
| Total | 2 | 82,000 | 2 | 85,000 | | +3,000 |
| Poison control: | | | | | | |
| Continuations: | | | | | | |
| Noncompeting | 4 | 111,000 | 5 | 212,000 | 1 | 101,000 |
| Competing (renewals) | 1 | 15,000 | 1 | 33,000 | | 18,000 |
| New | 2 | 133,000 | 1 | 14,000 | −1 | −119,000 |
| Supplemental | | 10,000 | | 20,000 | | 10,000 |
| Total | 7 | 269,000 | 7 | 279,000 | | +10,000 |

*(b) Payments to Hawaii*

| | |
|---|---|
| Other expenses, total: | |
| 1968 estimate | $1,200,000 |
| 1969 estimate | 1,200,000 |
| Increase or decrease | ---------- |

Funds under this activity are for payments to the State of Hawaii for care and treatment of persons afflicted with leprosy as authorized and directed by 42 U.S.C. 255.

The table below shows the estimated average daily patient load, patient days, per diem cost, and appropriation requests for 1968 and 1969. It should be noted that reimbursement is based on actual expense so that the requested amount will not be paid out unless it is actually needed.

| | 1968 | 1969 |
|---|---|---|
| Average daily patient load | 251 | 250 |
| Patient days | 91,980 | 91,250 |
| Per diem cost | $17.63 | $18.30 |
| Total cost and net requirements | $1,621,512 | $1,669,818 |
| Rounded | $1,622,000 | $1,670,000 |
| Appropriation request | $1,200,000 | $1,200,000 |

4. PERSONNEL DETAILED TO OTHER AGENCIES

| | 1968 estimate | | 1969 estimate | | Increase or decrease | |
|---|---|---|---|---|---|---|
| | Positions | Amount | Positions | Amount | Positions | Amount |
| Personnel compensation and benefits | 72 | $892,000 | 72 | $892,000 | ---------- | ---------- |
| Other expenses | ---------- | 193,000 | ---------- | 193,000 | ---------- | ---------- |
| Total | 72 | 1,085,000 | 72 | 1,085,000 | ---------- | ---------- |
| Reimbursable obligations | ---------- | 1,085,000 | ---------- | 1,085,000 | ---------- | ---------- |
| Direct obligations | | | | | | |

This activity is completely reimbursable. The funds provide for Public Health Service personnel detailed to other Federal agencies. Other objects of expense are also provided on a reimbursable basis when authorized by law.

The estimated number of personnel and net cost for all objects of expense by Agency are shown below:

| | 1967 estimate | | 1968 estimate | | 1969 estimate | |
|---|---|---|---|---|---|---|
| | Positions | Amount | Positions | Amount | Positions | Amount |
| Bureau of Employees' Compensation | 11 | $178,563 | 11 | $177,000 | 11 | $177,000 |
| Maritime Administration | 3 | 45,810 | 3 | 47,000 | 3 | 47,000 |
| Environmental Science Services Administration | 6 | 38,534 | 6 | 60,000 | 6 | 60,000 |
| Pan-American Health Organization | 1 | 5,589 | ---------- | ---------- | ---------- | ---------- |
| National Aeronautics and Space Administration | 1 | 17,885 | 1 | 20,000 | 1 | 20,000 |
| U.S. Coast Guard | 2 | 25,018 | 3 | 45,000 | 3 | 45,000 |
| Department of Agriculture | 1 | 8,932 | 1 | 14,000 | 1 | 14,000 |
| Army Corps of Engineers | 11 | 111,500 | 11 | 123,000 | 11 | 123,000 |
| Federal Appalachian Commission | 1 | 15,525 | 1 | 14,000 | 1 | 14,000 |
| Office of Economic Opportunity | 6 | 82,554 | 6 | 85,000 | 6 | 85,000 |
| AID-Vietnam program | 29 | 344,753 | 29 | 500,000 | 29 | 500,000 |
| Total | 72 | 874,663 | 72 | 1,085,000 | 72 | 1,085,000 |

NEW POSITIONS REQUESTED, FISCAL YEAR 1969

| | | |
|---|---|---|
| Operation of hospitals and clinics: | | |
| Dental staff technician | GS–7 | 6,734 |
| Nurse (2) | GS–7 | 13,468 |
| Nurse | GS–6 | 6,137 |
| Dental staff technician | GS–5 | 5,565 |
| Clerical Assistant | GS–5 | 5,565 |
| Nurse (5) | GS–4 | 24,975 |
| Dental staff technician (9) | GS–4 | 44,955 |
| Medical staff technician (3) | GS–4 | 14,985 |
| Clerical assistant (4) | GS–4 | 19,980 |
| Clerical assistant | GS–3 | 4,466 |
| Grades established by act of July 1, 1944 (42 U.S.C. 207): (commissioned officers) | | |
| Full grade (8) | | 87,511 |
| Senior assistant grade (13) | | 115,869 |
| Subtotal (49) | | 350,210 |
| Medical care for special groups: | | |
| (a) Coast Guard medical services: | | |
| Grades established by act of July 1, 1944 (42 U.S.C. 207) Senior grade officers (4) | | 53,735 |
| (b) Federal employee health services: | | |
| Medical officer | GS–15 | 18,404 |
| Nurse (3) | GS–10 | 26,463 |
| Nurse | GS–9 | 8,054 |
| Medical staff technician | GS–7 | 6,734 |
| Nurse (3) | GS–7 | 20,202 |
| Medical staff technician | GS–6 | 6,137 |
| Nurse (10) | GS–6 | 61,370 |
| Clerical assistant (4) | GS–5 | 22,260 |
| Ungraded positions at hourly rates equivalent to less than $15,841: | | |
| Housekeeping assistant (4) | | 16,984 |
| Grades established by act of July 1, 1944 (42 U.S.C. 207): (commissioned officers) | | |
| Full grade | | 11,312 |
| Senior assistant grade (3) | | 25,773 |
| Subtotal (32) | | 223,693 |
| Total new positions, all activities (85) | | 627,638 |

## Biographical Sketch

Name: John J. Walsh, M.D.
Position: Director, Division of Direct Health Services.
Birthplace and date: New York, N.Y., July 31, 1924.
Education:
State University of New York, College of Medicine, 1944—1948, M.D. Candidate.
Tulane University Graduate School, 1960–1965, Ph. D. Candidate (Pharm.).
Tulane University Graduate Business School, 1964—1965.
Experience:
Director, Division of Direct Health Services, 1966–Present.
Medical Officer in Charge, New Orleans PHS Hospital, 1964–1966.
Chief of Medicine, New Orleans PHS Hospital, 1963–1964.
Chief of Research Activities, New Orleans PHS Hospital, 1958–1964.
Fellow in Cardiology, Tulane Medical School, 1956–1958.
Deputy Chief of Medicine, New Orleans PHS Hospital, 1956.
Asst. Chief of Medicine, New Orleans PHS Hospital, 1954–1956.
Resident, Internal Medicine, Seattle PHS Hospital, 1951–1954.
Medical Officer, U.S. Coast Guard, 1949–1951.
Association memberships:
Diplomate, American Board of Internal Medicine.
Fellow, American College of Physicians, American College of Cardiology, American College of Chest Physicians, and American College of Clinical Pharmacology and Chemotherapy.
Member, American Association of University Professors, American Thoracic Society, National Tuberculosis Association, Society of Nuclear Medicine, and American Medical Association.
Special awards, citations, or publications:
Recipient of USPHS Commendation Medal.
Plaque for Distinguished Services for the Louisiana Tuberculosis Association.
Author or Co-Author of approximately 50 publications.

RESPONSIBILITIES COVER ALL ASPECTS OF HEALTH CARE

Senator HILL. Dr. Walsh, we are glad to have you proceed now, sir.

Dr. WALSH. Mr. Chairman, the provision of comprehensive health care for Federal beneficiaries, training of health services personnel, conduct of clinical and health services research, and participation in certain broad community programs are the main tasks of the Division of Direct Health Services.

In discharging these responsibilities, we deal with every aspect of health care. It follows that as this Division meets its responsibilities, it is given an opportunity to make significant contributions to the Nation's health. We are committed to just such a role.

In keeping with that view, we intend to provide the best and most comprehensive health services. The resources and programs we devote to the care of Federal beneficiaries are not isolated entities, but are integral parts of the local, regional, and national communities. Our efforts are directed toward making these resources and programs functioning components of community health programs at all of these levels.

We are committed to using our direct health care activities, including training and clinical research, as a base for health services research and for community services. Such research and services not only contribute significantly to the accomplishment of our primary mission, but also permit the development and demonstration of more effective and more economical methods by which health services can be delivered.

Senator HILL. In other words, one serves the other.

Dr. WALSH. Yes, sir.

TRAINING OF PHYSICIANS, DENTISTS, AND ALLIED AND AUXILIARY PERSONNEL

In addition to long-standing programs for the training of physicians and dentists, the Division has greatly increased its effort in the training of allied and auxiliary health personnel. During the last fiscal year, more than 1,800 individuals received at least a portion of their training in our facilities, such training involving affiliations with over 170 academic and other educational institutions.

Senator HILL. That is a pretty good record, isn't it?

Dr. WALSH. We are very proud of it.

COLLABORATION AND PARTICIPATION IN HEALTH-RELATED COMMUNITY PROGRAMS

Our collaboration with and participation in health-related community programs also involve health services, training, and research. The Division's medical facilities are participants in programs such as Headstart, Job Corps, manpower development and training, work experience and training, and others. The Division also administers national programs in emergency health services, poison control, and rehabilitation medicine.

OPERATION OF HOSPITALS AND CLINICS

Our 1969 budget estimates are consistent with these program concepts. They support the progress being made in the modernization of the facilities, the programs of our hospitals and clinics, and community services.

Major improvements in patient care are proposed, with particular emphasis on the ambulatory care program of the Division's outpatient

clinics and offices. These improvements encompass increased staffing for the outpatient clinics, and the purchase of additional equipment to complete modernization of the clinics in Chicago and Tampa.

For the hospital and clinic system as a whole, additional support is required for the improvement of the level of professional and other contractual medical services provided to beneficiaries, to meet urgent supply needs, and for newer and more complex forms of medical treatment.

Maintenance and repair funds are necessary to correct physical deficiencies of a potentially emergency nature, as well as to implement further a preventive maintenance program for our facilities.

Other increases in the budget will permit us to: (1) Purchase new equipment so that our facilities can keep abreast of current medical practices, and (2) meet subsistence costs and a number of mandatory and minor increases in other budget categories.

### Funding Increase

Senator Hill. You did not get the increases you requested, did you?

Dr. Walsh. No, sir.

Senator Hill. About $6 million more than this year; is that right?

Dr. Walsh. Yes, sir.

### Multiphasic Screening Program

Dr. Walsh. One of the Division's most promising projects involves a multiphasic screening program, and funds are requested to continue the development and implementation of this program. By perfecting the application of automation and computer techniques to medical services, this program will lead to improvement in the quality and scope of care provided to our beneficiaries.

The development, evaluation, and demonstration of such a multiphasic operation also promises to increase efficiency and economy in the delivery of health services. Because of the innovative nature of this effort, most of the requested funds will be expended in equipment. It is anticipated that the successful development and operation of this program will permit its replication by public and private health agencies at a considerably lower cost.

### Special Health Services

#### poison control program

The poison control program provides support services to the Nation's 563 community poison control centers. In 1969, funds will be used to establish a second regional toxicological laboratory and for research efforts focused on the development of better methods of diagnosis and treatment.

We also propose to apply modern data processing methods to the collection and interpretation of data on accidental poisonings, to assure rapid and accurate delivery of diagnostic and therapeutic information to the physician in the community. The number of toxic compounds (40,000) and annual incidents of poisoning (90,000, two-thirds in children aged five to seven) require that we expand our efforts to meet this health problem.

Senator Hill. Ninety thousand.

Dr. WALSH. Yes, sir. We feel there are more than that that do not get reported.

Our problem is accumulation of vast amounts of data that can no longer be handled by people alone.

### EMERGENCY HEALTH SERVICES PROGRAM

Incorporated in our Emergency Health Services Program, is support of community and regional research, training, and demonstration projects. These projects are directed to improving the quality and quantity of health services available to all citizens, from the onset of a particular medical emergency to attainment of maximum rehabilitation.

Considerable emphasis will be placed on the training of professional and lay personnel, and in providing consultation and technical assistance on a national level. Noteworthy in the efforts to date are the activities of the Information Clearinghouse, which provided more informational material during the last 9 months of 1967 than in the previous 4 years of its existence, the liaison established with the National Highway Safety Program of the Department of Transportation, and participation in the Public Health Service survey of emergency health services in 77 major cities last summer.

Senator HILL. Seventy-seven.

Dr. WALSH. Yes, sir.

Senator HILL. That is quite a large number, isn't it?

Dr. WALSH. Yes, sir.

## MEDICAL CARE FOR SPECIAL GROUPS

### COAST GUARD MEDICAL SERVICES

The U.S. Coast Guard is one of the five Armed Forces of the United States and is required to maintain a posture of military preparedness so it can, when required, serve with or as part of the Navy.

In fact, today a significant contribution to the effort in Southeast Asia is being made by Coast Guard operational forces.

In addition to the military requirements, the Coast Guard is charged by statute to conduct search and rescue operations, maintain aids to navigation, law enforcement, merchant marine safety, operation of ocean station vessels, oceanographic patrols, and all Arctic and Antarctic icebreaking operations.

The Coast Guard medical program is a major support element that provides the operational commander with personnel physically fit to perform their duties.

In support of the medical program, the Coast Guard operates infirmaries, dispensaries, and sickbays in its shore stations, air stations, and vessels both in the United States and in remote and isolated areas of the world. Station-manning levels are from 1 to 2,000 men; however, 71 percent of our 612 shore stations in the United States are manned by 15 or fewer men.

The Public Health Service is charged by statute to provide the professional staff to operate these activities and to provide other medical support in Public Health Service hospitals, outpatient clinics, outpatient offices, and designated physicians' offices.

FEDERAL EMPLOYEE HEALTH SERVICES

The Division of Federal Employee Health is attempting to meet the problems and needs arising in protecting the occupational health of the 2,800,000 Federal civilian employees, and the work safety of some 40,000 Public Health Service personnel.

Public Law 658 holds the Public Health Service responsible for providing consultation, standards, and evaluation of Federal employee health programs and services. The Law authorizes agencies, after securing such consultation, to enter into contractual and reimbursable agreements for the provision of needed services.

The occupational health of the Federal labor force continues to be a direct and rising cost of "doing business." Work injury loss among Federal employees currently costs the Government in excess of $46 million annually in direct expenditures. An alarming percentage of premature Federal employee retirements are for health disability. The use of over 20 million days of sick leave per year by Federal employees can be translated into disablement that brings discouragement, hardship, and loss of productivity.

We are now operating 62 employee health units, serving over 450 Federal agencies and activities, and 105,000 Federal workers.

SUMMARY

In summary, Mr. Chairman, the estimate for 1969 totals $71.2 million in appropriated funds, as compared with $65.1 million anticipated to be available in 1968 from appropriated funds, an increase of $6.1 million.

Senator HILL. That is not too much of an increase, is it?

Dr. WALSH. No, sir.

Senator HILL. Considering the job you have to do, all these activities and the increased cost of everything.

Dr. WALSH. Yes. We, as everyone else involved in providing medical and health services, are faced with increasing prices and personnel costs which are very difficult to keep up with.

This concludes my statement on patient care and special health services.

RECRUITMENT DIFFICULTIES

I am available to answer your questions, and Dr. Trautman, chief dental officer of the Coast Guard, and Mr. Wolfthal, assistant Director of the Division of Federal Employee Health, are present to respond to questions you may have regarding their programs.

Dr. STEWART. Mr. Chairman, he mentioned these are broad scope activities. In a way it is different from most of the activities of Public Health. It is direct services. It is either there or is not there.

We have pointed out, before several times, the difficulty of recruiting and competing for people in NIH or in other parts of the Public Health Service. We have that problem here to maintain a professional capability to deliver these services. It is getting very difficult and more difficult every day.

LIMITED PAY

Senator HILL. What is your answer?

Dr. STEWART. I don't have any real answer, Senator Hill. Money I guess is the answer but the structure of the personnel system, itself,

limits the amount that you can pay. I think we have a problem wherever professional and scientific people are used throughout the Government. It is not peculiar with the Public Health Service but we feel it very strongly.

Senator HILL. I am sure you do. It presents quite a problem with you.

Dr. WAGNER. I might say the understanding and support of this committee has improved the environment of the hospitals under the leadership of Dr. Walsh to the extent that we are attracting more high quality people to the hospitals where they can do high quality medicine and can do research and can do training. I think Dr. Stewart has seen this evidence.

Senator HILL. That is encouraging but you do need more support, dont' you?

CANNOT COMPETE WITHOUT ADEQUATE FACILITIES, EQUIPMENT AND SUPPORT

Dr. WALSH. Yes, sir. We cannot compete under any circumstances unless we have adequate facilities, adequate equipment, adequate supplies and adequate support. People must have professional satisfaction in addition to their personal satisfaction. This is what we are attempting to achieve, for we can never keep health professionals unless they are convinced that they can provide Federal beneficiaries with care of a quality at least equal to that provided by community hospitals.

Senator HILL. All these things you speak of cost money, don't they?

Dr. WALSH. Yes, sir.

Senator HILL. The cost gets higher each day.

Dr. WALSH. Yes, sir.

Senator HILL. Anything else you would like to add, sir?

Dr. WALSH. No, sir.

Senator HILL. I appreciate your statement.

Is there anything you gentlemen would like to add.

DR. WALSH BECOMING DEAN OF TULANE MEDICAL SCHOOL

Dr. STEWART. Dr. Walsh, on September 1st, becomes the dean of Tulane Medical School. While we are very distressed that he is leaving us, as an adopted son of Louisiana, I am glad he took that place.

Senator HILL. That has been a very outstanding medical school for many, many years. I was very much interested in looking over his biographical sketch to see that he got his M.D. degree in the State University of New York, College of Medicine, and then you went down to Tulane. Is that right?

Dr. WALSH. Yes, sir.

Senator HILL. It has been a very outstanding school for many, many years. You had a Dr. Rudolph Matas. He was a very great man. To me he stood in surgery pretty much like Sir William Osler stood in medicine. No doubt about that. He was a giant. He was a great surgeon and great man of letters, a very wonderful man.

He has a good man carrying on down there too, Dr. Ochsner.

Of course, a fellow out in Houston, Texas, named DeBakey is a product of Tulane Medical School. He has eyes in his fingers; his fingers are a third longer than yours or mine. He is a great cardiac surgeon as you well know.

I am sorry to see you leave the Public Health Service but you are certainly going to a fine place and one of great challenge.

Did you know Dr. Creech down there?

Dr. WALSH. Yes, sir, he was a friend of mine.

Senator HILL. He was a very outstanding man. He died too young. How old was he when he died?

Dr. WALSH. Approximately fifty.

Senator HILL. About in the prime of his life.

Dr. WALSH. Yes, he was.

Senator HILL. He was a fine surgeon. I had a cousin he operated on and he did a beautiful job. He also worked on Tom Dooley.

Thank you gentlemen very much. It was splendid testimony. We certainly appreciate it.

Dr. WALSH. Thank you for your support over the years, and for your very generous comments. Agreeing wholeheartedly as I do with Senator Bartlett's statement regarding your outstanding and unique contributions to medical care, research, and training, in this country and throughout the world, I feel very honored that Tulane and I have received your commendation.

Senator HILL. We hope you will find everything just as you would have it there at Tulane.

Dr. WALSH. I am certain that I will. Thank you again.

## Hospital Construction Activities

STATEMENT OF DR. HARALD M. GRANING, DIRECTOR, DIVISION OF HOSPITAL AND MEDICAL FACILITIES

ACCOMPANIED BY:

JOHN J. MOSCATO, ACTING SPECIAL ASSISTANT

DR. CARRUTH J. WAGNER, DIRECTOR, BUREAU OF HEALTH SERVICES

GEORGE SPATAFORE, ACTING EXECUTIVE OFFICER, BUREAU OF HEALTH SERVICES

RALPH BAHN, FINANCIAL MANAGEMENT OFFICER, BUREAU OF HEALTH SERVICES

DR. WILLIAM H. STEWART, SURGEON GENERAL

CHARLES MILLER, CHIEF FINANCE OFFICER

JAMES B. CARDWELL, DEPUTY ASSISTANT SECRETARY, BUDGET

### Appropriation Estimate

"HOSPITAL CONSTRUCTION ACTIVITIES"

"To carry out the provisions of title VI of the Act, as amended, and, except as otherwise provided, parts B and C of the Mental Retardation Facilities Construction Act (42 U.S.C. 2661–2677), and the Community Mental Health Centers Act (42 U.S.C. 2681–2687), [$293,357,000] *$258,368,000*, of which [$180,000,000] *$162,400,000* shall be available until June 30, [1969] *1970* (except that funds for Guam, American Samoa, and the Virgin Islands shall be available until June 30, [1970] *1971*), for grants or loans for hospitals and related facilities pursuant to section 601(b) of the Public Health Service Act, *and* [$100,000,000] *$92,000,000* shall be available until June 30, [1969] *1970* (except that funds for Guam, American Samoa, and the Virgin Islands shall be available until June 30, [1970] *1971*), for grants or loans for facilities pursuant to section 601(a) of the Public Health Service Act [, and $10,000,000 shall be for the purposes authorized in section 624 of the Public Health Service Act]: *Provided, That allotments to States for the fiscal year ending June 30, 1969, pursuant to section 602 of the Act shall include, in addition to funds appropriated herein, funds appropriated for this purpose for the fiscal year ending June 30, 1968, but not allotted to States for that fiscal year.*"

### Appropriation Language Changes

The first language change deletes Section 624 which authorized studies and demonstrations relating to coordinated use of hospital facilities. This section was repealed by Public Law 90–174, approved December 5, 1967.

The second language change will permit the allocation in 1969 of construction funds appropriated in 1968 but not allotted to the States for that fiscal year. This is necessary to assure the availability for allocation of 1968 construction funds that were placed in reserve.

## AMOUNTS AVAILABLE FOR ALLOTMENT

| | 1968 | 1969 |
|---|---|---|
| Appropriation | $293,357,000 | $258,368,00 |
| Transfer from "Health manpower education and utilization" | 130,000 | |
| Comparative transfer to "Community health services" | [1] −9,589,000 | |
| Cutback from the 1968 President's budget required by H. J. Res 888 | −12,956,000 | |
| Unused allotment available | | 12,800,000 |
| Total currently authorized | 270,942,000 | 271,168,000 |
| Plus: release of reserves for increased pay and postal costs | 152,000 | |
| Total available for allotment | 271,094,000 | 271,168,000 |
| Disposition of cutback: | | |
| To be used for increased pay and postal costs | 152,000 | |
| To be carried forward for allotment in 1969 | 12,800,000 | |
| To be returned to Treasury | 4,000 | |
| Total, cutback | 12,956,000 | |

[1] The comparable amount in terms of obligations would be $11,387,000.

## OBLIGATIONS BY ACTIVITY[1]

| | 1968 estimate | | 1969 estimate | | Increase or decrease | |
|---|---|---|---|---|---|---|
| | Positions | Amount | Positions | Amount | Positions | Amount |
| 1. Grants for construction of health facilities: | | | | | | |
| (a) Hospitals, public health centers, etc | | $124,055,000 | | $119,285,000 | | −$4,770,000 |
| (b) Long-term care facilities | | 66,800,000 | | 66,800,000 | | |
| (c) Diagnostic or treatment centers | | 19,085,000 | | 19,085,000 | | |
| (d) Rehabilitation facilities | | 9,545,000 | | 9,545,000 | | |
| (e) Modernization of health facilities | | 47,715,000 | | 52,485,000 | | +4,770,000 |
| 2. Operations and technical services | 282 | 3,894,000 | 282 | 3,968,000 | | +74,000 |
| Total available for allotment | 282 | 271,094,000 | 282 | 271,168,000 | | +74,000 |

[1] Hospital construction grants are on an allocation basis.

## OBLIGATIONS BY OBJECT

| | | 1968 estimate | 1969 estimate | Increase or decrease |
|---|---|---|---|---|
| | Total number of permanent positions | 282 | 282 | |
| | Full-time equivalent of all other positions | 3 | 3 | |
| | Average number of all employees | 261 | 263 | +2 |
| 11 | Personnel compensation: | | | |
| | Permanent positions | $2,920,000 | $3,089,000 | +$169,000 |
| | Positions other than permanent | 41,000 | 41,000 | |
| | Total, personnel compensation | 2,961,000 | 3,130,000 | +169,000 |
| 12 | Personnel benefits | 288,000 | 305,000 | +17,000 |
| 21 | Travel and transportation of persons | 266,000 | 266,000 | |
| 22 | Transportation of things | 14,000 | 14,000 | |
| 23 | Rent, communications, and utilities | 57,000 | 57,000 | |
| 24 | Printing and reproduction | 49,000 | 49,000 | |
| 25 | Other services | 106,000 | 106,000 | |
| | Payment to "Public Health Service management fund" | 112,000 | | −112,000 |
| 26 | Supplies and materials | 23,000 | 23,000 | |
| 31 | Equipment | 18,000 | 18,000 | |
| 41 | Grants, subsidies, and contributions | 262,768,549 | 290,849,000 | +28,080,451 |
| | Total, obligations by object [1] | 266,662,549 | 294,817,000 | +28,154,451 |

[1] Includes funds carried over for obligational purposes from prior years for Hill-Burton construction grants.

*Summary of Changes*

| | |
|---|---|
| 1968 enacted appropriation | $293,357,000 |
| Transfer from "Health manpower education and utilization" | 130,000 |
| Comparative transfer to "Community health services" | −9,589,000 |
| Cutback from the 1968 President's budget required by H.J. Res. 888 | −12,956,000 |
| Proposed release of reserves for increased pay and postal costs | 152,000 |
| 1968 estimated allotments | 271,094,000 |
| 1969 requested appropriation | 258,368,000 |
| Unused 1968 allotment available for allotment in 1969 | 12,800,000 |
| 1969 estimated allotments | 271,168,000 |
| Total change | +74,000 |

| | Base | | Changes from base | |
|---|---|---|---|---|
| | Positions | Amount | Positions | Amount |
| INCREASES | | | | |
| A. Built in: | | | | |
| 1. Annualization of Pay Act increases | | | | $36,000 |
| 2. Annualization of 4 new positions in 1968 transferred from health manpower | | | | 25,000 |
| 3. 1 extra day's pay in 1969 (260 days in 1968; 261 days in 1969) | | | | 10,000 |
| 4. Net additional cost of within grades ($74,000) and reclassifications ($41,000) | | | | 115,000 |
| DECREASES | | | | |
| A. Public Health Service management fund | | | | −112,000 |
| Total net changes requested | | | | +74,000 |

EXPLANATION OF TRANSFERS

| | 1968 estimate | 1969 estimate | Purpose |
|---|---|---|---|
| Transfer from: "Health manpower education and utilization". | $130,000 | | To provide for regional office architectural, engineering, and related program services as required by Bureau of Health Manpower in the actual construction phase of projects. |

JUSTIFICATION—HOSPITAL CONSTRUCTION ACTIVITIES

| | 1968 estimate | | 1969 estimate | | Increase or decrease | |
|---|---|---|---|---|---|---|
| | Positions | Amount | Positions | Amount | Positions | Amount |
| Personnel compensation and benefits | 282 | $3,249,000 | 282 | $3,435,000 | | +$186,000 |
| Other expenses | | 267,845,000 | | 267,733,000 | | −112,000 |
| Total | 282 | 271,094,000 | 282 | 271,168,000 | | +74,000 |

A request for $258,368,000 in New Obligational Authority is submitted for 1969. This amount provides $254,400,000 for the Hill-Burton construction program, and $3,968,000 for operations and technical services.

CONSTRUCTION UNDER TITLE VI OF THE PUBLIC HEALTH SERVICE ACT (HILL-BURTON)

| | 1968 estimate | 1969 estimate | Increase or decrease |
|---|---|---|---|
| Grants, subsidies, and contributions | $267,200,000 | $267,200,000 | ---------- |

In 1968 the construction level of $267,200,000 is 95 percent of the amount authorized in the appropriation act. The 5 percent reduction related to the government-wide cost reduction program was less severe in this program than in other construction programs because of the recognition of the critical need for hospital facilities.

The $267,200,000 available for 1969 for construction under Title VI of the Public Health Service Act will provide $171,770,000 for grants or loans to assist in (a) the construction of hospitals, public health centers, and related facilities and (b) the modernization of hospitals and other health facilities; $66,800,000 for long-term care facilities; $19,085,000 for diagnostic or treatment centers; and $9,545,000 for rehabilitation facilities.

Considerable progress has been made in providing additional general hospital beds and facilities. However, the need and demand for construction of these types of facilities continue at a high level. The need for long-term care and ambulatory facilities is also acute and the interest of communities in constructing these relatively low cost facilities in lieu of expensive general hospital beds continues. Increases in our population and the enactment of Medicare further contribute to the need for additional beds and facilities.

The rate at which existing facilities are becoming structurally and functionally obsolete and require replacement or modernization is the most serious problem in the health facilities field today. State agencies have now identified the modernization needs, and many cities and communities are seeking assistance under this program to modernize or replace these obsolete facilities.

1. *Hospitals, public health centers, etc.*—The amount of $119,285,000 is for the construction of new and expanded hospitals and public health centers out of the $171,770,000 available pursuant to Section 601(b). Hill-Burton State plans show a need to add 75,726 general beds and modernize 261,840 general beds for a total of 337,566 beds. The plans also show that 1,200 health centers should be added and 800 modernized for a total of 2,000 centers in all. The amount of $119,285,000 will produce an estimated 11,545 general hopsital beds and 42 public health center projects. Annually about 12,000 new or modernized general hospital beds are constructed outside the Hill-Burton program.

2. *Modernization of health facilities.*—An amount of $52,485,000 is for the modernization of hospitals and other health facilities out of the $171,770,000 available pursuant to the provisions of Section 601(b).

While the Hill-Burton program has achieved notable results in bringing needed health facilities to many areas, an additional serious and growing problem has emerged. Many hospitals and other health facilities—particularly those quality care general hospitals located in our more densely populated area—are functionally or structurally obsolete and are becoming increasingly inefficient or unsafe to operate. Yet these are the hospitals which provide for highly specialized hospital services, conduct research, put into practice the latest advances in medical science, and help train future physicians, nurses, and other health specialists.

This modernization problem is one of the more urgent needs in the hospital field today. The latest Hill-Burton State plans show the need for modernizing or replacing 261,840 general hospital beds and 208,083 long-term care beds. It is estimated that the $52,485,000 will modernize 8,155 general hospital beds and 300 long-term beds.

3. *Long-term care facilities.*—The need for chronic disease and nursing home beds continues to grow with the increase in our aging population. State agencies report that 357,496 long-term care beds must be constructed, modernized, or replaced. Providing more long-term care beds will not only permit more economical care of patients requiring this type of service, but in addition, will tend

to lessen the pressures for additional general hospital beds in some communities. The $66,800,000 for 1969 will produce an estimated 10,880 new or modernized nursing home and chronic disease hospital beds.

4. *Diagnostic or treatment centers and rehabilitation facilities.*—The construction of these outpatient facilities will provide a means of lessening the pressure for construction of additional expensive inpatient facilities and reducing the cost of health care to patients whose needs may be met through facilities providing outpatient care.

According to Hill-Burton State plans, a total of 770 outpatient departments should be added and 1,231 modernized. The $19,085.000 for diagnostic or treatment centers will produce an estimated 80 projects. The State plans also show that 306 rehabilitation facilities need to be added and 192 modernized. The $9,545,000 requested for this purpose will provide for an estimated 34 projects.

*Projects and Beds Produced by Funds Requested.*—The funds available will produce the following projects and beds for 1969. Comparative data are included for 1967 and 1968.

| Type of project | Number of projects | | | Beds provided | | |
|---|---|---|---|---|---|---|
| | 1967 | 1968 | 1969 | 1967 | 1968 | 1969 |
| Hospitals, public health centers, etc.: | | | | | | |
| General hospitals | 201 | 186 | 167 | 14,491 | 12,912 | 11,250 |
| Mental hospitals | 11 | 9 | 5 | 373 | 361 | 295 |
| Public health centers and laboratories | 40 | 42 | 42 | 0 | 0 | 0 |
| Subtotal | 252 | 237 | 214 | 14,864 | 13,273 | 11,545 |
| Long-term care facilities | 218 | 191 | 184 | 11,780 | 11,243 | 10,880 |
| Diagnostic or treatment centers | 83 | 80 | 75 | 0 | 0 | 0 |
| Rehabilitation facilities | 38 | 34 | 32 | 0 | 0 | 0 |
| Subtotal | 339 | 305 | 291 | 11,780 | 11,243 | 10,880 |
| Modernization | 56 | 77 | 118 | 4,000 | 5,325 | 8,455 |
| Grand total | 647 | 619 | 623 | 30,644 | 29,841 | 30,880 |

OPERATIONS AND TECHNICAL SERVICES

| | 1968 estimate | | 1969 estimate | | Increase or decrease | |
|---|---|---|---|---|---|---|
| | Positions | Amount | Positions | Amount | Positions | Amount |
| Personnel compensation and benefits | 282 | $3,249,000 | 282 | $3,435,000 | ..... | +$186,000 |
| Other expenses | ..... | 645,000 | ..... | 533,000 | ..... | −112,000 |
| Total | 282 | 3,894,000 | 282 | 3,968,000 | ..... | +74,000 |

The 1968 estimate is made up as follows:

| | Operations and technical services | | Hospital and medical facilities, research | | Total | |
|---|---|---|---|---|---|---|
| | Positions | Amount | Positions | Amount | Positions | Amount |
| Appropriated | 253 | $3,357,000 | 60 | $10,000,000 | 313 | $13,357,000 |
| Transfer from Manpower | 9 | 130,000 | ..... | ..... | 9 | 130,000 |
| Cutback | ..... | ..... | −10 | −156,000 | −10 | −156,000 |
| Pay costs | ..... | 131,000 | ..... | 21,000 | ..... | 152,000 |
| Transfer to Community Health Services for the National Center for Research and Development | ..... | ..... | −30 | −9,589,000 | −30 | −9,589,000 |
| Net | 262 | 3,618,000 | 20 | 276,000 | 282 | 3,894,000 |

As in all grant-aided construction programs, Hill-Burton must identify organizational and operational problems which interfere with the most efficient, effective and economical use of facilities built with Federal aid and (a) subject such problems to the research and development process, or (b) adapt innovative concepts and methodologies relating to the design, staffing, organization, and operation of health facilities for use by health facilities throughout the country. While there are many problems requiring significantly expanded research, other meritorious techniques and concepts which have immediate implications for more efficient, effective, and economical use of health facilities are already known and require only wide-spread implementation. Promoting implementation will be a priority concern of the Hill-Burton program.

The estimate of $3,968,000 and the 282 positions requested for 1969 are necessary to continue the Federal Government's role of providing national leadership in the planning, design, and construction of all types of facilities essential to the care and treatment of the sick and disabled.

The funds requested will support the staff necessary to provide technical assistance and consultation to sponsors and State agencies regarding all aspects of program administration; develop and revise minimum standards of design, construction, and equipment; review and approve basic documents, such as State plans, applications, and architectural drawings and specifications; compile and analyze data relating to problems in hospital and medical facility planning for the purpose of reflecting health facility needs and developing or projecting a base for a balanced program approach; maintain surveillance over bid awards and the construction of facilities; and develop regulations, procedures, and policies for operation of the program.

The operation of this program requires a large variety of specialized and highly technical skills relating to the planning, design, and construction of all types of hospital and medical facilities. For the most part these employees are in the professional or technical field of medicine, nursing, hospital administration, architecture, engineering, and equipment consultation.

A net increase of $74,000 is requested to cover mandatory items.

EXHIBIT I

HOSPITAL CONSTRUCTION ACTIVITIES—ALLOCATIONS TO STATES FOR CONSTRUCTION OF HOSPITAL AND MEDICAL FACILITIES

| | Fiscal year | | |
|---|---|---|---|
| | 1967 | 1968 | 1969 |
| Total | $270,000,000 | [1] $267,200,000 | [2] $267,200,000 |
| Alabama | 7,531,936 | 7,063,184 | 6,997,357 |
| Alaska | 750,000 | 750,000 | 750,000 |
| Arizona | 2,477,104 | 2,476,266 | 2,464,626 |
| Arkansas | 4,379,755 | 3,936,590 | 3,887,332 |
| California | 14,390,467 | 14,809,164 | 14,761,205 |
| Colorado | 2,541,105 | 2,664,467 | 2,679,489 |
| Connecticut | 2,170,924 | 2,555,933 | 2,606,823 |
| Delaware | 750,000 | 750,000 | 750,000 |
| District of Columbia | 782,182 | 761,430 | 753,135 |
| Florida | 9,264,822 | 8,989,589 | 8,935,370 |
| Georgia | 8,331,482 | 7,758,539 | 7,676,792 |
| Hawaii | 1,026,624 | 933,070 | 917,905 |
| Idaho | 1,337,186 | 1,193,352 | 1,175,532 |
| Illinois | 9,112,630 | 9,562,343 | 9,611,538 |
| Indiana | 6,462,739 | 6,310,955 | 6,331,763 |
| Iowa | 4,257,154 | 4,109,909 | 4,135,461 |
| Kansas | 3,354,793 | 3,192,644 | 3,204,879 |
| Kentucky | 6,270,427 | 5,853,033 | 5,796,408 |
| Louisiana | 6,991,881 | 6,477,947 | 6,400,687 |
| Maine | 1,772,862 | 1,718,937 | 1,718,493 |
| Maryland | 3,519,935 | 3,807,032 | 3,803,729 |
| Massachusetts | 5,706,612 | 6,308,575 | 6,409,850 |
| Michigan | 10,487,643 | 9,718,647 | 9,763,508 |
| Minnesota | 5,127,094 | 4,953,541 | 4,959,606 |
| Mississippi | 5,883,459 | 5,282,484 | 5,209,101 |
| Missouri | 5,850,465 | 6,493,701 | 6,514,444 |
| Montana | 1,197,821 | 1,198,513 | 1,206,603 |
| Nebraska | 2,134,648 | 2,120,204 | 2,127,120 |
| Nevada | 750,000 | 750,000 | 750,000 |
| New Hampshire | 1,081,513 | 1,044,212 | 1,026,156 |
| New Jersey | 6,275,499 | 6,679,711 | 6,770,725 |
| New Mexico | 1,886,436 | 1,659,927 | 1,626,308 |
| New York | 14,671,937 | 16,095,997 | 16,247,558 |
| North Carolina | 9,898,683 | 9,627,630 | 9,579,109 |
| North Dakota | 1,246,384 | 1,173,213 | 1,161,244 |
| Ohio | 12,688,579 | 12,477,364 | 12,466,955 |
| Oklahoma | 4,324,947 | 4,096,174 | 4,065,897 |
| Oregon | 2,356,250 | 2,438,661 | 2,432,645 |
| Pennsylvania | 15,624,370 | 15,857,418 | 15,972,828 |
| Rhode Island | 1,234,958 | 1,122,678 | 1,105,559 |
| South Carolina | 5,696,789 | 5,434,661 | 5,382,984 |
| South Dakota | 1,333,921 | 1,293,844 | 1,292,941 |
| Tennessee | 8,020,510 | 7,784,138 | 7,765,304 |
| Texas | 17,263,024 | 17,117,926 | 17,020,862 |
| Utah | 1,627,003 | 1,533,010 | 1,523,316 |
| Vermont | 884,327 | 885,785 | 872,611 |
| Virginia | 7,615,722 | 7,092,049 | 7,068,996 |
| Washington | 3,680,051 | 3,549,805 | 3,558,854 |
| West Virginia | 3,587,162 | 3,637,577 | 3,635,517 |
| Wisconsin | 5,533,879 | 5,361,806 | 5,346,850 |
| Wyoming | 765,069 | 753,874 | 750,000 |
| American Samoa | 57,145 | 66,031 | 375,000 |
| Guam | 387,251 | 380,034 | 375,913 |
| Puerto Rico | 7,269,841 | 7,161,426 | 7,102,112 |
| Virgin Islands | 375,000 | 375,000 | 375,000 |

[1] Excludes $12,800,000 reserve for obligations to be incurred in subsequent years.
[2] Includes 1968 reserve of $12,800,000.

EXHIBIT IV

ALLOCATIONS TO STATES FOR CONSTRUCTION AND MODERNIZATION OF HOSPITALS AND RELATED HEALTH FACILITIES FOR FISCAL YEAR 1968

| State | Total | Modernization | Hospitals and public health centers | Long-term care facilities | Diagnostic or treatment centers | Rehabilitation facilities |
|---|---|---|---|---|---|---|
| Total | $267,200,000 | $47,715,000 | $124,055,000 | $66,800,000 | $19,085,000 | $9,545,000 |
| Alabama | 7,063,184 | 766,714 | 3,583,895 | 1,913,379 | 532,747 | 266,449 |
| Alaska | 750,000 | 200,000 | 200,000 | 200,000 | 100,000 | 50,000 |
| Arizona | 2,476,266 | 359,381 | 1,204,912 | 643,281 | 179,111 | 89,581 |
| Arkansas | 3,936,590 | 327,788 | 2,054,098 | 1,096,647 | 305,343 | 152,714 |
| California | 14,809,164 | 2,320,674 | 7,108,338 | 3,795,017 | 1,056,657 | 528,478 |
| Colorado | 2,664,467 | 604,813 | 1,172,337 | 625,890 | 174,269 | 87,158 |
| Connecticut | 2,555,933 | 869,040 | 960,164 | 512,615 | 142,729 | 71,385 |
| Delaware | 750,000 | 200,000 | 200,000 | 200,000 | 100,000 | 50,000 |
| District of Columbia | 761,430 | 200,000 | 211,430 | 200,000 | 100,000 | 50,000 |
| Florida | 8,989,589 | 1,209,906 | 4,428,127 | 2,364,099 | 658,243 | 329,214 |
| Georgia | 7,758,539 | 767,465 | 3,979,258 | 2,124,456 | 591,518 | 295,842 |
| Hawaii | 933,070 | 200,000 | 380,127 | 202,943 | 100,000 | 50,000 |
| Idaho | 1,193,352 | 200,000 | 549,815 | 293,537 | 100,000 | 50,000 |
| Illinois | 9,562,343 | 2,133,226 | 4,228,588 | 2,257,569 | 628,581 | 314,379 |
| Indiana | 6,310,955 | 1,315,559 | 2,843,336 | 1,518,007 | 422,662 | 211,391 |
| Iowa | 4,109,909 | 951,772 | 1,797,583 | 959,698 | 267,212 | 133,644 |
| Kansas | 3,192,644 | 679,060 | 1,430,709 | 763,831 | 212,676 | 106,368 |
| Kentucky | 5,853,033 | 618,922 | 2,979,210 | 1,590,548 | 442,860 | 221,493 |
| Louisiana | 6,477,947 | 569,470 | 3,363,053 | 1,795,475 | 499,919 | 250,030 |
| Maine | 1,718,937 | 309,930 | 801,995 | 428,171 | 119,216 | 59,625 |
| Maryland | 3,807,032 | 668,045 | 1,786,683 | 953,879 | 265,591 | 132,834 |
| Massachusetts | 6,308,575 | 1,952,293 | 2,479,558 | 1,323,792 | 368,587 | 184,345 |
| Michigan | 9,718,647 | 2,127,413 | 4,320,864 | 2,306,833 | 642,298 | 321,239 |
| Minnesota | 4,953,541 | 951,303 | 2,278,038 | 1,216,205 | 338,631 | 169,364 |
| Mississippi | 5,282,484 | 395,022 | 2,781,900 | 1,485,208 | 413,530 | 206,824 |
| Missouri | 6,493,701 | 1,348,372 | 2,928,676 | 1,563,568 | 435,349 | 217,736 |
| Montana | 1,198,513 | 273,556 | 505,226 | 269,731 | 100,000 | 50,000 |
| Nebraska | 2,120,204 | 441,363 | 955,581 | 510,168 | 142,048 | 71,044 |
| Nevada | 750,000 | 200,000 | 200,000 | 200,000 | 100,000 | 50,000 |
| New Hampshire | 1,044,212 | 200,000 | 452,585 | 241,627 | 100,000 | 50,000 |
| New Jersey | 6,679,711 | 1,938,699 | 2,698,542 | 1,440,705 | 401,139 | 200,626 |
| New Mexico | 1,659,927 | 200,000 | 830,978 | 443,644 | 123,525 | 61,780 |
| New York | 16,095,997 | 4,135,205 | 6,807,977 | 3,634,660 | 1,012,008 | 506,147 |
| North Carolina | 9,627,630 | 1,371,386 | 4,699,381 | 2,508,917 | 698,565 | 349,381 |
| North Dakota | 1,173,213 | 200,000 | 536,686 | 286,527 | 100,000 | 50,000 |
| Ohio | 12,477,364 | 2,192,802 | 5,853,882 | 3,125,285 | 870,181 | 435,214 |
| Oklahoma | 4,096,174 | 567,174 | 2,042,827 | 1,090,629 | 303,667 | 151,877 |
| Oregon | 2,438,661 | 397,068 | 1,162,057 | 620,402 | 172,740 | 86,394 |
| Pennsylvania | 15,857,418 | 3,805,448 | 6,859,875 | 3,662,367 | 1,019,723 | 510,005 |
| Rhode Island | 1,122,678 | 200,000 | 503,740 | 268,938 | 100,000 | 50,000 |
| South Carolina | 5,434,661 | 581,798 | 2,762,207 | 1,474,694 | 410,603 | 205,359 |
| South Dakota | 1,293,844 | 223,166 | 600,227 | 320,451 | 100,000 | 50,000 |
| Tennessee | 7,784,138 | 1,270,279 | 3,707,632 | 1,979,439 | 551,140 | 275,648 |
| Texas | 17,117,926 | 2,352,829 | 8,404,164 | 4,486,835 | 1,249,281 | 624,817 |
| Utah | 1,533,110 | 202,776 | 757,157 | 404,233 | 112,552 | 56,292 |
| Vermont | 885,785 | 200,000 | 335,785 | 200,000 | 100,000 | 50,000 |
| Virginia | 7,092,049 | 1,110,674 | 3,404,546 | 1,817,628 | 506,086 | 253,115 |
| Washington | 3,549,805 | 718,950 | 1,611,298 | 860,243 | 239,520 | 119,794 |
| West Virginia | 3,637,577 | 646,999 | 1,702,211 | 908,780 | 253,034 | 126,553 |
| Wisconsin | 5,361,806 | 859,290 | 2,562,792 | 1,368,230 | 380,950 | 190,534 |
| Wyoming | 753,874 | 200,000 | 203,874 | 200,000 | 100,000 | 50,000 |
| American Samoa | 66,031 | 3,141 | 35,796 | 19,111 | 5,321 | 2,662 |
| Guam | 380,034 | 100,000 | 105,034 | 100,000 | 50,000 | 25,000 |
| Puerto Rico | 7,161,426 | 836,229 | 3,600,246 | 1,922,108 | 535,178 | 267,665 |
| Virgin Islands | 375,000 | 100,000 | 100,000 | 100,000 | 50,000 | 25,000 |

Note: Basis of allocations, per statutory formula: (a) Total population, as estimated by the Bureau of the Census: (1) provisional estimates of the United States and Puerto Rico, July 1, 1967 (series P–25, No. 373, Sept. 6, 1967); American Samoa, Guam, and Virgin Islands, provisional estimates as of July 1, 1966 (series P–25, No. 358, Jan. 18, 1967). (b) Allotment percentages for fiscal years 1968 and 1969, as determined by the Surgeon General; Sept. 30, 1966.

EXHIBIT V

TENTATIVE ALLOCATIONS TO STATES FOR CONSTRUCTION AND MODERNIZATION OF HOSPITALS AND RELATED HEALTH FACILITIES FOR FISCAL YEAR 1969

| State | Total | Modernization | Hospitals and public health centers | Long-term care facilities | Diagnostic or treatment centers | Rehabilitation facilities |
|---|---|---|---|---|---|---|
| Total | $267,200,000 | $52,485,000 | $119,285,000 | $66,800,000 | $19,085,000 | $9,545,000 |
| Alabama | 6,997,357 | 845,885 | 3,443,284 | 1,911,012 | 531,400 | 265,776 |
| Alaska | 750,000 | 200,000 | 200,000 | 200,000 | 100,000 | 50,000 |
| Arizona | 2,464,626 | 396,490 | 1,157,639 | 642,485 | 178,658 | 89,354 |
| Arkansas | 3,887,332 | 361,636 | 1,973,507 | 1,095,290 | 304,571 | 152,328 |
| California | 14,761,205 | 2,560,306 | 6,829,448 | 3,790,322 | 1,053,986 | 527,143 |
| Colorado | 2,679,489 | 667,265 | 1,126,342 | 625,116 | 173,828 | 86,938 |
| Connecticut | 2,606,823 | 958,777 | 922,493 | 511,981 | 142,368 | 71,204 |
| Delaware | 750,000 | 200,000 | 200,000 | 200,000 | 100,000 | 50,000 |
| District of Columbia | 753,135 | 200,000 | 203,135 | 200,000 | 100,000 | 50,000 |
| Florida | 8,935,370 | 1,334,841 | 4,254,393 | 2,361,175 | 656,579 | 328,382 |
| Georgia | 7,676,792 | 846,712 | 3,823,134 | 2,121,828 | 590,023 | 295,095 |
| Hawaii | 917,905 | 200,000 | 365,213 | 202,692 | 100,000 | 50,000 |
| Idaho | 1,175,532 | 204,115 | 528,244 | 293,173 | 100,000 | 50,000 |
| Illinois | 9,611,538 | 2,353,501 | 4,062,683 | 2,254,776 | 626,993 | 313,585 |
| Indiana | 6,331,763 | 1,451,404 | 2,731,779 | 1,516,129 | 421,594 | 210,857 |
| Iowa | 4,135,461 | 1,050,052 | 1,727,057 | 958,510 | 266,536 | 133,306 |
| Kansas | 3,204,879 | 749,180 | 1,374,576 | 762,886 | 212,138 | 106,099 |
| Kentucky | 5,796,408 | 682,831 | 2,862,323 | 1,588,580 | 441,741 | 220,933 |
| Louisiana | 6,400,687 | 628,272 | 3,231,106 | 1,793,254 | 498,656 | 249,399 |
| Maine | 1,718,493 | 341,933 | 770,529 | 427,641 | 118,915 | 59,475 |
| Maryland | 3,803,729 | 737,027 | 1,716,585 | 952,699 | 264,920 | 132,498 |
| Massachusetts | 6,409,850 | 2,153,886 | 2,382,274 | 1,322,154 | 367,656 | 183,880 |
| Michigan | 9,763,508 | 2,347,089 | 4,151,338 | 2,303,979 | 640,674 | 320,428 |
| Minnesota | 4,959,606 | 1,049,534 | 2,188,661 | 1,214,700 | 337,775 | 168,936 |
| Mississippi | 5,209,101 | 434,190 | 2,672,755 | 1,483,370 | 412,485 | 206,301 |
| Missouri | 6,514,444 | 1,487,604 | 2,813,711 | 1,561,634 | 434,249 | 217,186 |
| Montana | 1,206,603 | 301,802 | 485,404 | 269,397 | 100,000 | 50,000 |
| Nebraska | 2,127,120 | 486,939 | 918,090 | 509,537 | 141,689 | 70,865 |
| Nevada | 750,000 | 200,000 | 200,000 | 200,000 | 100,000 | 50,000 |
| New Hampshire | 1,026,156 | 200,000 | 434,828 | 241,328 | 100,000 | 50,000 |
| New Jersey | 6,770,725 | 2,138,889 | 2,592,667 | 1,438,923 | 400,126 | 200,120 |
| New Mexico | 1,626,308 | 200,000 | 798,375 | 443,096 | 123,213 | 61,624 |
| New York | 16,247,558 | 4,562,204 | 6,540,872 | 3,630,163 | 1,009,451 | 504,868 |
| North Carolina | 9,579,109 | 1,512,995 | 4,515,004 | 2,505,813 | 696,799 | 348,498 |
| North Dakota | 1,161,244 | 209,441 | 515,630 | 286,173 | 100,000 | 50,000 |
| Ohio | 12,466,955 | 2,419,230 | 5,624,210 | 3,121,419 | 867,982 | 434,114 |
| Oklahoma | 4,065,897 | 559,545 | 1,962,679 | 1,089,280 | 302,900 | 151,493 |
| Oregon | 2,432,645 | 438,068 | 1,116,464 | 619,634 | 172,303 | 86,176 |
| Pennsylvania | 15,972,828 | 4,198,397 | 6,590,733 | 3,657,835 | 1,017,146 | 508,717 |
| Rhode Island | 1,105,559 | 202,978 | 483,976 | 268,605 | 100,000 | 50,000 |
| South Carolina | 5,382,984 | 641,874 | 2,653,834 | 1,472,869 | 409,566 | 204,841 |
| South Dakota | 1,292,941 | 246,210 | 576,677 | 320,054 | 100,000 | 50,000 |
| Tennessee | 7,765,304 | 1,401,448 | 3,562,166 | 1,976,990 | 549,748 | 274,952 |
| Texas | 17,020,862 | 2,595,782 | 8,074,434 | 4,481,284 | 1,246,124 | 623,238 |
| Utah | 1,523,316 | 223,714 | 727,451 | 403,733 | 112,268 | 56,150 |
| Vermont | 872,611 | 200,000 | 322,611 | 200,000 | 100,000 | 50,000 |
| Virginia | 7,068,996 | 1,225,362 | 3,270,972 | 1,815,379 | 504,808 | 252,475 |
| Washington | 3,558,854 | 793,189 | 1,548,080 | 859,179 | 238,915 | 119,491 |
| West Virginia | 3,635,517 | 713,807 | 1,635,426 | 907,656 | 252,395 | 126,233 |
| Wisconsin | 5,346,850 | 948,020 | 2,462,243 | 1,366,537 | 379,997 | 190,053 |
| Wyoming | 750,000 | 200,000 | 200,000 | 200,000 | 100,000 | 50,000 |
| American Samoa | 375,000 | 100,000 | 100,000 | 100,000 | 50,000 | 25,000 |
| Guam | 375,913 | 100,000 | 100,913 | 100,000 | 50,000 | 25,000 |
| Puerto Rico | 7,102,112 | 922,576 | 3,458,992 | 1,919,730 | 533,825 | 266,989 |
| Virgin Islands | 375,000 | 100,000 | 100,000 | 100,000 | 50,000 | 25,000 |

Note: Basis of allocations, per statutory formula:

(a) Total population, as estimated by the Bureau of the Census: (1) Provisional Estimates of the United States, and Puerto Rico, July 1, 1967 (Series P–25, No. 373, Sept. 6, 1967); American Samoa, Guam, and Virgin Islands, Provisional Estimates as of July 1, 1966 (Series P–25, No. 358, Jan. 18, 1967).

(b) Allotment percentages for fiscal years 1968 and 1969, as determined by the Surgeon General, Sept. 30, 1966.

BIOGRAPHICAL SKETCH

Name: Harald M. Graning, M.D.

Position: Assistant Surgeon General; Director, Division of Hospital and Medical Facilities.

Birthplace and date: Minneapolis, Minnesota, February 14, 1912.

Education: B.S. University of Minnesota; B.M.-M.D., University of Minnesota; M.P.H. Johns Hopkins School of Hygiene and Public Health.

Experience: Director, Division of Hospital and Medical Facilities, Washington, D.C. October 1963 to present. Regional Health Director for the New York Region 1958–1963. Regional Medical Director, USPHS Chicago 1951 to 1958. Chief, State and Local Health Serv. USPHS Washington, D.C. 1948–50. Cancer Control Consultant, USPHS, New Orleans, La. 1947–48. Director, Division Local Health Service, Georgia Department of Public Health, Atlanta, Ga. 1945—47. Civil Affairs (Military Government) Princeton University, 1942–45. USPHS Plague Laboratory, San Francisco, Calif. 1942–43. Director Kitsay County Health Department, Bremerton, Wash., 1941. Hospital Service and Quarantine, San Pedro, Calif., 1938–40.

Association memberships: American Medical Association, American Hospital Association, the American Association of Military Surgeons, the American College of Preventive Medicine, member of the governing council of the American Public Health Association and the House of Delegates of the American Hospital Association.

Special awards, citations, or publications: In November 1963, he was awarded the Meritorious Service Medal of the Public Health Service Commissioned Corps.

HOSPITAL CONSTRUCTION ACTIVITIES

Senator HILL. Now, "Hospital construction activities," Dr. Graning. Were you in Minnesota when Dr. Christian Barnard was there?

Dr. GRANING. That was after my day, sir.

Senator HILL. I guess Dr. Wagensteen was there?

Dr. GRANING. Yes.

Senator HILL. Was Lillehei there too?

Dr. GRANING. No.

Senator HILL. I notice after you finished at Minnesota you went on to Baltimore, Johns Hopkins.

Dr. GRANING. Yes, sir.

Senator HILL. Fine. You go ahead and proceed in your own way, Doctor.

Dr. GRANING. Thank you, sir.

Mr. Chairman and members of the committee: As members of the committee are well aware, public concern for adequate health care has been expressed in many ways and for many years.

Federal assistance, particularly in more recent years, has fostered better distribution, design, and operation of health care facilities.

NEED FOR BETTER BALANCE BETWEEN HEALTH FACILITIES AND NON-INSTITUTIONAL-BASED SERVICE

Although substantial progress can be reported as to an increased general awareness of the need for planning on a community basis, it must be said that we have made only a modest beginning in achieving better balance among health facilities and between health facilities and non-institutional-based services.

Some communities have adequate acute care facilities, yet are in need of long-term care facilities. Other communities have sufficient acute and long-term care facilities, yet insufficient ambulatory care facilities or home care services. In other areas modern community hospitals exist in the rural and suburban areas while the hospitals

located in the urban centers are in desperate need of modernization or replacement.

### Balance Requires Full Spectrum of Beds, Facilities, Service and Manpower

The achievement of balance within an area calls for a full spectrum of beds, facilities, services, and manpower, which are appropriate to patient care. Moreover, and of equal importance, achievement of a health facility balance can have a favorable effect on the cost of medical care.

Specifically, the continued pressures upon general hospital bed usage and the concurrent rise in per diem hospital costs are understandable. They serve to emphasize the need for medical care options that can be provided either in ambulatory care facilities or in facilities that are less expensive than a general hospital.

### budget estimate

The total estimate for 1969 of $271.2 million includes $12.8 million carried over from fiscal year 1968, and is composed of $267.2 million for construction grants and approximately $4 million for operations and technical services.

Senator Hill. That $12.8 was the freeze that was made.

Dr. Graning. That is right.

Senator Hill. It was not that you did not need the money. There was a demand for the money all right.

Dr. Graning. Yes, indeed.

### Construction Grants

The $267.2 million would provide $119.3 million for hospitals and public health centers, $66.8 million for long-term-care facilities, $19.1 million for diagnostic or treatment facilities, $9.5 million for rehabilitation facilities, and $52.5 million for the modernization of hospitals and other medical facilities.

### Modernization and Replacement of Health Facilities

I would direct particular attention to the request for $52.5 million to be used for the modernization and replacement of the Nation's functionally and physically obsolete health facilities. The need in this area is great and the amount requested represents another forward step in attacking the problem.

Senator Hill. Many of our hospitals are pretty old, aren't they, particularly in our larger cities.

Dr. Graning. Yes, sir.

In part, the modernization problem can be traced to the fact that many of the Nation's hospitals were built in the 1920's, and are deteriorating physically because of advanced age.

In addition, medical care techniques are progressing so rapidly that many hospitals, which are relatively new in terms of years, are already functionally obsolete, and consequently, must be modernized.

The problem of modernization, essentially a problem of the cities, becomes more critical when one considers that these cities are also the centers of many of the Nation's health teaching and health research facilities.

### Construction and Expansion In Suburbs and Rural Areas

The amount requested for new construction and expansion of hospitals and public health centers will be primarily directed to two areas of need: Communities experiencing population growth, such as the American suburb, and to rural areas in need of new or expanded facilities.

The construction and expansion of public health centers will aid in increasing the average community's ability to provide a frequently neglected element of health care. While much has already been accomplished in these areas, it is necessary that we continue to upgrade the health services presently available by providing or expanding facilities from which acute medical care and preventive health care can be effectively and economically delivered.

### Long Term Care Facilities

The amounts requested for long-term-care facilities, diagnostic or treatment facilities and rehabilitation facilities will aid in mitigating the pressures on general hospital beds by providing alternate means for the delivery of health care.

Long-term-care facilities, which include nursing homes, are less expensive to construct, operate and maintain, and yet provide adequate and economical skilled nursing care for persons who are ill but do not require the specialized services of the acute general hospital.

### Ambulatory Care Facilities

Similarly, ambulatory care facilities, such as outpatient departments of hospitals and rehabilitation centers, to the extent that they are appropriate in the management of particular patient care problems negate the necessity of constructing additional inpatient facilities and tend to control the cost of delivering medical care.

Equally important, assistance directed to these facilities along with hospitals and public health centers will assist communities in providing a balanced and comprehensive range of health services.

### Operations and Technical Services

The $4 million requested for operations and technical services involves no increase in the existing staff and is essential to continuation of the Federal Government's leadership role in planning, designing, and constructing health facilities. This professional and technical staff is engaged in the work of reviewing and approving documents such as State plans and project applications, and architectural drawings and specifications.

Moreover, and perhaps of equal importance, this staff develops guide material relating to the planning of health services and facilities, and the design and construction of the physical plants from which such services are delivered.

Another program element of crucial importance is the technical assistance and consultation provided to the staff of State agencies, project sponsors and other members of the hospital community regarding all aspects of program administration.

Gentlemen, I thank you. I would be pleased to answer any questions concerning the Hill-Burton program and this budget request.

### Reduction in Construction Funding

Senator Hill. You got quite a reduction in your request, didn't you?

Dr. Graning. Yes, sir.

Senator Hill. Nearly $26 million, isn't that right?

Dr. Graning. Yes, sir.

Senator Hill. What would most of that money have gone to?

Dr. Graning. All of it for construction.

Senator Hill. For the different categories you outlined here today?

Dr. Graning. Yes, sir.

### Lower Budget Estimate

Senator Hill. Your budget estimate for this year is less than your appropriation last year, is that right?

Dr. Graning. Yes; it is right, sir. With the concurrence of the Congress we hope to be able to use the $12.8 million that was held back.

Senator Hill. That would help to take care of your situation. It would not be any great increase over last year though.

Dr. Graning. No, sir; it is not an actual increase because the cost of construction is going up 4 percent a year so we are really able to build fewer facilities even though the appropriation is the same.

### Backlog of Applications

Senator Hill. How much of a backlog of applications do you have today?

Dr. Graning. The States have indicated that if the Federal Government were prepared to do its share they would be prepared to go ahead in 1969 with some 1,992 projects costing $4,065,962,000, and a Federal share of $1.6 billion.

Senator Hill. What you were allowed here is a pretty small amount. Is that right?

Dr. Graning. Yes, sir. In terms of the attack on the modernization problem it represents about 3.9 percent of the problem.

Senator Hill. This is very little.

Is there anything you gentlemen would like to add?

Doctor, we certainly want to thank you very much for your statement this morning. You have made the situation very clear.

Dr. Graning. I would like to state it is a great privilege to appear before you.

Senator Hill. It is nice to have you here. You always bring us some mighty fine testimony.

(A summary of anticipated hospital construction appears on page 1337.)

## Health Manpower Education and Utilization

STATEMENT OF DR. LEONARD D. FENNINGER, DIRECTOR, BUREAU OF HEALTH MANPOWER

ACCOMPANIED BY:

DR. JOSEPH A. GALLAGHER, DEPUTY DIRECTOR
DR. CHARLES H. BOETTNER, ASSOCIATE DIRECTOR
DR. FRANK W. McKEE, DIRECTOR, DIVISION OF PHYSICIAN MANPOWER
DR. VIRON L. DIEFENBACH, DIRECTOR, DIVISION OF DENTAL HEALTH
MISS JESSIE SCOTT, DIRECTOR, DIVISION OF NURSING
FREDERICK ERICKSON, ACTING DIRECTOR, DIVISION OF ALLIED HEALTH MANPOWER
RAYMOND F. DIXON, DIRECTOR, DIVISION OF HEALTH MANPOWER EDUCATIONAL SERVICES
JOHN W. HAMBLETON, FINANCIAL MANAGEMENT OFFICER, BUREAU OF HEALTH MANPOWER
DR. JAMES A. SHANNON, DIRECTOR, NATIONAL INSTITUTES OF HEALTH
DR. WILLIAM H. STEWART, SURGEON GENERAL
CHARLES MILLER, CHIEF FINANCE OFFICER
JAMES B. CARDWELL, DEPUTY ASSISTANT SECRETARY, BUDGET

### Appropriation Estimate

"HEALTH MANPOWER

"HEALTH MANPOWER EDUCATION AND UTILIZATION

"To carry out, to the extent not otherwise provided, sections 301, 306, 309, 311, title VII, and title VIII of the Act, and for training grants under section 422 of the Act, [$164,663,000] *$197,400,000*, of which [$5,000,000] *$6,800,000* shall be available through June 30, [1969] *1970*, to carry out title VIII of the Act with respect to nursing educational opportunity grants: *Provided, That allotments to States for nursing educational opportunity grants for the fiscal year ending June 30, 1969, pursuant to title VIII of the Act shall include, in addition to funds appropriated herein, funds appropriated for this purpose for the fiscal year ending June 30, 1968, but not allotted to States for that fiscal year.*

"Loans, grants, and payments for the next succeeding fiscal year: For making, after March 31 of the current fiscal year, loans, grants, and payments under section 306, parts C, F, and G of title VII, and parts B and D of title VIII of the Act for the first quarter of the next succeeding fiscal year, such sums as may be necessary, and the obligations incurred and expenditures made hereunder shall be charged to the appropriation for that purpose for such fiscal year: *Provided*, That such payments pursuant to this paragraph may not exceed 50 per centum of the amounts authorized in section 306, parts C and G of title VII, and parts B and D of title VIII for these purposes for the next succeeding fiscal year."

### Appropriation Language Changes

The first language change authorizes that funds appropriated in 1969 for nursing educational opportunity grants will be available until June 30, 1970.

The second language change will permit the allotment in 1969 of nursing educational opportunity grants appropriated in 1968 but not allotted to the States for that fiscal year. This is necessary to assure the availability for allotment of 1968 funds that were placed in reserve.

AMOUNTS AVAILABLE FOR OBLIGATION

| | 1968 | 1969 |
|---|---|---|
| Appropriation | $164,663,000 | $197,400,000 |
| Transferred to: | | |
| "Hospital construction activities" | —130,000 | |
| "Health professions education fund" | —2,000,000 | |
| "Nurse training fund" | —4,390,000 | |
| "Operating expenses, Public Buildings Service", General Services Administration | —2,035 | |
| Unobligated balance brought forward | 500,000 | 250,000 |
| Cutback required by H.J. Res. 888: | | |
| Reduction below obligation level in the 1968 President's budget: | | |
| Unobligated balance lapsing | —3,365,000 | |
| Unobligated balance carried forward | —250,000 | |
| Total cutback | —3,615,000 | |
| Total currently authorized for obligation | 155,025,965 | 197,650,000 |
| Plus proposed release of reserves for increased pay and postal costs | 275,300 | |
| Total available for obligation [1] | 155,301,265 | 197,650,000 |
| Disposition of cutback: | | |
| To be used for pay and postal costs in this account | 275,300 | |
| To be transferred to "Office of the Surgeon General, salaries and expenses" for pay and postal costs | 78,000 | |
| To be returned to the Treasury | 3,011,700 | |
| To be carried forward for obligation in 1969 | 250,000 | |
| Total cutback | 3,615,000 | |

[1] Excludes estimated obligations due to advance obligational authority, details of which are on p. 75.

OBLIGATIONS BY ACTIVITY

| | 1968 estimate | | 1969 estimate | | Increase or decrease | |
|---|---|---|---|---|---|---|
| | Positions | Amount | Positions | Amount | Positions | Amount |
| Institutional support: | | | | | | |
| (a) Medical, dental, and related | | $52,675,000 | | $70,000,000 | | +$17,325,000 |
| (b) Nursing | | 7,000,000 | | 7,000,000 | | |
| (c) Public Health | | 8,500,000 | | 10,054,000 | | +1,554,000 |
| (d) Allied health professions | | 10,750,000 | | 19,100,000 | | +8,350,000 |
| Student assistance: | | | | | | |
| (a) Traineeships | | 20,120,000 | | 22,300,000 | | +2,180,000 |
| (b) Scholarships and opportunity grants | | 12,450,000 | | 18,350,000 | | +5,900,000 |
| (c) Loans | | 24,610,000 | | 27,000,000 | | +2,390,000 |
| Manpower requirements and utilization: | | | | | | |
| (a) Grants | | 5,578,000 | | 6,600,000 | | +1,022,000 |
| (b) Direct operations | 673 | 12,317,865 | 718 | 15,871,000 | +45 | +3,553,135 |
| Program direction and management services | 89 | 1,300,400 | 95 | 1,375,000 | +6 | +74,600 |
| Total NOA available [1] | 762 | 155,301,265 | 813 | 197,650,000 | +51 | +42,348,735 |

[1] Excludes estimated obligations due to advance obligational authority, details of which are on p. 75.

ADVANCE OBLIGATIONAL AUTHORITY

| | 1968 estimate amount | 1969 estimate amount |
|---|---|---|
| NOA available | $155,301,265 | $197,650,000 |
| Appropriation available from subsequent year | 29,014,000 | 61,950,000 |
| Appropriation available in prior year | —8,867,788 | —29,014,000 |
| Total obligations | 175,447,477 | 230,586,000 |

OBLIGATIONS BY OBJECT

| | 1968 estimate | 1969 estimate | Increase or decrease |
|---|---|---|---|
| Total number of permanent positions | 762 | 813 | +51 |
| Full-time equivalent of all other positions | 71 | 82 | +11 |
| Average number of all employees | 752 | 821 | +69 |
| Personnel compensation: | | | |
| Permanent positions | $7,018,700 | $7,743,500 | +$724,800 |
| Positions other than permanent | 443,100 | 524,000 | +80,900 |
| Other personnel compensation | 31,000 | 32,000 | +1,000 |
| Total, personnel compensation | 7,492,800 | 8,299,500 | +806,700 |
| Personnel benefits | 710,300 | 770,600 | +60,300 |
| Travel and transportation of persons | 775,000 | 899,400 | +124,400 |
| Transportation of things | 71,000 | 85,700 | +14,700 |
| Rent, communications, and utilities | 276,365 | 360,800 | +84,435 |
| Printing and reproduction | 198,000 | 265,300 | +67,300 |
| Other services | 522,000 | 642,400 | +120,400 |
| Project contracts | 3,153,500 | 5,381,500 | +2,228,000 |
| Services of other agencies | 54,800 | 55,000 | +200 |
| Payment to "National Institutes of Health management fund" | 38,000 | 38,000 | |
| Supplies and materials | 163,400 | 248,600 | +85,200 |
| Equipment | 163,100 | 199,200 | +36,100 |
| Investments and loans | 34,356,000 | 45,204,000 | +10,848,000 |
| Grants, subsidies, and contributions | 127,473,212 | 168,136,000 | +40,662,788 |
| Total, obligations by object | 175,447,477 | 230,586,000 | +55,138,523 |

*Summary of Changes*

| | |
|---|---|
| 1968 enacted appropriation | $164,663,000 |
| Transferred to: | |
| "Hospital construction activities" (regional office program) | −130,000 |
| "Health professions education fund" (revolving fund capitalization) | −2,000,000 |
| "Nurse training fund (revolving fund capitalization) | −4,390,000 |
| "Operating expenses, Public Buildings Service," General Services Administration (space rental) | −2,035 |
| Unobligated balance brought forward | 500,000 |
| Cutback required by H.J. Res 888: | |
| Unobligated balance lapsing | −3,365,000 |
| Unobligated balance carried forward | −250,000 |
| Proposed release of reserves for increased pay and postal costs | 275,300 |
| 1968 total NOA available | 155,301,265 |
| 1969 requested appropriation | 197,400,000 |
| Unobligated balance brought forward | 250,000 |
| 1969 total NOA available | 197,650,000 |
| Total change | +42,348,735 |

| | Base | | Change from base | |
|---|---|---|---|---|
| | Positions | Amount | Positions | Amount |
| INCREASES | | | | |
| A. Built in: | | | | |
| 1. Annualization of new positions authorized in 1968 | | | | $189,000 |
| 2. 1 extra day's pay (260 days in 1968; 261 days in 1969) | | | | 24,000 |
| 3. Annualization of 1968 pay raise | | | | 103,600 |
| Institutional Support | | | | |
| B. Program: | | | | |
| 1. Dental auxiliary utilization grants | | $3,000,000 | | 1,000,000 |
| 2. Health professions educational improvement grants | | 49,675,000 | | 16,325,000 |
| 3. Grants to schools of public health | | 4,000,000 | | 554,000 |
| 4. Project grants for graduate public health training | | 4,500,000 | | 1,000,000 |
| 5. Allied health educational improvement grants | | 9,750,000 | | 7,250,000 |
| 6. Allied health new methods grants | | 1,000,000 | | 1,100,000 |
| Student Assistance | | | | |
| 7. Dental fellowships | | 100,000 | | 50,000 |
| 8. Nurse fellowships | | 520,000 | | 130,000 |
| 9. Nurse traineeships | | 10,000,000 | | 1,000,000 |
| 10. Allied health traineeships | | 1,500,000 | | 1,000,000 |
| 11. Nursing educational opportunity grants | | 5,250,000 | | 1,800,000 |
| 12. Health professions scholarships | | 7,200,000 | | 4,100,000 |
| 13. Health professions student loans | | 15,000,000 | | 2,300,000 |
| 14. Nursing student loans | | 9,610,000 | | 90,000 |
| Manpower Requirements and Utilization | | | | |
| 15. Reasearch grants: Physician manpower | | 646,000 | | 702,000 |
| 16. Research training grants: | | | | |
| Dental health | | 300,000 | | 200,000 |
| Nursing | | 580,000 | | 120,000 |
| 17. Direct operations: | | | | |
| Physician manpower | 94 | 2,745,400 | 4 | 147,600 |
| Dental health | 264 | 4,653,665 | 9 | 347,335 |
| Nursing | 179 | 2,746,800 | 12 | 1,644,700 |
| Allied health manpower | 55 | 1,086,300 | 9 | 225,600 |
| Health manpower educational services | 81 | 1,085,700 | 11 | 925,900 |
| 18. Program direction and management services | 89 | 1,300,400 | 6 | 53,000 |
| Total program increases | | | 51 | 42,065,135 |
| DECREASES | | | | |
| A. Built in: 1. Nonrecurring program costs | | | | −33,000 |
| Total net changes requested | | | +51 | +42,348,735 |

## Explanation of Changes

### INSTITUTIONAL SUPPORT

*Dental auxiliary utilization grants*

The requested increase of $1,000,000 will add an additional school in 1969 to this program which provides undergraduate dental students with comprehensive chairside experience with auxiliaries under professional supervision. It will also initiate developmental programs at two institutions planning dental schools and will strengthen existing programs by lengthening the time of clinical experience and broadening the scope to include other types of auxiliaries.

*Health professions educational improvement grants*

The requested increase of $16,325,000 will provide for basic and special improvement grants to approximately 172 schools of medicine, dentistry, osteopathy, optometry and podiatry to improve the quality of education. Basic improvement grants will utilize approximately $33,700,000 for supporting additional teachers and providing teaching and scientific equipment. Special improvement grants totalling approximately $32,300,000 will be awarded with highest priority given to applications from schools whose accreditation is in jeopardy and whose deficiencies cannot be corrected through the basic grants.

*Grants to schools of public health*

The requested increase of $554,000 will enable the fifteen schools of public health to strengthen their curriculum content and their teaching staffs.

*Project grants for graduate public health training*

The requested increase of $1,000,000 will fund more than 20 new projects supporting teaching programs in medical care economics, epidemiology, health planning and other areas. Approximately 115 projects were supported in 1968.

*Allied health educational improvement grants*

The requested increase of $7,250,000 will expand basic improvement grants to junior colleges, colleges, and universities having almost 28,000 trainees registered in 1,100 programs in areas such as medical technology, physical and occupational therapy, and dietetics.

*Allied health new methods grants*

The requested increase of $1,100,000 will provide for grants to support approximately 20 additional projects to develop, demonstrate, or evaluate new curriculums for the training of health technologists. Approximately 21 projects were supported in 1968.

STUDENT ASSISTANCE

*Dental fellowships*

The requested increase of $50,000 will provide for three additional fellowships for research proposals in such areas as economics, political science, statistics, and psychology. Seven fellows were supported in 1968.

*Nurse fellowships*

The requested increase of $130,000 will provide for 26 additional fellowships for research training at the pre- and post-doctoral levels looking toward fuller understanding and improvement of nursing care. Ninety-four fellows were supported in 1968.

*Nurse traineeships*

The requested increase of $1,000,000 will support the training of approximately 185 nurses on a long-term basis; 1,900 were supported in 1968 for positions as teacheres, administrators and supervisors. Approximately 5,000 nurses will receive short-term training in 1969, the same level as in 1968.

*Allied health traineeships*

The requested increase of $1,000,000 will provide traineeships to 100 additional allied health professionals for long-term training as teachers, supervisors and specialists and will begin a program for short-term training of 2,500 professionals and technicians. In 1968, approximately 300 professionals received long-term training.

*Nursing educational opportunity grants*

The requested increase of $1,800,000 will provide approximately 3,300 additional scholarships, through schools of nursing, to qualified high school graduates of exceptional financial need, who could not otherwise pursue a nursing career. Approximately 8,400 scholarships were supported in 1968.

*Health professions scholarships*

The requested increase of $4,100,000 will provide scholarships to students from low income families who, without this assistance, would be unable to pursue their courses of study in schools of medicine, dentistry, osteopathy, podiatry, pharmacy, and optometry. These funds will support approximately 4,000 first year students and will provide continued support to approximately 8,000 second and third year students.

*Health professions student loans*

The requested increase of $2,300,000, for a 1969 total of $17,300,000, together with loans from the health professions student loan revolving fund will provide a loan program to support approximately 29,800 students in health professions schools. In 1968, approximately 25,380 students were supported.

The requested increase of $90,000, for a total of $9,700,000, together with loans from the nursing student loan revolving fund will provide a loan program to support approximately 27,000 students in nursing schools. In 1968, approximately 24,500 students were supported.

*Research grants—Physician manpower*

The requested increase of $702,000 will be used for studies related to medical and osteopathic curriculum improvement, teaching techniques and methods of evaluating curricula changes. The curricula of medical and osteopathic schools will be studied and new teaching methods will be initiated through the development and demonstration of new techniques and approaches for improving the education of physicians. The increase provides for the continuation of grants new in 1967. Approximately 24 research projects will be supported in 1969 compared with 13 in 1968.

*Research training grants—Dental health*

The requested increase of $200,000 will support two additional programs concerning behavioral sciences and dental care administration. Three programs were supported in 1968.

*Research training grants—Nursing*

The requested increase of $120,000 will support an additional program at a university to prepare nurses for interdisciplinary research to improve nursing care. Five universities were supported in 1968.

*Direct operations—Physician manpower*

The requested increase of four positions and $147,600 is for the following programs: two positions and $69,600 for the educational facilities program and for physician education, including $50,000 in contract funds for an additional retraining center for inactive physicians; and two positions and $78,000 for physician utilization, including $50,000 for contracts to examine the organization and delivery of health services and to define, within reasonable limits those services which only physicians can provide.

*Direct operations—Dental health*

The requested increase of nine positions and $347,335 is for the following programs: two positions and $65,000 for continuing education activities at the Dental Health Center; one position and $20,000 to develop new teaching media; two positions and $163,000 to expand cleft lip and palate study activities; two positions and $43,335 to extend oral cancer detection demonstrations; and two positions and $56,000 for dental productivity studies at Louisville, Kentucky.

*Direct operations—Nursing*

The requested increase of 12 positions and $1,644,700 is for the following programs: three positions and $200,000 for a program to encourage qualified youths to enter the field of nursing; and nine positions and $1,444,700 for a program to promote the refresher training of inactive registered nurses. Both of these programs will operate primarily through contracts.

*Direct operations—Allied health manpower*

The requested increase of nine positions and $225,600 is for the following programs: seven positions and $179,600 to strengthen staff capability in supply, distribution, and needs for health manpower; developing training programs for new types of health workers; and program development of training programs in comprehensive health planning. Two positions and $46,000 will provide staff and contract funds needed to review and evaluate the teaching programs supported by the grants to schools of public heatlh.

*Direct operations—Health manpower educational services*

The requested increase of 11 positions and $925,900 is for the following programs: five positions and $750,000 to begin a long-range plan to establish a National Health Manpower Intelligence System; four positions and $150,000 to establish a health manpower information clearinghouse; and two positions and $25,900 for increased supporting services related to grant increases in 1969 totaling nearly $34,000,000.

*Program direction and management services*

The requested increase of six positions and $53,000 is for special areas of need in the overall direction of the bureau related to educational and training

communications, legislative activities, planning, programming and information activities.

EXPLANATION OF TRANSFERS

| | 1968 estimate | 1969 estimate | Purpose |
|---|---|---|---|
| Transfer to: | | | |
| "Hospital construction activities" | $130,000 | ---------- | To support 9 positions providing program services in regional offices. |
| "Office of the Surgeon General, salaries and expenses." | 78,000 | ---------- | Pay raise costs. |
| "Health professions education fund" | 2,000,000 | ---------- | To capitalize the revolving funds which provide loans to health professions and nursing students. |
| "Nurse training fund" | 4,390,000 | ---------- | Do. |
| "Operating expenses, Public Building Service," General Services Administration. | 2,035 | ---------- | Rental of space. |

JUSTIFICATION—INSTITUTIONAL SUPPORT

| | 1968 estimate | | 1969 estimate | | Increase or decrease | |
|---|---|---|---|---|---|---|
| | Positions | Amount | Positions | Amount | Positions | Amount |
| Personnel compensation and benefits | | | | | | |
| Other expenses | | $78,925,000 | | $106,154,000 | | +$27,229,000 |
| Total | | 78,925,000 | | 106,154,000 | | +27,229,000 |
| Subactivities: | | | | | | |
| Medical, dental, and related: | | | | | | |
| Dental auxiliary utilization grants | | 3,000,000 | | 4,000,000 | | +1,000,000 |
| Health professions educational improvement grants | | 49,675,000 | | 66,000,000 | | +16,325,000 |
| Nursing: | | | | | | |
| Project grants for improvement of nurse training | | 4,000,000 | | 4,000,000 | | |
| Payments to diploma schools of nursing | | 3,000,000 | | 3,000,000 | | |
| Public health: | | | | | | |
| Grants to schools of public health | | 4,000,000 | | 4,554,000 | | +554,000 |
| Project grants for graduate public health training | | 4,500,000 | | 5,500,000 | | +1,000,000 |
| Allied health professions: | | | | | | |
| Educational improvement grants | | 9,750,000 | | 17,000,000 | | +7,250,000 |
| New method grants | | 1,000,000 | | 2,100,000 | | +1,100,000 |
| Total | | 78,925,000 | | 106,154,000 | | +27,229,000 |

Many educational institutions for health are in serious financial condition. Financial support is essential for them to continue in operation to maintain and improve the quality of education. Costs for education are increasing at a rapid rate. The limited resources of these schools are over-taxed.

Several types of grant funds are available to permit the schools to enlarge faculty, modify existing and add new curriculums, modernize teaching laboratories, provide programs in dental schools offering practical experience in use of assistants and identify new categories of allied health professionals. The grant programs are discussed below:

*Dental auxiliary utilization grants*

The authority for this program is contained in section 422 of the Public Health Service Act with an indefinite authorization for 1969.

Construction grants, made possible by the Health Professions Educational Assistance Act of 1963 as amended, have provided a significant stimulus in the educational field to help meet dental objectives in this country. The potential offered by the Division's grant program, designed to expand the productivity of the individual dentist through effective utilization of auxiliary personnel, is equally significant as a program seeking solutions to dental manpower problems. Grants to dental schools for instruction in the use of dental auxiliaries provides a clinical experience for dental students in the team concept of clinical

service. This program is rapidly attaining a goal which assures that every graduating dentist has an experience that will enable him to provide a more efficient and more economical service to his patient.

At present, 49 of the nation's 50 dental schools participate in the program. An increase of $1,000,000 will add an additional school in 1969 and will initiate the development of similar programs at two new dental schools which are being planned. These additional funds will also provide more intensive chairside experience and experience in the use of other types of auxiliaries.

*Health professions educational improvement grants*

The authority for this program is contained in section 770 of the Public Health Service Act with a 1969 authorization of $80,000,000.

Basic and special improvement grants will be made in 1969 to schools of medicine, dentistry, osteopathy, optometry and podiatry to improve the quality of education provided to their students. These grants are authorized by the Health Professions Educational Assistance Act.

An increase of $16,325,000 over the 1968 program level of $49,675,000 is requested for a total of $66,000,000 for 1969.

*Basic Improvement Grants.*—Basic improvement grants will be used to assist schools in over-coming their most critical educational deficiencies, thereby stabilizing and improving the quality of education. The amount of the grant to each school will be determined by the statutory formula: $25,000 plus $500 times the number of full-time students. In 1969, basic improvement grants are expected to be made to 172 schools totalling about $33,700,000 and averaging about $196,000.

In 1967, all of the 170 eligible schools participated in the program. The awards, which totalled $30,000,000 (the full amount of the appropriation), represented about 95% of the funds needed to satisfy the statutory formula. In 1968, we expect to award about $32,400,000 to the 172 eligible schools. These grants will average approximately $188,000.

Basic improvement grants are designed to provide resources sufficiently flexible to enable schools to advance the quality of their educational programs in the most effective way in accordance with their educational principles.

In 1967, approximately 61% of the funds were expended for faculty salaries. Employment of additional faculty strengthened, enriched and modernized teaching programs. These funds also enable some schools to increase faculty salaries, thereby permitting them to compete more effectively for the scarce supply of competent teachers. The enrollment of students in the schools of the health professions has also increased as a direct result of the basic improvement grants.

*Special Improvement Grants.*—Special improvement grant funds are used to meet additional costs, to maintain or achieve accreditation, and for the development of new and special functions that cannot be carried out within the limitations of the basic improvement grants. These grants are awarded upon approval by the Surgeon General following recommendation of the National Advisory Council on Medical, Dental, Optometric, and Podiatric Education. Highest priority is given to applications from schools whose accreditation may be in jeopardy and whose educational programs are weak because of inadequate financing.

Approximately $32,300,000 will be awarded for special improvement grants. These grants will be made only to those schools which have approved applications for basic improvement grants and no school may receive more than $400,000 in one year.

It is expected that the major portion of the increase requested will provide for additional highly qualified faculty and replacement of inadequate and obsolete scientific equipment. While these inadequacies will receive primary attention, education will also be improved in other ways. For example, one mid-western dental school would utilize these funds for renovation of its clinic facilities to alleviate overcrowded conditions; to employ new full-time faculty members: and to replace 30-year-old antiquated scientific and teaching equipment.

In 1968, about 45 schools with exceptional need will receive $300,000—the maximum amount authorized for a special grant. An additional 37 schools will receive lesser amounts thus, grants will be made to 82 of the 172 eligible schools. In 1969, about 50 schools with exceptional need will receive $400,000 the full amount of the authorization for a special grant; an additional 122 schools will receive lesser amounts, grants being made to all of the 172 eligible schools.

HEALTH PROFESSIONS BASIC EBUCATIONAL IMPROVEMENT GRANTS

[To nearest hundred]

| Type of school | 1967 actual | | 1968 estimate | | 1969 estimate | |
|---|---|---|---|---|---|---|
| | Number | Amount | Number | Amount | Number | Amount |
| Medicine | 98 | $18,780,518 | 99 | $20,239,500 | 99 | $20,958,000 |
| Dentistry | 52 | 8,440,653 | 53 | 9,104,000 | 53 | 9,469,500 |
| Optometry | 10 | 1,231,266 | 10 | 1,362,500 | 10 | 1,499,000 |
| Osteopathy | 5 | 983,293 | 5 | 1,063,000 | 5 | 1,097,000 |
| Podiatry | 5 | 564,270 | 5 | 635,000 | 5 | 673,000 |
| Totals | 170 | 30,000,000 | 172 | 32,404,000 | 172 | 33,696,500 |

| Category | 1968 estimate grant amount | Percent |
|---|---|---|
| Total | $32,404,000 | 100 |
| Teaching staff | 19,669,000 | 60.6 |
| Other staff | 3,500,000 | 10.9 |
| Equipment | 5,249,500 | 16.2 |
| Alteration and renovation | 2,495,000 | 7.7 |
| All other expenses | 1,490,500 | 4.6 |

*Project grants for the improvement of nurse training*

The authority for this program is contained in section 805 of the Public Health Service Act with a 1969 authorization of $4,000,000.

Project grants have demonstrated imaginative and economic use of facilities and resources. The grants have supported the application of new educational methods and equipment in nursing education. They have also demonstrated ways of extending the effectiveness of scarce, highly qualified teachers. Although a grant is awarded to a single school, other schools participate in the project. Thus far, 143 nursing programs sharing in the 116 projects benefiting over 33,000 students.

One grant enabled 18 schools to experiment with cooperative curriculum planning and subsequent production and telecasting of courses. Another produced a series of video tape lectures on public health science. Another school is using a telelecture system to bring expert teachers to more students. Many of the materials resulting from projects of these kinds are being used by schools throughout the country. Schools are experimenting with reorganization of curriculum and revision of content and teaching methods in ways that will reduce the length of the nursing program while improving the quality of nursing care to patients. A diploma school for example has eliminated unnecessary repetition, and will increase its number of graduates by an estimated 20 percent through the use of an improved curriculum.

The funds requested for 1969 will provide opportunities for the development of new curricula, the enrichment of current programs and the use of multimedia techniques to enable more students to learn from master teachers. Improvements in education resulting from these projects will enable more entering students to complete their educational programs and, on graduation, to pass State Board examinations.

These funds make possible curriculum study and revision enabling schools to make transitions to types of programs in nursing education which will improve nursing practice. The amount requested for 1969, $4,000,000, the full authorization will support projects at the same level as 1968.

*Payments to diploma schools of nursing*

The authority for this program is contained in section 806 of the Public Health Service Act with a 1969 authorization of $10,000,000.

Schools of nursing need money to operate. Costs are increasing for all types of nursing educational programs. Payments authorized under the Nurse Training Act are helping hospital-based diploma programs to defray part of the educational costs. Payments to accredited diploma schools of nursing are made according to the formula in the Nurse Training Act based upon the increase in enrollment and the number of Federally-sponsored students. Over 900 payments have been made

to eligible programs since 1965. Schools are using these payments to add essential faculty, increase faculty salaries to attract and to retain good teachers, improve their libraries, and to purchase new educational aids and equipment.

Funding in 1969 is at the 1968 level.

*Formula grants to schools of public health*

The authority for this program is contained in section 309 of the Public Health Service Act with a 1969 authorization of $6,000,000.

Grants to schools of public health provide basic support to these institutions, an essential national resource for training, consultation, and technical assistance in public health.

Schools can improve and enlarge their programs in health care administration and in public health to provide highly qualified specialists in both new and constantly changing health fields. Substantial increases in such support for schools of public health were strongly recommended by the Third National Conference on Public Health Training.

The number of schools of public health has increased from 11 to 15 since 1958. The annual number of graduates has increased by more than 50%, from 715 to 1079, between 1962 and 1966. Most of the schools have used these grants to develop and strengthen programs in emerging areas of medical care administration, environmental health, health planning, population dynamics, and others.

In fiscal year 1966, the schools of public health used 72% of the funds for faculty and staff. The remainder has provided for equipment and other expenses. Funds for faculty salaries serve the dual purpose of strengthening curriculum content and increasing faculty to meet increasing enrollment.

The request for 1969 of $4,554,000 is $554,000 over the 1968 amount. The requested funds will provide increases for the fifteen training centers participating in the program, including the two additional schools of public health which received formula grant funds for the first time in 1968.

GRANTS TO SCHOOLS OF PUBLIC HEALTH

| Schools of public health | 1967 actual | 1968 estimate | 1969 authorization | 1969 estimate |
|---|---|---|---|---|
| California (Berkeley) | $386,900 | $392,000 | $588,100 | $446,400 |
| California (Los Angeles) | 280,000 | 325,400 | 488,100 | 370,500 |
| Columbia | 209,200 | 203,800 | 305,700 | 232,100 |
| Harvard | 257,600 | 251,600 | 377,300 | 286,400 |
| Hawaii | 102,700 | 113,700 | 170,600 | 129,400 |
| Johns Hopkins | 308,900 | 318,500 | 477,700 | 362,600 |
| Loma Linda | | 92,100 | 138,200 | 104,800 |
| Michigan | 526,600 | 542,200 | 813,300 | 617,300 |
| Minnesota | 387,900 | 362,500 | 543,700 | 412,700 |
| North Carolina | 439,900 | 442,000 | 662,900 | 503,200 |
| Oklahoma | | 168,900 | 253,400 | 192,300 |
| Pittsburgh | 250,200 | 228,100 | 342,100 | 259,700 |
| Puerto Rico | 197,700 | 172,100 | 258,200 | 195,900 |
| Tulane | 205,900 | 184,100 | 276,200 | 209,600 |
| Yale | 196,400 | 203,000 | 304,500 | 231,100 |
| Total | 3,750,000 | 4,000,000 | 6,000,000 | 4,554,000 |

*Project grants for graduate public health training*

The authority for this program is contained in section 309 of the Public Health Service Act with a 1969 authorization of $9,000,000.

Schools must expand their enrollment capacity to train more public health personnel. Additional highly qualified faculty and staff are essential. Schools must concomitantly revise their academic programs in keeping with new technology and new patterns for the delivery of health services. Project grants for graduate and specialized training in public health provide schools of public health and other institutions offering training in public health the means for achieving these missions.

In 1968, an estimated 115 continuation projects will be supported in about 90 schools of public health, medicine, dentistry, nursing, engineering and other universities providing graduate public health training. These grants are supporting teaching programs in such areas as medical care economics, environmental health engineering, health care organization, epidemiology, population problems, and health planning.

The $5,500,000 request for training project grants in 1969 provides for $1,000,000 over the 1968 amount. This level of funding will provide support for about 20 additional schools which have not yet been funded. Emphasis will also be given to the support of additional institutions which provide graduate professional education in the administration, delivery, and evaluation of community and environmental health services. Support will also be provided in such fields as health statistics, hospital administration, and community health education at the master's degree level.

*Allied health educational improvement grants*

The authority for this program is contained in section 792 of the Public Health Service Act with a 1969 authorization of $17,000,000.

Allied health educational improvement grants provide basic support to junior colleges, colleges, and universities for improving programs of professional and technical education in the field of allied health, with funds being used for equipment, teachers and supporting staff, and other expenses. Grant amounts are based on a statutory formula of $5,000 for each specialized curriculum in which training is provided, plus $500 times the number of full-time students enrolled in these curriculums such as medical technology, physical and occupational therapy, dietetics, dental hygiene, and other allied health occupations.

In 1967 these grants were awarded to support 395 curricula enrolling more than 11,000 students in 164 four-year colleges and universities and 28 junior and community colleges. The total of entitlements proved to be in excess of 1967 funds but it was possible to award 41% of the amount requested by each of the eligible institutions. These funds have been used to improve the quality of course offerings, strengthen faculty, and meet costs of increased enrollments.

The program will be expanded in 1968 to assist about 1,000 educational programs for allied health personnel enrolling approximately 25,000 trainees. The appropriation of $9,750,000 will meet an estimated 70% of the statutory entitlements.

For 1969, the requested increase of $7,250,000 to a total of $17,000,000 (the full amount of the authorization) will permit us to make grants approaching 100% of the entitlment level for an expected 1,100 programs in which some 28,000 students are registered.

*Allied health new methods grants*

The authority for this program is contained in section 794 of the Public Health Service Act with a 1969 authorization of $3,000,000.

Health care facilities and services are being extended to all age groups. New management techniques are being developed. A rapid succession of technological advances geared to patient care is being introduced. Current numbers and categories of health specialists are insufficient and inadequate to deliver optimal health care to all people requiring such assistance. For these reasons, it is necessary to utilize both existing and developing categories of health specialists in order to provide more and better trained personnel in shorter periods of time. New arrangements are needed within and between the various competency levels in health occupations to provide opportunities for career development.

The Allied Health Professions Personnel Training Act authorizes project funds to educational institutions to develop, demonstrate, or evaluate new curricula for the training of health technologists. During 1967, the first year of the program, six projects totalling approximately $200,000 were funded to develop training programs for electroencephalographic technicians, health care administrators, hospital-medical systems engineers, diagnostic microbiology technologists, and specialized advanced training in medical technology.

The Georgia Institute of Technology for example is creating a new type of health technologist who will apply the skills involved in industrial engineering, operations research, systems analysis, and design management science to health care delivery systems. This is a new three-year training program leading to the Master's degree. A two-year training program for electroencephalographic technicians which includes work experience, is being developed at the University of Kentucky Medical Center.

During 1968, the six projects funded in 1967 will be evaluated to determine their adaptability to other training institutions, and approximately 15 additional projects will be funded. The $2,100,000 requested for FY 1969, representing an increase of $1,100,000, will permit the study, demonstration, evaluation, and development of approximately 20 more educational and training programs.

STUDENT ASSISTANCE

| | 1968 estimate | | 1969 estimate | | Increase or decrease | |
|---|---|---|---|---|---|---|
| | Positions | Amount | Positions | Amount | Positions | Amount |
| Personnel compensation and benefits | | | | | | |
| Other expenses | | $57,180,000 | | $67,650,000 | | +$10,470,000 |
| Total | | 57,180,000 | | 67,650,000 | | +10,470,000 |
| Subactivities: | | | | | | |
| Traineeships: | | | | | | |
| Dental fellowships | | 100,000 | | 150,000 | | +50,000 |
| Nurse fellowships | | 520,000 | | 650,000 | | +130,000 |
| Nurse traineeships | | 10,000,000 | | 11,000,000 | | +1,000,000 |
| Public health traineeships | | 8,000,000 | | 8,000,000 | | |
| Allied health traineeships | | 1,500,000 | | 2,500,000 | | +1,000,000 |
| Scholarships and opportunity grants: | | | | | | |
| Nursing educational opportunity grants | | 5,250,000 | | 7,050,000 | | +1,800,000 |
| Health professions scholarships | | 7,200,000 | | 11,300,000 | | +4,100,000 |
| Loans: | | | | | | |
| Health professions student loans | | 15,000,000 | | 17,300,000 | | +2,300,000 |
| Nursing student loans | | 9,610,000 | | 9,700,000 | | +90,000 |
| Total | | 57,180,000 | | 67,650,000 | | +10,470,000 |

The great demand for medical care today has highlighted a serious shortage in trained health manpower. The high cost of education constitutes a major deterrent to talented young people who might otherwise select a carreer in the health professions, or who might wish to further their career by undertaking graduate or specialized training and thereby alleviate some of the most pressing manpower problems facing the country.

Traineeships, scholarships and loans are available to help these students. These are designed to increase the supply by giving financial aid, and to provide direct training for health occupations and training to prepare teachers, supervisors and administrators for health facilities. These programs are discussed below:

*Dental fellowships*

The authority for this program is contained in Section 301 of the Public Health Service Act with an indefinite authorization for 1969.

The Dental Health research fellowships program which began in fiscal year 1967 provides support for training graduate students in research skills needed in dental public health. Fellowships currently support training in advanced computer technology, the sociology of family health action, dental care administration and the epidemiology of periodontal disease. During the remainder of 1968, applications will be considered in these fields as well as in the testing of clinical materials and procedures.

In 1969, the increase of $50,000 will provide 3 additional fellowships, in such fields as economics, political science, statistics and psychology as they relate to dental health. The funds requested will provide for 10 fellowships.

*Nurse fellowships*

The authority for this program is contained in Section 301 of the Public Health Service Act with an indefinite authorization for 1969.

To improve the practice of nursing, research in nursing care for patients is imperative. Many more than the 300–400 nurses now prepared in research methodology must receive graduate training for research.

The special fellowships in nursing research provide support to nurses for research training at the pre- and post-doctoral levels. This program is an essential adjunct to the research grant program. It prepares nurses to carry on the much needed research for fuller understanding and improvement of nursing care. There is a growing demand for competent nurses to direct nursing research projects, to work as part of research teams, and to direct community health research. Approximately 120 fellows will be supported with the requested $650,000 for 1969, an increase of $130,000 over 1968. This will provide for 26 additional fellowships.

*Nurse traineeships*

The authority for this program is contained in Section 821 of the Public Health Service Act with a 1969 authorization of $12,000,000.

The effectiveness of nursing in health services depends on the competence of the leadership. Of the 640,000 registered nurses in 1967, only 83,600 have an academic degree in preparation for professional leadership: teaching, supervision, administration, clinical specialization, and research. It is estimated that 256,000 nurses with this preparation are needed today. 173,000 additional nurses should be so prepared. These nurses are essential to direct nursing services in the 23,000 health agencies and institutions, and to teach in 2,300 professional and vocational educational programs.

Although the Professional Nurse Traineeship Program has increased the number of nurses prepared for positions as teachers, administrators, and supervisors, the demand for these specialists continues to grow. The gap between the supply and demand is increasing. The practice of nursing is becoming more and more complex and calls for an increasingly higher level of nursing skills and academic preparation. The demand for qualified teachers for schools of nursing is increasing at a rapid rate due to the increase in numbers of programs and the different types of programs. A larger number of nurse administrators and supervisors is needed as more and more people join the health team and nursing care and its management becomes more complex. There is an increasing specialization in medical practice requiring more nurse specialists in the clinical areas, such as staff needed for coronary care and intensive care units. The continuing shortage and uneven distribution of physicians, together with the many new technologies and therapeutics resulting from medical research, requires that professional nurses accept responsibility for many activities and functions that were formerly the responsibility of physicians.

An estimated 1,900 long-term trainees are being supported in 1968; and short-term training continues to be provided for nurses who are not able to undertake full-time study. These include courses such as rehabilitative nursing, supervision in nursing homes, and school nursing.

With the request of $11,000,000 in 1969, it is estimated that 2,085 long-term trainees will be supported and short-term training courses will be supported at the same level of an estimated 5,000 trainees each year. The $1,000,000 increase requested in 1969 will support approximately 185 long-term traineeships.

*Public health traineeships*

The authority for this program is contained in Section 306 of the Public Health Service Act with a 1969 authorization of $10,000,000.

Public health traineeships provide support to individuals for basic professional, graduate or specialized training in public health and for short-term specialized education and training to maintain or improve the level of competence of individuals working in the field of public health.

Nearly half of the present staffs of official health agencies have taken entry positions in public health without having had specialized training. The rapid progress of changes in the administration and delivery of health services has necessitated extensive reorientation of public health personnel and expansion of the opportunities for them to up-date their professional education. Stipend assistance for long-term and short-term educational programs enables public health personnel and students to undertake appropriate training efforts to enhance and develop their professional skills.

The traineeship program is divided into four major types of training noted below. The following table summarizes the programs for 1968:

| | Estimated number of grants | Estimated number of institutions | Estimated number of people trained |
|---|---|---|---|
| Residencies | 28 | 28 | 70 |
| Apprenticeships | 50 | 50 | 550 |
| Short-term training | 200 | 150 | 11,450 |
| Long-term training | 231 | 165 | 1,230 |

*Residencies in preventive medicine, preventive dentistry, and other public health related areas.*—This program is designed to alleviate the shortage of physicians and dentists needed to plan, conduct and participate effectively in community health programs and to teach in schools of public health and departments of preventive medicine and dentistry, and to serve as leaders in State and local public health settings.

*Apprenticeship training for medical and other professional students.*—This program provides medical and dental students with the opportunity to work in the field of public health for eight to twelve week periods. This activity has two principal objectives: (a) to give students a better understanding of the community in which they work, and of community resources; and to participate in public health programs as practitioners; and (b) to influence the students to choose careers in public health.

*Short-term public health training.*—Training supported by this program enables professional health personnel to update their knowledge and skills relating to the public health programs in which they work. It decreases the time lag courses on principles of prepaid dental care, and training in new and improved the health of the people.

Professional health personnel are supported in a wide variety of short-term, intensive education programs needed to keep abreast of their rapidly expanding responsibilities in public health. These include seminars in the administration of comprehensive community health services, courses on medical care and nursing home administration, clinical training in new skills and techniques for the management of chronically ill patients, workshops in epidemiology, courses on principles of prepaid dental care, and training ni new and improved techniques in environmental sciences.

*Long-term traineeship grants.*—These grants are designed to enable those individuals with basic professional training in a health discipline to obtain advanced or specialized public health training. Support is provided through long-term traineeship grants to institutions providing graduate or specialized training in public health. Awards are also made directly to individuals pursuing such training.

The individuals are trained in a broad spectrum of fields of vital importance to complex public health programs including public health administration, infectious and chronic disease epidemiology, public health nursing, environmental health engineering, gerontology, public health nutrition, biometry, and a variety of other disciplines.

In 1968, we estimate that more than 13,300 traineeships will be funded from the $8.000,000 available for the program. The program will continue at the same level in 1969.

*Allied health traineeships*

The authority for this program is contained in Section 793 of the Public Health Service Act with a 1969 authorization of $3,500,000.

Allied health traineeships provide advanced training to increase the number of professionals in the allied health disciplines who are prepared for teaching, administration, supervision, and in specialties in allied health professions. They also support programs of specialized short-term education for allied health professional and technical personnel.

Experience to date demonstrates that increased enrollment in educational programs basic to the fields allied to health cannot be met in many instances because of the lack of qualified teachers. To accomplish optimum utilization of the work force, there must be adequate numbers of administrators, supervisors, and clinical specialists trained to provide the full range of supportive medical services necessary for comprehensive health care.

Just as greater numbers of new personnel must be brought into the allied health professions, so must individuals working in the allied health disciplines be given an opportunity to improve their level of competence to meet changing demands of new health technology. Support is required for short-term training to allow for more rapid presentation of new methods of providing ancillary health services and to meet requirements for uniformly higher standards of performance.

Starting from the base of 64 trainees who received a total of $240,000 in 1967, this program will be expanded to support advanced training for approximately 300 persons at a level of $1,500,000 in 1968. These students, most of whom are enrolled in the key curricula of medical technology, physical therapy,

dietetics, and occupational therapy are participating in educational programs of 49 training centers located throughout the country. The requested increase of $1,000,000 for 1969 will extend support to an additional 100 allied health professionals for their training as teachers, supervisors, and specialists, and will make possible the initiation of a program of short-term training for an estimated 2,500 workers at the professional and technical levels.

*Nursing educational opportunity grants*

The authority for this program is contained in Section 861 of the Public Health Service Act with a 1969 authorization of $7,000,000.

In view of the great need for nurses, the number of qualified applicants for admission to schools of nursing must be markedly increased.

The high cost of nursing education excludes many young people who would otherwise enter professional nursing. Based on a study carried out by the Division of Nursing it is estimated that one-third to one-half of all qualified applicants to schools of nursing will require financial assistance from sources outside their families. These students require financial and other help to pursue their professional education.

This assistance supplements the nursing student loan program and is designed to increase the number of nurses by making nursing education possible for young people who could not otherwise afford to pursue a nursing career.

A full-time nursing student in need of financial assistance is eligible for a grant of $800 or one-half of the amount of other student financial aid he is receiving whichever is the lesser; a student finishing in the upper half of his class is eligible for an additional $200.

The amount estimated to be available in 1969, $7,050,000 (including $250,000 brought forward from 1968) is an increase of $1,800,000 over 1968, and will provide grants for about 11,700 students. The number of students supported in 1968, the first full year of the program, is an estimated 8,400 in 248 institutions in 47 States.

*Health professions scholarship program*

The authority for this program is contained in Section 780 of the Public Health Service Act with an indefinite authorization for 1969.

For 1969, $11,300,000 is requested, an increase of $4,100,000 over 1968, to provide scholarship grants to an estimated total of 11,900 students in about 245 schools of medicine, dentistry, osteopathy, optometry, podiatry and pharmacy. From these funds it is estimated that awards will be made to more than 3,900 first-year students. About 7,960 second- and third-year students will receive continuation awards.

The amount of a scholarship grant made to each school is determined by the formula prescribed in the law. Since 1969 is the third year of the program, the formula amount available to each eligible school is based on $2,000 multiplied by one-tenth of the number of full time first, second and third-year students of the school.

The number of scholarships awarded by discipline follows:

| Discipline | Estimated scholarship awards | |
|---|---|---|
| | Fiscal year 1968 | Fiscal year 1969 |
| Medicine | 3,356 | 5,046 |
| Dentistry | 1,585 | 2,380 |
| Osteopathy | 306 | 423 |
| Optometry | 303 | 450 |
| Pharmacy | 2,280 | 3,412 |
| Podiatry | 134 | 189 |
| Total | 7,964 | 11,900 |

The objective of this program is to enable economically deprived students, from low-income families to pursue education and careers in the health professions. The program supplements but does not supplant assistance provided from health professions student loans. The school determines the student's total financial need by comparing his educational and living expenses with his total resources, including the amount of loans which may be made available to him.

Up to $2,500 of the remaining amount which is necessary to enable the student to pursue his educational program may then be awarded from these scholarship funds. About 20% of eligible students receive support from this program.

The student who is contemplating a career in medicine or another health profession is confronted with the problem of coping with the costs of a prolonged and expensive period of education and training. These scholarships improve the ability of health professions schools to attract motivated students of high quality who have limited or virtually no financial resources. Without such assistance these potential practitioners of the health professions are likely to be enticed into other scientific fields by the nonrepayable financial support which is readily available.

*Student loans*

The authority for the Health Professions Student Loan program is contained in Section 742 of the Public Health Service Act with a 1969 authorization of $26,500,000. The authority for the Nursing Student Loan program is contained in Section 824 of the Public Health Service Act with a 1969 authorization of $30,900,000.

| | 1968 estimate | 1969 estimate | Increase or decrease |
|---|---|---|---|
| Health professions | $15,000,000 | $17,300,000 | +$2,300,000 |
| Nursing | 9,610,000 | 9,700,000 | +90,000 |
| Total | 24,610,000 | 27,000,000 | +2,390,000 |

The Health Professions and Nursing Student Loan programs offer two methods of capitalizing loan funds to eligible schools. Each school may choose either the Federal Capital Contribution plan whereby the schools provide 10% and the Government 90% of the necessary funds; or the revolving fund plan, whereby a school borrows directly from the Government the entire amount; or both. The revolving fund method became available in 1968.

*Health Professions.*—The appropriation request of $17,300,000 in 1969 plus $11,429,000 in funds estimated to be available in the Health Professions Education Fund (revolving fund) will provide a loan program of $28,729,000. This is an increase of about $2,000,000 above the level of funding in 1968 of $26,659,000, made up of $15,000,000 appropriated and $11,659,000 in the revolving fund.

An important factor in alleviating the existing critical shortage of health manpower is to remove or minimize the financial barrier which has prevented many of the youth of this Nation from pursuing careers in the health professions. Health professional education is lengthy and expensive.

A majority of the students have come from the more affluent levels of society. Today it is imperative that the doors to the medical, dental, and other health professions schools be accessible to capable students from all socio-economic levels, including the economically deprived. This program and the Health Professions Scholarship Program, which are complementary, are opening these doors.

Since enactment of the Health Professions Educational Assistance Act of 1963 an estimated 74,000 loans will have been made through 1968 to assist students to achieve their goal in becoming physicians, dentists or members of other eligible health professions.

The rising cost of education to the student is reflected in the increased use and reliance on the program. In 1965, loans averaging $817 were made to 11,550 students or 24% of the total enrollment of participating schools. It is estimated that in 1969, the average loan will increase to more than $950 and the number of borrowers will be about 29,800 or 39.4% of the total enrollment. This represents an increase of 4,420 borrowers over 1968. It is further expected that in 1969 a minimum of 39 additional schools will participate in the program for the first time bringing the total number to 256.

*Nursing Student Loan Program.*—The appropriation request of $9,700,000 in 1969 plus $7,300,000 in funds estimated to be available in the Nurse Training Fund (revolving fund) will provide the program with an operating level of $17,000,000. This is an increase of about $700,000 above the level of funding in 1968 of $16,325,000 made up of $9,610,000 appropriated and $6,715,000 in the revolving fund.

The increased demand for health services and expansion of hospital and nursing home facilities has intensified the already critical shortage of nurses. To help combat this problem, financial assistance in the form of long-term, low-interest loans was made available to students in nursing schools by enactment of the Nurse Training Act of 1964.

The program began in 1965 with 426 programs of nursing education participating. In 1969, it is estimated that 731 programs will participate—an increase of 71% in five years and an estimated increase of 43 programs over 1968. In the same period the number of students enrolled in participating schools is expected to rise from 67,037 in 1965 to about 111,700 in 1969. This would constitute a 66% increase. The need for the program is evidenced by the increasing number of loans made to students during each year. This number has grown from 3,645 in 1965 to an estimated 27,000 in 1969, about 24% of the enrollment. During the first four years of this program, 1965 through 1968, loans were made to about 57,000 recipients.

This program supports students enrolled in diploma, associate degree, baccalaureate and graduate programs of nurse education. The participating enrollment in the graduate program level has increased from 1,210 in 1965 to an estimated 4,396 in 1969. During the same period the number of loans in the graduate level administered by the program increased from 32 in 1965 to an estimated 308 in 1969. This suggests that the program is encouraging more students to seek higher levels in the nursing profession which is expected to aid in producing additional faculty members so critically needed by the nursing schools.

MANPOWER REQUIREMENTS AND UTILIZATION

| | 1968 estimate | | 1969 estimate | | Increase or decrease | |
|---|---|---|---|---|---|---|
| | Positions | Amount | Positions | Amount | Positions | Amount |
| Personnel compensation and benefits | 673 | $7,034,700 | 718 | $7,830,600 | +45 | +$795,900 |
| Other expenses | | 10,861,165 | | 14,640,400 | | +3,779,235 |
| Total | 673 | 17,895,865 | 718 | 22,471,000 | +45 | +4,575,135 |
| Subactivities: | | | | | | |
| Grants: | | | | | | |
| Research grants: | | | | | | |
| Physician manpower | | 646,000 | | 1,348,000 | | +702,000 |
| Dental health | | 1,259,000 | | 1,259,000 | | |
| Nursing | | 2,593,000 | | 2,593,000 | | |
| Research training grants: | | | | | | |
| Dental health | | 300,000 | | 500,000 | | +200,000 |
| Nursing | | 580,000 | | 700,000 | | +120,000 |
| Continuing education grants: Dental health | | 200,000 | | 200,000 | | |
| Direct operations: | | | | | | |
| Physician manpower | 94 | 2,745,400 | 98 | 2,979,000 | +4 | +233,600 |
| Dental health | 264 | 4,653,665 | 273 | 5,064,000 | +9 | +410,335 |
| Nursing | 179 | 2,746,800 | 191 | 4,437,000 | +12 | +1,690,200 |
| Allied health manpower | 55 | 1,086,300 | 64 | 1,363,000 | +9 | +276,700 |
| Health manpower educational services | 81 | 1,085,700 | 92 | 2,028,000 | +11 | +942,300 |
| Total | 673 | 17,895,865 | 718 | 22,471,000 | +45 | +4,575,135 |

*Research grants—Physician manpower*

The authority for this program is contained in section 301 of the Public Health Service Act with an indefinite authorization for 1969.

| | 1968 appropriation | | 1969 estimate | | Increase or decrease | |
|---|---|---|---|---|---|---|
| | Number | Amount | Number | Amount | Number | Amount |
| Noncompeting continuations | 5 | $175,000 | 8 | $431,000 | +3 | +$256,000 |
| New grants | 8 | 471,000 | 16 | 917,000 | +8 | +446,000 |
| Supplementals | | | | | | |
| Total | 13 | 646,000 | 24 | 1,348,000 | +11 | +702,000 |

The demand to expand the supply and improve the utilization of physician manpower in the United States has stimulated a pressing need for support of research in the various facets of physician manpower. The support of this research will result in the general strengthening of manpower in the health professions.

The requested increase of $702,000 in research grants will be used primarily to explore and develop new methods and techniques in premedical and physician education. This includes studying the problems and methodologies in the continuing education of physicians. These grants would also evaluate the methods and techniques used in physician continuing education.

In 1968 grant funds are being used to continue the medical and allied health professions research program. Research grants are being used to study the effective use of medical manpower and to assess the rate at which designated skills and clinical specialties are acquired. For example, a grant awarded in 1968 to the University of Illinois will study the use of computers in medical education by simulating clinical patient situations. With the results of the research which we will support in 1968, we anticipate being closer to understanding the questions involved in increasing the quantity of physician manpower without decreasing the quality of education.

Examples of research programs which the Division of Physician Manpower plans to initiate in 1969 and future years, utilizing the knowledge gained from private resources and earlier grants, include: (1) studies related to recruitment of physician manpower and stimulation of interest in various physician careers, such as practice, research, education, and administration; (2) studies relating to the recruitment of educators in various disciplines for faculty at schools of medicine and osteopathy; (3) studies on the costs and financing of physician education; (4) research and studies related to curriculum improvement, development, teaching techniques, and methods of evaluating physician education; (5) studies related to improving the quality of physician education and shortening the period of formal education for the physician; (6) studies on the management and financial requirements for operating medical and osteopathic schools; (7) studies relating to development and evaluation of procedures and methods to encourage and/or improve physician continuing education; (8) studies to stimulate non-Federal sources to develop various methodological approaches to encourage and improve continuing education; (9) studies related to the impact of socio-economic, environmental, technological and medical research and practice factors in physician supply potential; and (10) studies concerned with the availability, distribution, and utilization of physician manpower and physician services.

*Research grants—Dental health*

The authority for this program is contained in section 301 of the Public Health Service Act with an indefinite authorization for 1969.

| | 1968 appropriation | | 1969 estimate | | Increase or decrease | |
|---|---|---|---|---|---|---|
| | Number | Amount | Number | Amount | Number | Amount |
| Noncompeting continuations | 26 | $739,000 | 19 | $772,000 | −7 | +$33,000 |
| New grants | 10 | 497,000 | 10 | 462,000 | ..... | −35,000 |
| Supplementals | (1) | 23,000 | (2) | 25,000 | +(1) | +2,000 |
| Total | 36 | 1,259,000 | 29 | 1,259,000 | −7 | ..... |

A principal task for the Division is the development of research to determine ways of increasing and improving the productivity of dental manpower, improving teaching of dental personnel, improvement of the distribution, organization and financing of dental services and improvement of preventive, control and treatment procedures. In each of these areas, research grants will be used to complement the intramural program effort.

Research now being supported by grants includes the testing of agents and procedures for controlling dental caries; impact of fluoridation on dental practice; the relationship of oral hygiene to periodontal disease; the design of a mathematical model for dental insurance plans; the clinical testing of dental materials; evaluation of methods to improve health education in the schools; and studies of more effective ways of teaching dental students.

Research projects and programs are planned on communication of research findings, and dental health information; control of pain in dental patients, evaluation of simulation in teaching dental students, more efficient use of dental auxiliaries and use of devices in treatment of orthodontic disorders. The request for $1,259,000 will provide for continuation of 19 current projects and 10 new grants.

*Research grants—Nursing*

The authority for this program is contained in section 301 of the Public Health Service Act with an indefinite authorization in 1969.

| | 1968 appropriation | | 1969 estimate | | Increase or decrease | |
|---|---|---|---|---|---|---|
| | Number | Amount | Number | Amount | Number | Amount |
| Noncompeting continuations | 36 | $1,676,000 | 36 | $1,776,000 | ..... | +$100,000 |
| New grants | 20 | 870,000 | 17 | 716,000 | −3 | −154,000 |
| Supplementals | (3) | 47,000 | (6) | 101,000 | (+3) | +54,000 |
| Total | 56 | 2,593,000 | 53 | 2,593,000 | −3 | ..... |

The promotion, conduct, and support of research for better understanding and subsequent improvement of nursing care of patients is an essential part of nursing. As medical care of patients becomes increasingly scientific, systematic analysis must be made of the effect of nursing practice on the patient's progress toward recovery of health maintenance. Answers are needed to the related problems of nursing service administration, nursing education and recruitment. Nursing research projects are providing some of the answers. For example, an ongoing nursing research project on pressure sores has developed findings which provide a scientific basis for altering present practices for recognition, care and prevention of this condition. Plans are underway for preparation of a manual and for developing other means of disseminating these findings widely and with minimum delay.

The $2,593,000 for 1969 is requested to do essential nursing research in the following areas:

Investigation of new elements in the total care of patients that can most effectively be provided by professional nurses. New scientific knowledge is particularly essential in view of the changing characteristics of the population with its increase in older people and the increase in the incidence of long-term illness.

Development of new and more effective methods of utilization of personnel, facilities and equipment including techniques of automation and patient monitoring devices.

Identifying and testing the most effective ways of keeping the practicing nurses informed of new changes in patient care.

Experimentation with organizational patterns that provide the most economical and safe care and with methods for delivering this care to patients in hospitals, homes, and health facilities in the community.

*Research training grants—Dental health*

The authority for this program is contained in section 301 of the Public Health Service Act with an indefinite authorization for 1969.

| | 1968 appropriation | | 1969 estimate | | Increase or decrease | |
|---|---|---|---|---|---|---|
| | Number | Amount | Number | Amount | Number | Amount |
| Noncompeting continuations | 2 | $198,000 | 2 | $302,000 | ..... | +$104,000 |
| New grants | 1 | 49,000 | 3 | 188,000 | +2 | +139,000 |
| Supplementals | (1) | 53,000 | (1) | 10,000 | ..... | −43,000 |
| Total | 3 | 300,000 | 5 | 500,000 | +2 | +200,000 |

Established in 1966, the Division's research training activity is now in its third year. Four training programs in the areas of dental epidemiology, dental educational research and medical sociology have been initiated at geographically dispersed educational centers. Growing interest in all aspects of dental public health research has led to the receipt of applications for graduate training under these programs from more students than can be accommodated. Additional programs are needed both to increase training capability in these fields and to obtain coverage in other important research areas. A new grant is planned in 1969 which would establish a program of summer on-the-job traineeships to provide initial exposure of dental students to applied dental health research.

The increase of $200,000 requested for fiscal year 1969 will provide for the funding of a program to prepare students for research training in the behavioral science aspects of dental practice, and a training program in dental care administration research will also be initiated.

*Research training grants—Nursing*

The authority for this program is contained in section 301 of the Public Health Service Act with an indefinite authorization for 1969.

| | 1968 appropriation | | 1969 estimate | | Increase or decrease | |
|---|---|---|---|---|---|---|
| | No. | Amount | No. | Amount | No. | Amount |
| Noncompeting continuations | 5 | $580,000 | 5 | $580,000 | | |
| New grants | | | 1 | 120,000 | +1 | +$120,000 |
| Total | 5 | 580,000 | 6 | 700,000 | +1 | +120,000 |

Research training complements the support for research grants. The research training grant program is now supporting 22 departments in 5 universities. Few nurses now have the training in depth in the basic sciences needed to participate in the increasing amount of interdisciplinary research. These grants make it possible for more nurses to be prepared in fields such as anthropology, physiology, microbiology, and sociology, thereby bringing this knowledge to studies for improving nursing care. The $700,000 requested for 1969 will support 28 departments in 6 unversities. An increase of $120,000 over 1968 will provide support for one additional university.

*Continuing education grants—Dental health*

The authority for this program is contained in section 422 of the Public Health Service Act with an indefinite authorization in 1969.

Grant funds available for continuing education were first appropriated in 1967 and have provided support for five projects. Over the next three to seven years, existing projects will contribute directly to upgrading the skills of 39,000 dentists. In addition to this direct effect on the dental practitioner, a vehicle is provided for the transmission of new knowledge about needs, resources, and educational methods, media and systems for continuing education, and for automated, self-instructional materials on such subjects as periodontics, operative dentistry, preventive dentistry, endodontics and community dental care programs for children. This new knowledge and utilization of these new educational materials and techniques have through these grants a potential of extension to all educational institutions, professional organizations, and dentists. thus facilitating the development of an effective, economical, continuing education system which asures life-long educational opportunities for all dentists.

The $200,000 requested will provide for the continuation of the existing programs.

*Direct operations—Physician manpower*

*General.*—The Division of Physician Manpower has as its principal mission the improvement of the quality and availability of physician manpower in the United States. This mandate involves the entire spectrum of physician recruitment, basic education, continuing education, and utilization. Analysis and revision of the education of physicians, suitable utilization of facilities, examination of the problems of continuing education and the development of effective methods for providing this education are essential to improve the care which physicians provide for patients and for the development of new knowledge.

Responsibilities of the Division include increasing the interest of students in secondary schools in health careers, recruitment of potential physicians in colleges and universities and enlarging opportunities for education in medical and osteopathic schools, teaching hospitals, post-graduate specialty training, and continuing education. In 1968, the mission is being pursued through research grants, intramural studies, and extramural contracts.

Major energy will be directed toward programs that will increase the number of physicians providing health care from the level of 297,000 in 1966 to about 348,200 in 1975. Changes in distribution of physician manpower and improvement in the utilization of physicians are vital if health services of high quality are to be available to all those who need them. The search for solutions to these problems will receive high priority. The Division of Physician Manpower provides professional advice and counsel to public and private institutions, agencies and organizations that are concerned with physicians. The physician manpower program is closely correlated with the total effort being made in the development of health manpower.

*Physician Education.*—Resources will be directed toward the problem of the physician shortage in the United States through various approaches. Support and encouragement will be given to (1) decrease the number of years required to educate the physician, without sacrificing quality of education; and (2) increase the effectiveness of medical schools in order that more physicians will be trained without concomitant increase in faculty requirements. The ultimate goal is to make sure that all medical and osteopathic schools in the United States will have an opportunity to implement changes which will benefit physician education.

This program is also endeavoring to stimulate study and modification of the curricula of medical and osteopathic schools to reflect the changing pattern in the delivery of comprehensive and community health care services.

In late 1967, two pilot contracts were initiated with medical schools in Chicago and California, to develop curricula in comprehensive and community health care. The two contracts were carried out in cooperation with the Office of Economic Opportunity and the Department of Housing and Urban Development. In the summer of 1968 about four contracts, averaging $50,000 each, will be carried out in cooperation with OEO and HUD.

The program seeks to identify problems involved in keeping physicians in urban and rural settings up-to-date on new medical knowledge and technology. Identification of problems of this kind is especially important in the effort to provide the highest level of medical care to people of this country. This program is carried out by intramural studies and contracts. It will require approximately $700,000 in 1968 and will remain at that level in 1969.

Studies on the retraining of inactive physicians are also being carried out. In 1967 a pilot project was initiated at the Presbyterian Medical Center in San Francisco, California, for the purpose of studying the problems involved in retraining inactive physicians. The study was designed to determine the feasibility of retraining, and how retraining might be carried out. This study has resulted in a cooperative effort of the American Medical Association and the Division of Physician Manpower to identify inactive physicians and to determine their interest in a retraining program that might be established in their area. Most physicians who responded indicated their interest in bringing their knowledge and skills up-to-date.

In 1968 the existing contract with the Presbyterian Medical Center will be extended and the program expanded. We are establishing three additional retraining centers, suitably located geographically, in 1968, using knowledge gained from the initial project. In 1969 we anticipate the award of one additional contract of $50,000. After these initial fact-finding contracts are completed the results will be widely distributed through the public information media and professional journals. The Division anticipates that when the demonstrations are completed the contract-supported centers will become self-sustaining and will provide significant opportunities for the continuing education of physicians in the areas in which they are located, and that other privately supported centers will be established as a result of this program.

One additional position, a Public Health Advisor, is requested for the physician education program in 1969 to help administer the expanded grant and contract programs and provide technical assistance to Public Health Service and Federal programs, medical and osteopathic schools, and professional organizations.

*Physician Utilization.*—It is essential to develop and maintain a continuous record of the supply and distribution of physicians by geographic area and by specialty. This information serves as a base on which to determine the effectiveness of the physician in providing health services. While the numbers of physicians are increasing, the need for high quality services continues to exceed the supply, and will do so for some time to come. Improved utilization of the skills of the physician is, therefore, essential to meeting the current and anticipated demands for health services. Studies on the current use of professional skills, the analysis of professional responsibilities, and the organizational pattern in which the physician functions with others in the delivery of health care services are essential. In view of the national economic situation and the lag time in developing resources and facilities to increase the supply of physicians, the emphasis in 1969 will be on improving the utilization of the present physician population to meet current demands for services. Through the collection of available data and the acquisition of new information, this program is developing and maintaining current information on the supply and distribution of physicians in this country. It will also develop and maintain a system of continuous information of medical and osteopathic schools, students and faculty. Using these data, needs for physicians, the skills which they possess and the geographic distribution of physicians will be maintained.

In 1968 a study entitled "How Medical Students Finance Their Education," will be undertaken. This study will canvass all the medical and osteopathic students in the United States during the 1968 Spring semester. An analysis and report will be issued next year on the financing of physician education. Such information serves as the base to estimate the need for student aid programs and is essential in the determination of the Federal role in medical education.

The licensure and certification of physicians will be studied to determine how these procedures vary from state to state. The free flow of physicians from one area to another is influenced by state licensing and certifying procedures; therefore, these systems, which support high professional standards, may inhibit more equitable distribution of physician manpower. We anticipate that several years will be required to study this complex and highly significant problem.

In 1969, two additional positions are requested for the physician utilization program and $50,000 for three contracts. These positions, a Medical Officer and a Statistician, will organize studies and develop contracts to improve the utilization of physician manpower. The new contracts will study the organization and delivery of health services to define with reasonable limits those services which can only by provided by physicians.

*Educational Facilities.*—The Educational Facilities program administers grants for the construction of new and the rehabilitation and renovation of existing educational facilities for schools of medicine, osteopathy, dentistry, nursing, pharmacy, optometry, podiatry, veterinary medicine, public health, and the allied health professions. The program provides architectural and engineering assistance to schools, provides primary review of grant applications, and maintains surveillance on the progress of construction projects.

This program plays a major role in increasing the quantity and quality of health manpower in the United States by making possible the rehabilitation and renovation of existing schools and providing financial support for the construction of new schools. If the health manpower shortage is to be decreased, then this program must expand its vital services.

In 1969, one additional position, a Construction Engineer, is requested to provide technical assistance to medical and osteopathic schools, and for surveillance of the increasing number of facilities under construction.

In summary, the increase of $233,600 for Physician Manpower in 1969 will provide four new positions and $47,600 for salaries and expenses related to those positions; $100,000 for additional contracts; and $86,000 for built-in increases, including annualization of positions new in 1968, and annualization of the recently enacted pay increase.

*Direct operations—Dental health*

To carry out its functions, the Division is organized into three major operational areas—Manpower and Education, Dental Technology and Community Programs.

*Manpower and Education.*—In cooperation with the American Association of Dental Examiners our Resource Analysis program is developing a National Data Compilation System for dentists and hygienists. Beginning with the 1965 reregis-

tration of dentists, the collection has progressed and is now including licensed dental hygienists. In 1968, 40 states will be included in the system, and by the end of 1969, data on dentists and the services they supply will be available in all 50 states.

A study is also being conducted with the assistance of the Medical Foundation of Boston to provide information which will be used to develop a methodology for the gathering and organization of manpower and resource data in a large metropolitan area, and to demonstrate the feasibility of such a method for planning for dental service needs. Findings from this study will offer the opportunity to establish a workable system in another large metropolitan area in 1969. Studies are continuing in the behavioral aspects of dental auxiliary manpower to assess the effectiveness of auxiliary manpower and its application in the dental profession today.

The alarming shortage of dentists in the United States requires programs to alleviate major deficiencies which have been identified in educational programs for dental workers. The Division's programs in educational research attack the most critical of these defects including: (1) the acute shortage of qualified teachers, (2) the lack of qualified applicants to dental schools, (3) a crowded and rigid curriculum, (4) outmoded administrative practices, and (5) lack of innovation in design of instructional facilities. Qualified teachers are acutely lacking in schools of dental hygiene and dental assisting. There is an urgent need to develop new teaching media and to improve teaching methods as well as to train more teachers.

The Dental Health Center in San Francisco seeks to improve teacher recruitment, selection and development. The development of educational programs especially suited to the interest and abilities of students already identified as potential successes in teaching and/or research is one example of current projects.

Major emphasis has been placed on the use of new teaching methods in 1968. Various mechanical and electrical devices are being used to improve teaching methods for dental educators. Computer-assisted instruction shows promise towards improving teaching methodology in its application to the teaching of dental skills. Greater emphasis will be placed upon exploring these possibilities in schools for dental auxiliary personnel. We will promote teaching methodology in three additional schools of dental hygiene.

*Dental Productivity.*—Progress in dental productivity is dependent upon continued exploration of those functions that can be delegated to dental auxiliaries and devising methods of training auxiliaries to undertake these functions in conjunction with the dentist. Since 1964 studies at Louisville, Kentucky have provided a unique opportunity for evaluation and the delegating of expanded duties and responsibilities to chairside assistants. Beginning in 1969, additional variables will be introduced into the study such as number of dental assistants and the degree of their technical versatility in situations of revised operatory designs. This phase of the project will study the team of one dentist and five auxiliaries. At the suggestion of nationally recognized leaders in dental health there is now an opportunity to conduct training seminars at the Center in Louisville. With the assistance of those experts we can now attain more widespread acceptance of the team concept in dental practice. An increase of two positions and $56,000 is requested for these activities.

*Continuing Dental Education.*—The obstacles faced by practicing dentists in keeping with scientific advances are many, and the solution to developing a sound continuing education system for all dentists will depend upon solving complex problems. Programs are designed to overcome two major obstacles to the development of such a system: (1) the broad geographic distribution of dentists throughout the nation, and (2) the lack of teaching manpower available for a continuing education program of this magnitude.

The Division program at the Dental Health Center in San Francisco focuses primarily on the development, evaluation and demonstration of new educational methods and media for continuing education outside the dental school. New audio-visual approaches to automated programed instruction to meet the special needs of dentists are reaching an estimated 7 percent of the dental population as compared with less than 4 percent in 1967. The demonstration courses developed for individual and group instruction have contributed to improving the knowledge and skills of over 10,000 practicing dentists. Funds provided in 1969 for the intramural program will continue this activity.

To demonstrate the feasibility of a coordinated, statewide, off-campus continuing dental education program, a prototype statewide distribution system will

be developed and demonstrated in 1969. This system will be designed to incorporate new instructional methods and media, extend the utilization of available instructional materials and develop new courses that will meet the continuing educational needs of practicing dentists. To accelerate the development of an adequate nationwide program for dentists, a distribution system will be developed to assure the prompt dissemination of information on needs, new methods, media and resources in continuing dental education. The system is designed to reach 500 department heads and deans of schools in addition to over 1,000 state and local dental societies' leaders, other individuals and groups responsible for the nation's continuing education.

Funds requested this year will support the initiation of a program in dental care education for the dental patient. Emphasis is placed on the development of patient education systems within the private dental offices and clinics. The programs are designed to conserve the productivity of the dental health team and to motivate the patient to seek adequate dental services.

An increase of $65,000 and 2 positions will be used to augment the continuing education program at the Dental Health Center in San Francisco, and $20,000 and 1 position will be used to develop new teaching media in schools of dentistry and dental assisting.

*Dental Technology.*—The Epidemiology programs of the Division have been seeking methods to protect the teeth of children living in areas not serviced by central water supplies. Two of these methods show considerable promise. The first, fluoridation of school water supplies, has been studied in pilot projects and rural areas of Pennsylvania, Kentucky and the Virgin Islands. The second consists of self-administration of fluoride solutions under the supervision of dental auxiliaries or school teachers. Studies on the self-administration of topical fluorides have been initiated in Louisiana, Oregon and Brazil. Additional studies will be conducted to determine optimal amounts of fluorides for school fluoridation and the use of the new fluoride agents and techniques for self-application.

*Studies of oral congenital defects.*—In an attempt to discover causes for the occurrence of cleft lip and palate more than 12,000 birth certificates on which clefts are recorded have been collected at the Dental Health Center and are being analyzed to determine the factors that surround the occurrence of clefts. For example, from this effort it was determined that the likelihood of a child being born with a cleft increases with the mother's age. When the knowledge gained from these analyses identifies possible leads regarding the etiology of clefts, epidemiological field investigations will be designed and conducted.

A major field study on twins which seeks to shed light on the relative contribution of genetics and environmental forces in the causation of clefts has already been initiated. Physical examination of 80 pairs of twins in which a cleft has affected at least one of the twins, as well as interviews of the twins' families are being carried out on the West Coast. Emphasis will be given to identifying the similarities and differences that occur in twins that have developed from the same egg.

An increase of $163,000 and 2 positions is requested to expand the Cleft Lip and Palate Twin Study to include additional pairs identified from birth records and to institute a study leading to the establishment of a network of rehabilitation centers for the treatment of clefts.

*Periodontal Disease.*—Epidemiological and supporting labortory studies conducted by the center have demonstrated a definite and consistent relationship between oral hygiene status and the health of the soft and hard tissues supporting the teeth. The potential effectiveness of oral hygiene in the prevention and control of periodontal disease is being demonstrated by a continuing study being conducted at Mt. View, California. Shortly, a major investigation will begin to evaluate clinically the efficiency of a dentifrice that holds considerable promise in being able to prevent the formation of calculus (tartar) on the teeth. Studies such as these are essential for the planning and development of major national programs for the prevention and control of periodontal disease which attacks virtually all adults in this country and is the major cause of tooth loss after age 35.

Malocclusion results from the improper alignment or arrangement of the teeth and jaws. Degrees of malocclusion range from minor imperfections to major jutting or recession of the jaws and teeth. Extensive malocclusion is crippling and psychological injurious. Only meager information is available on the prevalence and developmental history of these conditions. The Division will

initiate a study in 1968 to determine the prevalence and severity of malocclusion in selected population groups and assess the potential public health use of selected control measures.

The Materials and Technology Branch of the division conducts applied clinical research to evaluate and compare new and conventional dental materials, dental procedures, and dental devices and to link basic laboratory research findings in the physical and biological sciences with clinical practice.

Fundamental information about the clinical, physical and biological properties and the safety of dental materials has been established through laboratory experimentation. Laboratory testing does not provide information about the behavior and performance of the materials when exposed to the oral environment. Long-range clinical studies conducted under controlled conditions, are necessary to ascertain the practical value of properties such as adhesion, color stability, strength, solubility, resistance to wear and long-term effect on the hard and soft tissues of the mouth.

Such long-range studies are being conducted by the Division in cooperation with dental personnel in public health service hospitals, VA hospitals, the Bureau of Prisons, the Division of Indian Health and in dental schools. By coordination of such studies and by the development of special evaluation methods, information is being accumulated which will lead to improved dental care for the public and reduced manpower requirements for delivery of high quality dental care.

*Community Programs.*—In the past year, greater understanding and support of fluoridation by the public were evidenced by increased activity in coordinated state-wide approaches to fluoridation. Mandatory state fluoridation laws exist only in three states, Connecticut, Minnesota and Illinois. Two states, Kentucky and Michigan, have interpreted existing state statutes as the necessary authority for the Board of Health to issue rules regarding fluoridation of water supplies. Community action has now raised to over 75 million the number of people benefiting from fluoridated public water supplies. Until fluoridation is available to all, we must continue our efforts to extend the coverage by providing direct technical assistance to state and local jurisdictions and utilizing every effort to develop a completely informed public in the benefits of a fluoridated water supply.

*Control of Oral Cancer.*—Encouraged by earlier success, the program to control oral cancer is pursued with increased intensity. Built on the experience we have gained so far, a concerted effort will be made to assure that the diagnostic procedure for oral cancer is incorporated into the practice of every dentist in the country. In 1969 oral cancer detection demonstrations will be extended and contracts negotiated with three additional agencies extending the demonstration program for local practitioners on cytological testing for oral malignancies to approximately 500 more dental practitioners. An increase of $43,335 and 2 positions is requested for this purpose.

*Economics of Dental Care.*—The Division continues to provide consultation and technical assistance on dental care economics to groups interested in developing dental insurance programs. Preliminary analysis of the Public Health Service survey of prepaid dental care plans indicates that member enrollment in existing plans is constantly growing and that the number of new plans is increasing. Preliminary estimates based on the incomplete on-going survey, at the end of 1967, show 1,074 privately sponsored prepaid dental care plans in existence, with membership of 4.1 million persons eligible for dental care benefits. These benefits include at least diagnostic services and continuing restorative care, with the bulk of the beneficiaries being eligible for one or more specialty services, i.e., prosthetics, orthodontics, periodontics, etc. Although the trend indicates an increase in the number of people being covered under various prepaid dental care programs, dental insurance remains inaccessible to a large portion of the population.

The Division continues to compile information on State and local dental health programs. A model state dental health plan is being developed which will serve as a guide to state dental directors in the development of comprehensive plans for dental activities. Information is being collected and two documents, "Federal Assistance for Dental Activities" and "Recent Legislation Affecting Dentistry" will be published in 1969 which will enable state and local dental directors to keep abreast of dental activities at the Federal level.

In summary the increase of $410,335 for Dental Health and 9 new positions are requested to cover the institution of 2 new programs in Oral Cancer, provide

for the evaluation of dental productivity studies at Louisville, Kentucky, enable the Dental Health Center in San Francisco, California to develop projects leading to the establishment of Cleft Lip and Palate treatment centers throughout the United States and support the study of twins having this malformation, extend the continuing education programs at the Dental Health Center aimed at producing automated teaching devices and programmed instruction which will double the number of programs demonstrating these techniques in 1969. The increase also includes $63,000 for built-in costs for annualization of positions new in 1968 and the annualization of the recent pay increase.

*Direct Operations—Nursing*

The keystone of nursing is practice. This must be studied, developed and supported if nursing services are to be adequate for the needs of modern health programs. For many years the extension of health services and facilities and the developments and changes in medical knowledge and practice, without adequate support for appropriate changes in nursing practice have resulted in a steady dilution in the quality and effectiveness of nursing in all settings. Opportunity for professional nurses to use their special knowledge and skill in practicing their own discipline and to collaborate appropriately with physicians in patient care has not kept pace with the needs of patients and with the prevention of illness.

Sound administrative practices and techniques and automatic equipment have not been widely applied in managing the delivery of nursing services. This results in a myriad of staffing patterns and a widespread inadequate utilization of scarce nursing skills. Poor utilization of professional skills dilutes the quality of care which patients receive. It is costly.

The gap between supply of nurses and the demand for their services can never be reconciled through numbers alone; the professional competencies of each practitioner must be used to the best possible advantage in all settings. Discriminating utilization of professional talent not only bridges the numerical gap between supply and demand, but also promotes job satisfaction which encourages nurses to remain active in their profession.

The total of $4,437,000 requested for 1969 will be used to demonstrate effective organization and management of nursing services and utilization of personnel and to assist hospitals and health agencies in applying these practices. It is also planned to develop new knowledge about patterns of nursing care through research and experimentation and to communicate this to the practitioner.

Professional nurse skills are in too short supply not to be used to their fullest potential. Experience in working with hospitals has demonstrated that utilization of nursing personnel can be markedly improved and that patients can receive more professional nursing care when those non-nursing activities which divert the nurse from the patient are provided by other groups within the hospital.

One of the most urgent needs is to improve the use of the knowledge and skills of clinical nurse specialists who are particularly needed in the hospital setting of today, in connection with many kinds of patient care and treatment. Improved utilization of specialized nursing personnel is also needed in other settings—schools, industry, group practice, and home health care.

Consultation services and technical assistance given to hundreds of health agencies help them realize their potential for nursing care through optimal organization, administration and utilization of available personnel.

The intramural program includes in-depth research of various types. For example, research design is being applied to a number of community nursing programs to evaluate nursing effectiveness; tools are being developed for evaluating health status of the individual, the family and the community, which can be used in measuring the effect of nursing service in the prevention of disease, early diagnosis and treatment of illness, reduction of disabilities, and hastening of rehabilitation. Similar studies are being designed to improve nursing methods in institutional settings, and to determine the actual cost of nursing care in these settings.

Of the increase requested for 1969, $200,000 and 3 positions will be used for recruitment contracts. Adequate and accurate information about nursing as a career is not reaching potential recruits in schools throughout the country. Guidance counselors and school officials are generally unaware of the opportunities for students in the nursing profession or of assistance that is available to

them in various types of nursing programs and of Federal funds which are available for this kind of support. The overall concept of recruitment is broadening to mean a process that begins with helping potential nurses become qualified to enter nursing school and continues throughout the nursing program to help them remain to graduate. The group considered as potential nurses has expanded as well to include the educationally deprived, minority groups and adults.

The percentage of young people who select nursing is small because of the increasing attractiveness of competing occupations and the availability of scholarship assistance in these areas. Although the number of admissions to nursing schools of female high school graduates has been increasing, the percentage of female high school graduates have been increasing, the percentage of female high school graduates entering schools of nursing has been decreasing (see Table 1).

TABLE 1.—FEMALE HIGH SCHOOL GRADUATES ADMITTED TO NURSING SCHOOLS

| Year | Admissions to nursing schools | Percent of female high school graduates |
|---|---|---|
| 1963–64 | 52,274 | 5.3 |
| 1964–65 | 57,180 | 4.9 |
| 1965–66 | 60,191 | 4.5 |

In 1969 contracts will be let with State and local educational agencies and others to encourage qualified youths of exceptional financial need to complete secondary school and to enter the field of nursing.

The remainder of the increase requested for 1969, $1,444,700 and 9 positions, will be used for a program to promote recruitment and refresher training of inactive registered nurses. This will increase the number who return and improve the quality of this important segment of nurse manpower. It should be an ongoing activity because of the dynamic nature of nursing—the numbers leaving and re-entering the profession at a later date, and rapid changes in practice and basic course content. Nurse Coordinators in every State will assist with recruitment and establishment and evaluation of refresher training programs.

This refresher training program was initiated in 1967 using reprogrammed funds with 46 contracts made with 45 states and the District of Columbia to employ nurse coordinators through 1968. These contracts are to be renewed in 1969.

In summary the increase of $1,690,200 for the Nursing Division provides $200,000 for recruitment activities, $1,444,700 for refresher training and $45,500 for built-in costs including annualization of positions new in 1968 and annualization of the recently enacted pay increase.

*Direct operations—Allied health manpower*

As we strengthen and expand our efforts to provide institutional and student support for education in the allied and public health specialties, we must also develop and improve our capabilities to provide expert professional and technical guidance on educational programs for these groups. We must possess more detailed knowledge and understanding of the current and future requirements for such personnel, and undertake continuous review and evaluation to assure that grant programs are meeting their objectives.

The attainment of such capabilities requires the allocation of direct resources to plan and undertake studies and demonstrations in such program areas as specific manpower shortages, geographic maldistribution, planning of curricula. utilization of existing health workers and determination of need for and the creation of new types of health workers. It requires the development of cooperative and close working relationships between the Public Health Service and other agencies with responsibilities and interest in manpower such as the Office of Education, Department of Labor, Office of Economic Opportunity, and Department of Housing and Urban Development to assure the use of Federal resources in areas of highest priority and greatest need. It requires continued efforts, working cooperatively with a multiplicity of institutions, professional groups, organizations and agencies responsible for the training, certification, licensure

and employment of the more than 85 allied health occupational categories, to develop orderly and efficient patterns of education, and productive career opportunities. It requires careful program review, and evaluation of grant support programs and expert consultation and technical assistance to the nearly 500 grantee institutions receiving support through the allied and public health training grant programs.

A coordinated national effort to undertake such a program was initiated in January 1967 through the establishment of the Division of Allied Health Manpower. In addition to providing program administration for the several grant programs authorized under the new Allied Health Professions Personnel Training Act, the public health training grants (Sec. 306 and 309, PHS Act) and those portions of the Health Professions Educational Assistance Act relating to optometry, podiatry, pharmacy, and veterinary medicine, the Division has undertaken efforts in a number of areas to develop a better understanding of the supply, distribution and requirements for allied health manpower, and to encourage the design of educational programs which are responsive to demands of new health technology and the entire range of community, environmental and personal health services.

A recently completed survey, undertaken cooperatively with the American Hospital Association, has provided valuable information on manpower resources in hospitals throughout the country. This joint undertaking was designed to determine the number and types of personnel employed in hospitals, current vacancies and estimates of persons needed to give optimum care to hospitalized patients.

Four pilot projects in Oklahoma, Oregon, Pennsylvania, and Washington also hold promise to increase our knowledge and understanding of health manpower resources. These projects are designed to encourage allied health manpower assessment and analysis and to develop within the States a facility for collection, analysis and distribution of health manpower data.

Development of Educational Programs—Support was provided to develop training programs in two health specialties—orthopedic assistant and psychology assistant. The program for orthopedic assistants has been undertaken with a view to training discharged medical corpsmen for this specialty. Another program recently completed under contract with the National Committee for Careers in Medical Technology undertook the construction of curriculum content for refresher training of inactive medical technologists returning to the work force. Particular emphasis during 1968 is also being placed on cooperative planning with other agencies in the development of such activities as training for the economically disadvantaged, improvement of health curricula in elementary and secondary education, and the development of career opportunities in occupations in human services fields.

Partnership for Health programs throughout the country must, in order to accomplish their goals, have an adequate supply of specially trained manpower—specialists in the planning of comprehensive health services programs, as well as additional specialists required in the development of new and improved methods of providing health services. Effective implementation of specialized training authorized through Comprehensive Health Planning legislation will require close coordination with general health manpower efforts, and particularly basic public health training authorized through Sections 306 and 309 of the PHS Act. Such a task requires activities by staff of the Bureau of Health Manpower to stimulate the inclusion of health planning concepts and course offerings in the curricula available to the spectrum of health disciplines. Concurrent with such program development is the responsibility for staff and advisory committee review and evaluation of comprehensive health planning training proposals and for staff consultation for projects which have been undertaken.

In order to strengthen staff capability for the growing responsibilities required in improving education and training programs in allied health manpower, an increase of seven positions and $179,600 is requested in 1969. These resources will be used (1) to strengthen our capabilities in the development of better information on the supply, distribution and needs for health manpower, particularly in assisting States and communities to develop such capabilities; (2) to provide additional professional staff for support in the development of training programs for new types of health workers and the improvement of educational and employment opportunities for existing allied health workers, and (3) to provide support for program development, centralized receipt, referral, and costs of expert committee review of training programs in comprehensive health planning.

Evaluation of Grants to Schools of Public Health—P.L. 90–174, Partnership for Health Amendments of 1967 (Sec. 8(c)), which extended the program of formula grants to schools of public health provided for the allocation of 1% of funds appropriated for such grants to be used for evaluation.

With the rapid changes which are taking place in the organization and delivery of community and environmental health services, programs for the training of personnel to carry out such services must be continuously reviewed, modified and expanded to keep pace with changing requirements.

In order to assist the schools participating in this program in the review and evaluation of teaching programs supported by the grants, and to provide continuous planning and review of the program of grants to schools of public health, two positions and $46,000 are requested for 1969. These funds will provide for one professional and one supporting staff, necessary travel, and expert outside consultation, in order to carry out this important function.

In summary, the overall increase of $276,700 for allied health manpower will provide $225,600 for the nine new positions requested and for consultant services required for the comprehensive program and evaluation of grants to schools of public health and $51,100 for built-in costs including annualization of positions new in 1968 and for annualization of the recently enacted pay increase.

*Direct operations—Health Manpower Educational Services*

The Division of Health Manpower Educational Services provides the central administration of grant, loan and operational programs for education and training in the health occupations, and provides the consultative, evaluative, informational, procedural, and related services for the support of health manpower grant and loan programs. The increase in health manpower programs in 1969, particularly the increases requested for educational improvement grants, traineeships, scholarships, project grants and loans amounting to grant increases totaling $33,719,000, requires an increase in the level of supporting services in order to carry out program requirements. Two new positions and $25,900 are therefore requested. In 1969, the principal increases are requested to initiate the operation of a National Health Manpower Intelligence System and a national clearinghouse on health manpower information. These are discussed below.

*Health Manpower Intelligence System.*—The mission to provide leadership in planning, initiating, conducting, and evaluating the Nation's health manpower programs requires that comprehensive information for the Nation on supply, distribution, and utilization be accessible to plan and decide wisely how to achieve program goals and objectives. With the advent of electronic computers and modern management sciences, notable progress has been made in data processing techniques, communications, statistical and mathematical routines and research activities. The Bureau of Health Manpower, with its new and expanding programs needs to avail itself of this advanced technology. Accordingly, for 1969, $750,000 and 5 positions are requested to initiate a long-range plan to place into operation a National Health Manpower Intelligence System of the Bureau of Health Manpower to provide information to cover the health manpower universe.

Implementation of the system will be approached in sequence phases—Phase 1, System Survey (Requirements); Phase 2, System Development, Phase 3, System Installation and Demonstration. Factors such as resources and costs, demand that management evaluate each segment of activity to insure that the total goals and objectives are attainable prior to proceeding with subsequent phases. In 1973 this transition should be completed and the intelligence system installed and demonstrated.

The estimate of $750,000 includes $627,000 in contracts of which $250,000 is to be used to contract for a system analyses survey to produce a master plan which will include proposed system specifications and appropriate management and financial plans for its development. Pending development and installation of the HMIS, an interim system will be operational early in 1969. A total of $377,000 is requested for contracts in connection with development of health manpower utilization data and for purchase of information from institutions, professional associations and other agencies. Data obtained will be used to develop information on supply and utilization of health manpower, their status and availability, geographic distribution, etc., also a broad spectrum of information pertaining to schools, faculty and students. The cost of personnel to work on the interim system and the long-range system, together with machine rental costs connected with conversion of information obtained to the requirements and format of the interim system is estimated at $123,000.

The staff requested will (1) design overall specifications for total project requirements; (2) provide full-time participation for monitoring contracts; (3) coordinate the acquisition of information from professional associations, universities, and other government agencies, etc.; and (4) evaluate results of end products acquired.

The staff will also provide technical assistance for the development and implementation of Bureau operating systems necessary for day-to-day decision making, planning, and evaluation of Bureau activities.

*Clearinghouse.*—Concurrent with the initiation of the Health Manpower Intelligence System will be the establishment of a health manpower information clearinghouse which will provide information on the content and availability of health manpower education and training programs and the nature of financial assistance for students. Also needed are basic reference materials, including the catalogues and publications of all institutions with programs in the area of health manpower training. The knowledge gathered in the data collection system described above will be one of the major holdings of the clearinghouse. The cost of establishing the clearing house which will also serve as a health manpower reference center is estimated at four positions and $150,000 in 1969. The ability to train health manpower is directly related to capacity and adequacy of educational facilities and their educational programs. Knowledge of this is absolutely necessary to plan the Public Health Service's role in this vital area.

In summary, of the total increase of $942,300 requested in 1969 for Health Manpower Educational Services, $925,900 is for program increases described above and $16,400 is for built-in costs including annualization of positions new in 1968 and annualization of the recently enacted pay increase.

PROGRAM DIRECTION AND MANAGEMENT SERVICES

| | 1968 estimate | | 1969 estimate | | Increase or decrease | |
|---|---|---|---|---|---|---|
| | Positions | Amount | Positions | Amount | Positions | Amount |
| Personnel compensation and benefits | 89 | $1,168,400 | 95 | $1,239,500 | +6 | +$71,100 |
| Other expenses | | 132,000 | | 135,500 | | +3,500 |
| Total | 89 | 1,300,400 | 95 | 1,375,000 | +6 | +74,600 |

The Office of the Bureau Director is charged with furnishing leadership and direction to the various programs of the Bureau concerned with the education and utilization of health manpower; providing a coordinating point with other bureaus in the Public Health Service and other agencies; and with State and local government and national associations and organizations. It provides administrative management services such as personnel management, financial management and various housekeeping services to insure the efficient operation of the Bureau programs. It provides for consistency throughout the divisions of the Bureau in the quest of maximum operational effectiveness. The Bureau also provides a focus for development, coordination and evaluation of programs concerned with manpower planning, study and supply.

At the time the Bureau was established in January, 1967, minimum staffing was provided for the program direction and management services to be furnished by the Office of the Director to the several Divisions. With program increases being requested in the 1969 budget for research and other manpower activities, the program direction and management services provided the several Divisions need to be strengthened.

Therefore the estimate for 1969 in addition to providing $21,600 for built-in increases principally for annualization of the pay increase, includes an additional 6 positions and $53,000 for special areas of need such as educational and training communications, legislative activities, planning, programming, and information activities.

Included in the six additional positions are two positions for educational and training communications. The success of health manpower programs demands that effective communication and collaboration be developed between the educational community and the health community. Although important, funds have not been available within present resources to finance Educational and Training Communications. The lack of coverage of this important area has placed an undue burden on the Bureau Director and the Deputy Director, who from necessity, have had to take on increasing responsibilities in this field.

In 1969, it is proposed to activate this function to serve as the Public Health Service focus for the coordination and evaluation of educational and training programs for the health occupations (secondary, collegiate, graduate, continuing and specialty); conduct and support activities to develop and demonstrate educational communications methods, techniques and systems including audio-visuals; provide consultation and assistance in the development and improvement of educational and training programs; and maintain requisite working relationships with educational institutions, organizations and groups concerned with education and training for the health occupations.

Also requested for 1969 is an analyst position to support the Special Assistant for Legislation. This position will help meet the need to strengthen the Bureau's competency to marshall and analyze current knowledge of the legislative base and legislative activities in areas of significance to health manpower, particularly those outside the Bureau of Health Manpower such as Office of Education, Department of Labor, Office of Economic Opportunity and Welfare Administration, and the Department of Defense.

Another position requested will provide for a trainee to be assigned to the Bureau program planning staff. Inherent in a newly established bureau such as Bureau of Health Manpower is the need to give ever increased emphasis to program planning. This trainee position represents a step toward developing competency to help support the Bureau's responsibilities in this important area.

The remaining positions provide for a secretary and for a visual information specialist to round out the information activities and services furnished the several Divisions.

NEW POSITIONS REQUESTED, FISCAL YEAR 1969

| | Grade | Annual salary |
|---|---|---|
| Physician manpower: | | |
| Medical Officer | GS–16 | $20,982 |
| Engineer | GS–13 | 13,507 |
| Statistician | GS–12 | 11,461 |
| Commissioned officers: Assistant grade | | 6,606 |
| Subtotal (4) | | 52,556 |
| Dental health: | | |
| Medical officer | GS–16 | 20,982 |
| Assistant branch chief | GS–15 | 18,404 |
| Medical officer | GS–15 | 18,404 |
| Public health program specialist | GS–14 | 15,841 |
| Do | GS–13 | 13,507 |
| Administrative staff assistant | GS–9 | 8,054 |
| Clerical assistant (2) | GS–5 | 11,130 |
| Clerical assistant | GS–3 | 4,466 |
| Subtotal (9) | | 110,788 |
| Nursing: | | |
| Nurse (5) | GS–13 | 67,535 |
| Public health program specialist (2) | GS–13 | 27,014 |
| Public health program specialist | GS–12 | 11,461 |
| Statistician | GS–12 | 11,461 |
| Clerical assistant (3) | GS–5 | 16,695 |
| Subtotal (12) | | 134,166 |
| Allied health manpower: | | |
| Education specialist | GS–14 | 15,841 |
| Public health program specialist | GS–14 | 15,841 |
| Public health program specialist (3) | GS–13 | 40,521 |
| Clerical assistant (4) | GS–5 | 22,260 |
| Subtotal (9) | | 94,463 |
| Health manpower educational services: | | |
| Information specialist | GS–15 | 18,404 |
| Management analyst | GS–14 | 15,841 |
| Systems analyst | GS–14 | 15,841 |
| Do | GS–13 | 13,507 |
| Programer (3) | GS–12 | 34,383 |
| Public health program specialist (2) | GS–11 | 19,314 |
| Library assistant | GS–7 | 6,734 |
| Clerical assistant | GS–5 | 5,565 |
| Subtotal (11) | | 129,589 |

NEW POSITIONS REQUESTED, FISCAL YEAR 1969—Continued

| | Grade | Annual salary |
|---|---|---|
| Program direction and management services: | | |
| Public health program specialist | GS–15 | 18,404 |
| Legislative assistant | GS–13 | 13,507 |
| Administrative staff assistant | GS–11 | 9,657 |
| Visual information specialist | GS–9 | 8,054 |
| Clerical assistant | GS–6 | 6,137 |
| Do | GS–5 | 5,565 |
| Subtotal (6) | | 61,324 |
| Total new positions, all activities (51) | | 582,826 |

BIOGRAPHICAL SKETCH

Name: Leonard D. Fenninger, M.D.
Position: Director, Bureau of Health Manpower.
Birthplace and date: Hampton, Virginia, October 3, 1917.
Education: A.B. Princeton, 1938; M.D. University of Rochester, 1943.
Experience: Present—Director, Bureau of Health Manpower, PHS; 1961–1966—Medical Director, Strong Memorial Hospital, Rochester, N.Y.; Associate Dean, Professor of Medicine, Professor and Chairman, Department of Health Services, Univ. of Rochester, School of Medicine and Dentistry; 1958–1961—Associate Dean, Associate Professor of Medicine, University of Rochester; 1954–1958—Assistant Dean, Professor of Medicine, School of Medicine and Dentistry, Univ. of Rochester; 1953–1954—Research Associate, part time. George Washington University, School of Medicine; 1953—Surgeon (R), USPHS: 1952–1953—Senior Assistant Surgeon (R), USPHS; 1948–1952—Fellow, Cancer Research, Rochester; 1947–1952—Instructor in Medicine, Rochester; 1946–1947—Assistant Resident Physician, Rochester; 1945–1946—Assistant, Pathology, Rochester; 1945—Assistant, Radiology, Rochester; 1944—Assistant, Medicine, School of Medicine and Dentistry, University of Rochester; 1944—Intern, Medicine, Strong Memorial Hospital, Rochester.
Association memberships: American Medical Association; American Association for the Advancement of Science; Association of American Medical Colleges (Asst. Sec. 1956–57); New York State, Monroe County, Medical Society; New York Academy of Sciences: Rochester Academy of Medicine; American Association of Cancer Research; Phi Beta Kappa; Sigma XI; Alpha Omega Alpha.
Special awards, citations, publications: Citation, University of Rochester Alumni Federation, 1960; Diplomat, American Board of Internal Medicine.

ATTRACT STUDENTS, AID THEM, PROVIDE EDUCATIONAL OPPORTUNITIES

Senator HILL. Dr. Fenninger.

Doctor, before you proceed, I might state I think you will be the last witness we will be able to hear this morning. It is now practically 1 o'clock.

If there are any other witnesses who are here we will have to let them go over until some subsequent date which I hope will be Monday but we will give you notice. So if you have reason to leave you may do so.

All right, doctor, you may proceed in your own way.

Dr. FENNINGER. Mr. Chairman and members of the committee, I am pleased to have this opportunity to present the budget of the Bureau of Health Manpower.

The Bureau of Health Manpower has been in existence a little more than a year. Its major tasks are to assure that men and women in medicine, dentistry, nursing, and practitioners of the other important health professions and occupations are well prepared to bring the fruits of modern knowledge in the fields of health to all Americans.

To accomplish these tasks the Bureau works in concert with educational and training institutions and other agencies and organizations, both public and private, to attract able students into careers in health, to aid them financially in preparation for their careers and to provide opportunities for advanced and continuing education so that they may become and remain skilled practitioners, outstanding teachers, strong administrators, and seekers of new knowledge.

To further sound educational opportunities the programs of the Bureau provide support to strengthen the curricula in existing schools, to improve their faculties and the facilities in which teaching and learning occur.

Programs are also aimed at the development of new schools, of new courses and of persons with new types of skills, particularly those who will provide services to the poor in urban and rural settings, who will participate in the improvement of the environment and in the prevention of illness.

It also assists in the establishment of educational programs in educational institutions to prepare people in planning for health services and in administering them. Among its most important functions is the assessment for health manpower needs, types of educational and training programs which will increase the quality and quantity of health services and will aid in making health services available to all who need them.

### Disparity Between Demand and Availability of Health Services

The people of the United States, acting through the Congress, have determined that financial barriers should not limit access to health care. The enactment of medicare and medicaid are clear indications of this determination.

People expect to have access to health care when they need it. More and more they are using the services provided by physicians, nurses, dentists, and other important practitioners of the health professions. They are seeking help in hospitals, in clinics, in emergency departments, in neighborhood centers, and in doctors' offices.

They seek advice on how to remain well and they seek help when illness overtakes them. Yet health services are not available to all who need them. There is an increasing disparity between the demand for health services and the availability of people in the health professions and occupations who can render services of high quality.

We are aware of shortages, in some cases of critical proportions, in most categories of health manpower. In some circumstances inadequately prepared people must be used instead of those who are skilled. Distribution of services is uneven among socioeconomic groups and geographic locations. Lack of qualified staff has caused some hospital and nursing-home beds to be shut down and prevented new facilities from being opened.

### Public and Private Sectors Striving To Improve Health Services

The public and private sectors of this Nation are striving to improve health services through new and expanded health insurance, through construction and renovation of facilities for health care, education, and research. Increasing support is being provided for educational programs and research. Planning for health services is now being widely undertaken so that they may be more available and effective.

The essential ingredient of all these efforts—public and private—is manpower, able individuals drawn from every portion of our society who are provided with the highest quality of education and training so that they may serve others skillfully.

ROLE OF THE FEDERAL GOVERNMENT IN DEVELOPING HEALTH MANPOWER

The Federal Government has become a supporting partner with many institutions and organizations in developing qualified people to provide health services. It has clearly recognized the national needs and purposes which the schools of the health professions serve.

Federal programs have therefore been aimed at the urgent needs for: (1) Teachers to prepare additional students and qualified people with special skills for supervisory roles in education and patient care; (2) mechanisms to encourage, stimulate, and support more programs of high quality for education in the field of health; (3) support of the efforts of institutions to improve the quality of training while increasing their enrollments; (4) support for the study, development, and establishment of new curriculums and new approaches to education in the health professions and occupations; (5) programs to improve the quality of those in practice and to prepare them for changes in knowledge and technology; and (6) the attraction of able candidates in all health professions and occupations.

SUMMARY OF BUDGET REQUEST

The 1969 budget estimate, amounting to $197,400,000, represents an increase of approximately $42 million over funds available in 1968. It includes provisions for programs which will reduce the manpower deficiencies in each of the major disciplines.

The principal increases needed are for institutional support, for which an increase of $27,229,000 is requested, and for student assistance, for which an additional $10,470,000 is requested. Other major increases are for research in physician education, $702,000; $1,445,000 for a nurse refresher training program, and $900,000 for a health manpower data bank, intelligence system, and information clearinghouse.

INSTITUTIONAL SUPPORT

The schools of the health professions and occupations constitute major national resources. Basic educational improvement grants represent the minimum Federal investment to assure the continued operation and growth of these vital institutions.

They have already resulted in strengthening the educational programs of the eligible schools which have received them. The schools have been able, through these grants, to increase their enrollment in the fall of 1967. These funds have added stability to schools and have made advanced budgetary planning possible.

REASONABLE ENROLLMENT INCREASE

Senator Hill. Has there been a pretty good increase in enrollment in 1967?

Dr. Fenninger. The increase, considering the resources available to the schools and the length of time required to plan for and gather faculty, equipment and facilities, I think was a reasonable increase.

Several schools have been able to initiate curriculums that had been planned for several years but required additional funds to implement

them. Others have been able to develop visual educational programs to purchase much-needed equipment for teaching. Most schools have used their funds to strengthen their faculties and to maintain existing programs.

MAINTENANCE OF EXISTING PROGRAMS NOT SUFFICIENT

But maintenance of existing programs is not sufficient to meet our present needs, to say nothing of the needs of the future. New courses must be established. Teaching methods must be improved through research in education in the fields of health.

HEALTH PROFESSIONS SPECIAL IMPROVEMENTS GRANTS

The Federal Government has an obligation to encourage and participate in these programs. The health professions special improvements grants provide the means for such participation. Until fiscal year 1968, funds were not available for these grants.

We have just completed the review of the first applications. We can see the great contributions to the quality of health professions education that can be expected from these grants in the future. Of the eligible schools, 135 have submitted applications. Had it not been general knowledge that the funds were limited and highest priority would be given to schools having the most critical financial problems, we believe all of the schools would have applied.

Use of Funds

The schools propose to use the funds they have requested in various ways. The applications from some schools in serious financial straits reflect careful planning to offset their most critical weaknesses. Other schools are improving their curriculums by adding new courses.

Some of these new courses will prepare students in community health. Others represent a new body of knowledge that has come from breakthroughs in research. What is most exciting is the thoughtful and imaginative planning which the schools are doing and the fact that for the first time the Federal Government is assisting the schools to meet some of the critical problems which confront education in the health professions. A major portion of the increase in funds requested for fiscal year 1969 is for health professions special improvement grants.

Increased Funding

Increases amounting to $16,325,000 are requested for basic and special improvement grants to health professions schools of medicine, dentistry, osteopathy, optometry, and podiatry; and $7,250,000 for basic improvement grants for the allied health professions; and $1,554,000 to enable institutions to improve and enlarge their programs relating to the training of public health personnel.

Student Assistance

Provision of scholarships and loans to students with serious financial need is an essential component of any program designed to overcome the shortage of trained health manpower. Our requested increase of $10,470,000 for student assistance includes $8,290,000 for scholarships and loans to be made to more than 14,000 additional students.

It is equally essential to prepare teachers, supervisors, and administrators of health services. Within the balance of the increase are funds to assist men and women to undertake advanced or special study to become teachers, administrators, and clinical specialists. They are teachers and administrators who will function in the preservation of health, in the prevention of illness, and in planning for improved and more realistic health services.

Funds are also requested to enable workers in the allied health disciplines to improve their level of competence to meet the changing demands of new health technologies. Under these provisions more than 2,500 additional persons will be trained in 1969.

### Research Grant Funds

An increase of $702,000 in research grant funds requested to explore new methods in premedical and medical education. These funds will enable the medical schools to increase their effectiveness in educating more physicians and in preparing them to provide comprehensive care within the changing patterns of community health services.

### Refresher Training for Nurses

There are aproximately 1 million registered nurses in the United States but only about two-thirds of them are in active practice. Of those who are practicing, 25 percent work part time. Many nurses leave active practice each year, particularly young women with family responsibilities. Of these a substantial proportion later return to active practice.

Because of the rapid changes in medical knowledge and technology, these nurses must learn new techniques and acquire new knowledge when they return. Refresher courses will encourage a greater number of nurses to return to practice each year by updating their skills in providing modern nursing care. $1,445,000 is requested for this program.

### Health Manpower Data Bank, Intelligence System and Information Clearinghouse

The planning and development of health manpower programs to best serve the Nation's needs must have a base of accurate and current information on the supply, distribution and utilization of health manpower, on the needs, capabilities, and resources for health manpower training, and the availability of financial assistance for students, together with basic reference materials.

Information in these areas is fragmented and incomplete. Much better data are required if we are to direct our efforts most effectively. The establishment of a health manpower data bank and information clearinghouse will provide a central place for storage and retrieval of health manpower information derived from many sources, private and public.

Such information is needed for planning by institutions, organizations, and agencies which must develop and support education for the health occupations. $900,000 is requested for this activity.

The funds requested for institutional support, for student aid and for the development of new curricula and new methods of education

in the fields of health will further our progress in preparing able students to serve health needs of all Americans in the future.

I shall be glad to answer any questions.

REDUCED REQUEST

Senator HILL. You have brought us a splendid statement. In spite of the urgency and the compelling need for your programs you got quite a reduction, didn't you?

Dr. FENNINGER. Yes, sir.

Senator HILL. Both from the Department and also from the Bureau of the Budget. It looks like a total of about $43 million. These are all very vital programs, aren't they?

Dr. FENNINGER. They are, sir.

Senator HILL. If you were sick today you would think so, wouldn't you?

Dr. FENNINGER. I think so, even being well today.

Senator HILL. Is there anything you gentlemen would like to add? You have brought us a splendid statement.

(The summary referred to on p. 1299 follows:)

## Summary of Anticipated Construction of Hospitals and Related Health Facilities (Under Title VI of the Public Health Service Act, 1964 Amendments) if There Were no Limitation on Federal Assistance for Fiscal Years 1969 and 1970

UNITED STATES AND TERRITORIES

| State and fiscal year | Number of projects | Estimated cost (thousands) | | Beds or related health facilities added, by type of facility | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | | | | Number of beds | | | | Number of related health facilities | | | | |
| | | Total cost | Federal share | Total | General hospital | TB hospital | Long-term care facilities | Total | Diagnostic or treatment center | Rehabilitation facility | Public health center | State health laboratory |
| Total | 2,881 | $6,112,401 | $2,504,431 | 189,046 | 133,090 | 644 | 55,312 | 593 | 238 | 141 | 210 | 4 |
| 1969 | 1,992 | 4,055,962 | 1,650,166 | 124,079 | 88,329 | 644 | 35,106 | 447 | 195 | 112 | 137 | 3 |
| 1970 | 889 | 2,056,439 | 854,265 | 64,967 | 44,761 | ---- | 20,206 | 146 | 43 | 29 | 73 | 1 |
| Alabama | 60 | 70,680 | 42,408 | 2,163 | 1,754 | 134 | 275 | 14 | 1 | 6 | 7 | ---- |
| 1969 | 28 | 30,865 | 18,519 | 1,148 | 739 | 134 | 275 | 7 | 1 | 2 | 4 | ---- |
| 1970 | 32 | 39,815 | 23,889 | 1,015 | 1,015 | ---- | ---- | 7 | ---- | 4 | 3 | ---- |
| Alaska | 12 | 17,000 | 6,800 | 232 | 167 | ---- | 65 | 5 | 5 | ---- | ---- | ---- |
| 1969 | 12 | 17,000 | 6,800 | 232 | 167 | ---- | 65 | 5 | 5 | ---- | ---- | ---- |
| 1970 | ---- | ---- | ---- | ---- | ---- | ---- | ---- | ---- | ---- | ---- | ---- | ---- |
| Arizona | 182 | 78,013 | 36,824 | 3,468 | 2,373 | ---- | 1,095 | 117 | 63 | 21 | 33 | ---- |
| 1969 | 182 | 78,013 | 36,824 | 3,468 | 2,373 | ---- | 1,095 | 117 | 63 | 21 | 33 | ---- |
| 1970 | ---- | ---- | ---- | ---- | ---- | ---- | ---- | ---- | ---- | ---- | ---- | ---- |
| Arkansas | 38 | 49,309 | 25,522 | 2,246 | 1,682 | ---- | 564 | 5 | ---- | 4 | 1 | ---- |
| 1969 | 14 | 35,160 | 18,025 | 1,434 | 1,149 | ---- | 285 | 1 | ---- | 1 | ---- | ---- |
| 1970 | 24 | 14,149 | 7,497 | 812 | 533 | ---- | 279 | 4 | ---- | 3 | 1 | ---- |
| California | 102 | 310,205 | 102,372 | 10,136 | 7,789 | 388 | 1,959 | 23 | 11 | 7 | 5 | ---- |
| 1969 | 101 | 295,805 | 97,572 | 8,936 | 7,789 | 388 | 759 | 23 | 11 | 7 | 5 | ---- |
| 1970 | 1 | 14,400 | 4,800 | 1,200 | ---- | ---- | 1,200 | ---- | ---- | ---- | ---- | ---- |

| | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|
| Colorado | 57 | 80,929 | 35,784 | 3,142 | 2,614 | 528 | 13 | 5 | 4 | 4 | |
| 1969 | 52 | 77,531 | 34,238 | 2,902 | 2,454 | 448 | 13 | 5 | 4 | 4 | |
| 1970 | 5 | 3,398 | 1,546 | 240 | 160 | 80 | | | | | |
| Connecticut | 14 | 59,386 | 20,030 | 580 | 325 | 255 | | | | | |
| 1969 | 13 | 59,286 | 19,997 | 580 | 325 | 255 | | | | | |
| 1970 | 1 | 100 | 33 | | | | | | | | |
| Delaware | 11 | 13,825 | 5,609 | 400 | 275 | 125 | 4 | 1 | | 3 | |
| 1969 | 6 | 8,200 | 3,122 | 265 | 215 | 50 | 2 | | | 2 | |
| 1970 | 5 | 5,625 | 2,487 | 135 | 60 | 75 | 2 | 1 | | 1 | |
| District of Columbia | 13 | 85,749 | 33,405 | 1,422 | 592 | 830 | 2 | 1 | | 1 | |
| 1969 | 13 | 85,749 | 33,405 | 1,422 | 592 | 830 | 2 | 1 | | 1 | |
| 1970 | | | | | | | | | | | |
| Florida | 129 | 165,742 | 73,874 | 9,759 | 5,950 | 3,809 | 29 | 17 | 12 | | |
| 1969 | 121 | 162,179 | 72,429 | 9,625 | 5,816 | 3,809 | 23 | 13 | 10 | | |
| 1970 | 8 | 3,563 | 1,445 | 134 | 134 | | 6 | 4 | 2 | | |
| Georgia | 76 | 100,889 | 40,821 | 3,530 | 2,227 | 1,303 | 9 | 1 | 1 | 7 | |
| 1969 | 38 | 60,039 | 23,565 | 1,980 | 1,333 | 647 | 5 | 1 | 1 | 3 | |
| 1970 | 38 | 40,850 | 17,256 | 1,550 | 894 | 656 | 4 | | | 4 | |
| Hawaii | 31 | 48,364 | 22,230 | 847 | 508 | 339 | 14 | 4 | 1 | 9 | |
| 1969 | 23 | 41,262 | 18,967 | 696 | 464 | 232 | 10 | 4 | 1 | 5 | |
| 1970 | 8 | 7,102 | 3,263 | 151 | 44 | 107 | 4 | | | 4 | |
| Idaho | 9 | 11,845 | 3,786 | 595 | 580 | 15 | 2 | 1 | | 1 | |
| 1969 | 5 | 10,053 | 2,889 | 380 | 380 | | | | | | |
| 1970 | 4 | 1,792 | 897 | 215 | 200 | 15 | 2 | 1 | | 1 | |
| Illinois | 129 | 359,380 | 129,230 | 9,444 | 6,720 | 2,724 | 29 | 12 | 10 | 4 | 3 |
| 1969 | 81 | 204,434 | 67,699 | 5,096 | 3,804 | 1,292 | 22 | 12 | 7 | 1 | 2 |
| 1970 | 48 | 154,946 | 61,531 | 4,348 | 2,916 | 1,432 | 7 | | 3 | 3 | 1 |
| Indiana | 27 | 114,984 | 38,101 | 2,827 | 2,697 | 130 | 3 | 1 | 2 | | |
| 1969 | 22 | 108,005 | 35,765 | 2,595 | 2,465 | 130 | 1 | 1 | | | |
| 1970 | 5 | 6,979 | 2,336 | 232 | 232 | | 2 | | 2 | | |

## Summary of Anticipated Construction of Hospitals and Related Health Facilities (Under Title VI of the Public Health Service Act, 1964 Amendments) if There Were no Limitation on Federal Assistance for Fiscal Years 1969 and 1970—Continued

UNITED STATES AND TERRITORIES—Continued

| State and fiscal year | Number of projects | Estimated cost (thousands) | | Beds or related health facilities added, by type of facility | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | | | | Number of beds | | | | Number of related health facilities | | | | |
| | | Total cost | Federal share | Total | General hospital | TB hospital | Long-term care facilities | Total | Diagnostic or treatment center | Rehabilitation facility | Public health center | State health laboratory |
| Iowa | 41 | 132,300 | 44,200 | 3,546 | 1,771 | ---- | 1,775 | ---- | ---- | ---- | ---- | ---- |
| 1969 | 18 | 54,900 | 18,300 | 1,293 | 633 | ---- | 660 | ---- | ---- | ---- | ---- | ---- |
| 1970 | 23 | 77,400 | 25,900 | 2,253 | 1,138 | ---- | 1,115 | ---- | ---- | ---- | ---- | ---- |
| Kansas | 25 | 54,252 | 19,176 | 3,603 | 3,332 | ---- | 271 | 2 | ---- | 1 | 1 | ---- |
| 1969 | 20 | 36,952 | 12,256 | 2,104 | 1,883 | ---- | 221 | 2 | ---- | 1 | 1 | ---- |
| 1970 | 5 | 17,300 | 6,920 | 1,499 | 1,449 | ---- | 50 | ---- | ---- | ---- | ---- | ---- |
| Kentucky | 61 | 81,504 | 41,712 | 3,009 | 2,274 | ---- | 735 | 18 | 9 | 4 | 5 | ---- |
| 1969 | 30 | 22,530 | 11,700 | 710 | 495 | ---- | 215 | 11 | 5 | 2 | 4 | ---- |
| 1970 | 31 | 58,974 | 30,012 | 2,299 | 1,779 | ---- | 520 | 7 | 4 | 2 | 1 | ---- |
| Louisiana | 28 | 58,475 | 22,353 | 3,094 | 2,741 | ---- | 353 | 8 | 1 | 3 | 4 | ---- |
| 1969 | 25 | 54,975 | 20,753 | 3,004 | 2,651 | ---- | 353 | 7 | 1 | 2 | 4 | ---- |
| 1970 | 3 | 3,500 | 1,600 | 90 | 90 | ---- | ---- | 1 | ---- | 1 | ---- | ---- |
| Maine | 31 | 42,370 | 19,935 | 1,416 | 781 | ---- | 635 | 4 | 4 | ---- | ---- | ---- |
| 1969 | 16 | 15,950 | 6,825 | 511 | 194 | ---- | 317 | 2 | 2 | ---- | ---- | ---- |
| 1970 | 15 | 26,420 | 13,110 | 905 | 587 | ---- | 318 | 2 | 2 | ---- | ---- | ---- |
| Maryland | 18 | 105,251 | 38,413 | 2,339 | 1,615 | ---- | 724 | 2 | ---- | ---- | 2 | ---- |
| 1969 | 18 | 105,251 | 38,413 | 2,339 | 1,615 | ---- | 724 | 2 | ---- | ---- | 2 | ---- |
| 1970 | ---- | ---- | ---- | ---- | ---- | ---- | ---- | ---- | ---- | ---- | ---- | ---- |

| | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|
| Massachusetts | 48 | 175,601 | 67,636 | 4,151 | 2,822 | 1,329 | 2 | | 2 | |
| 1969 | 34 | 134,422 | 51,164 | 2,837 | 1,958 | 879 | 2 | | 2 | |
| 1970 | 14 | 41,179 | 16,472 | 1,314 | 864 | 450 | | | | |
| Michigan | 47 | 297,240 | 113,402 | 8,540 | 6,560 | 1,980 | 2 | | 1 | 1 |
| 1969 | 35 | 168,240 | 66,372 | 4,778 | 3,598 | 1,180 | 2 | | 1 | 1 |
| 1970 | 12 | 129,000 | 47,030 | 3,762 | 2,962 | 800 | | | | |
| Minnesota | 139 | 178,359 | 80,270 | 7,094 | 2,595 | 4,499 | 5 | 1 | 3 | 1 |
| 1969 | 89 | 105,924 | 47,672 | 3,980 | 1,381 | 2,599 | 4 | | 3 | 1 |
| 1970 | 50 | 72,435 | 32,598 | 3,114 | 1,214 | 1,900 | 1 | 1 | | |
| Mississippi | 13 | 28,210 | 18,807 | 1,041 | 1,041 | | 2 | | 2 | |
| 1969 | 13 | 28,210 | 18,807 | 1,041 | 1,041 | | 2 | | 2 | |
| 1970 | | | | | | | | | | |
| Missouri | 52 | 153,146 | 75,893 | 3,696 | 2,530 | 1,166 | 1 | 1 | | |
| 1969 | 36 | 73,819 | 36,230 | 2,421 | 1,255 | 1,166 | 1 | 1 | | |
| 1970 | 16 | 79,327 | 39,663 | 1,275 | 1,275 | | | | | |
| Montana | 31 | 27,799 | 11,070 | 865 | 573 | 292 | | | | |
| 1969 | 29 | 27,199 | 10,830 | 815 | 573 | 242 | | | | |
| 1970 | 2 | 600 | 240 | 50 | | 50 | | | | |
| Nebraska | 47 | 72,470 | 22,540 | 2,908 | 1,658 | 1,250 | | | | |
| 1969 | 28 | 48,150 | 12,812 | 1,608 | 1,148 | 460 | | | | |
| 1970 | 19 | 24,320 | 9,728 | 1,300 | 510 | 790 | | | | |
| Nevada | 10 | 25,375 | 10,244 | 530 | 280 | 250 | 3 | 1 | 2 | |
| 1969 | 9 | 25,175 | 10,144 | 530 | 280 | 250 | 2 | | 2 | |
| 1970 | 1 | 200 | 100 | | | | 1 | 1 | | |
| New Hampshire | 20 | 36,550 | 11,600 | 1,256 | 793 | 463 | | | | |
| 1969 | 17 | 34,000 | 10,750 | 1,176 | 713 | 463 | | | | |
| 1970 | 3 | 2,550 | 850 | 80 | 80 | | | | | |
| New Jersey | 113 | 161,797 | 56,623 | 4,832 | 3,067 | 1,765 | 28 | 17 | 6 | 5 |
| 1969 | 107 | 134,552 | 47,088 | 4,129 | 2,364 | 1,765 | 27 | 16 | 6 | 5 |
| 1970 | 6 | 27,245 | 9,535 | 703 | 703 | | 1 | 1 | | |

## Summary of Anticipated Construction of Hospitals and Related Health Facilities (Under Title VI of the Public Health Service Act, 1964 Amendments) if There Were no Limitation on Federal Assistance for Fiscal Years 1969 and 1970—Continued

UNITED STATES AND TERRITORIES—Continued

| State and fiscal year | Number of projects | Estimated cost (thousands) | | Beds or related health facilities added, by type of facility | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | | | | Number of beds | | | | Number of related health facilities | | | | |
| | | Total cost | Federal share | Total | General hospital | TB hospital | Long-term care facilities | Total | Diagnostic or treatment center | Rehabilitation facility | Public health center | State health laboratory |
| New Mexico | 37 | 40,495 | 15,567 | 590 | 435 | ---- | 155 | 21 | 1 | 1 | 19 | ---- |
| 1969 | 13 | 31,309 | 11,220 | 420 | 390 | ---- | 30 | 2 | 1 | 1 | ---- | ---- |
| 1970 | 24 | 9,186 | 4,347 | 170 | 45 | ---- | 125 | 19 | ---- | ---- | 19 | ---- |
| New York | 146 | 691,945 | 221,031 | 17,623 | 11,757 | 122 | 5,744 | 12 | 2 | 4 | 6 | ---- |
| 1969 | 89 | 389,665 | 121,421 | 10,369 | 5,918 | 122 | 4,329 | 11 | 2 | 4 | 5 | ---- |
| 1970 | 57 | 302,280 | 99,610 | 7,254 | 5,839 | ---- | 1,415 | 1 | ---- | ---- | 1 | ---- |
| North Carolina | 39 | 136,742 | 77,102 | 4,430 | 4,080 | ---- | 350 | 4 | ---- | 1 | 3 | ---- |
| 1969 | 29 | 119,542 | 66,438 | 3,778 | 3,598 | ---- | 180 | 4 | ---- | 1 | 3 | ---- |
| 1970 | 10 | 17,200 | 10,664 | 652 | 482 | ---- | 170 | ---- | ---- | ---- | ---- | ---- |
| North Dakota | 13 | 17,010 | 7,823 | 500 | 428 | ---- | 72 | ---- | ---- | ---- | ---- | ---- |
| 1969 | 13 | 17,010 | 7,823 | 500 | 428 | ---- | 72 | ---- | ---- | ---- | ---- | ---- |
| 1970 | ---- | ---- | ---- | ---- | ---- | ---- | ---- | ---- | ---- | ---- | ---- | ---- |
| Ohio | 98 | 225,405 | 73,522 | 5,508 | 3,599 | ---- | 1,909 | 19 | 9 | 8 | 2 | ---- |
| 1969 | 57 | 124,971 | 41,653 | 2,863 | 1,871 | ---- | 992 | 12 | 5 | 6 | 1 | ---- |
| 1970 | 41 | 100,434 | 31,869 | 2,645 | 1,728 | ---- | 917 | 7 | 4 | 2 | 1 | ---- |
| Oklahoma | 38 | 116,483 | 57,742 | 2,514 | 2,369 | ---- | 145 | 9 | 1 | 2 | 6 | ---- |
| 1969 | 21 | 74,673 | 36,837 | 1,405 | 1,385 | ---- | 20 | 6 | 1 | 1 | 4 | ---- |
| 1970 | 17 | 41,810 | 20,905 | 1,109 | 984 | ---- | 125 | 3 | ---- | 1 | 2 | ---- |
| Oregon | 59 | 67,575 | 22,565 | 1,955 | 1,532 | ---- | 423 | 10 | 2 | 1 | 7 | ---- |
| 1969 | 26 | 34,425 | 11,525 | 799 | 654 | ---- | 145 | 6 | 2 | ---- | 4 | ---- |
| 1970 | 33 | 33,150 | 11,040 | 1,156 | 878 | ---- | 278 | 4 | ---- | 1 | 3 | ---- |

| | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|
| Pennsylvania | 154 | 371,002 | 123,594 | 10,208 | 4,678 | | 5,530 | 14 | 10 | 3 | 1 |
| 1969 | 58 | 91,563 | 30,532 | 2,699 | 858 | | 1,841 | 6 | 3 | 2 | 1 |
| 1970 | 96 | 279,439 | 93,062 | 7,509 | 3,820 | | 3,689 | 8 | 7 | 1 | |
| Rhode Island | 15 | 55,435 | 25,195 | 826 | 506 | | 320 | 2 | 1 | | 1 |
| 1969 | 15 | 55,435 | 25,195 | 826 | 506 | | 320 | 2 | 1 | | 1 |
| 1970 | | | | | | | | | | | |
| South Carolina | 71 | 117,270 | 78,180 | 3,663 | 2,536 | | 1,127 | 20 | 8 | 5 | 7 |
| 1969 | 30 | 65,400 | 43,600 | 1,940 | 1,263 | | 677 | 8 | 4 | 3 | 1 |
| 1970 | 41 | 51,870 | 34,580 | 1,723 | 1,273 | | 450 | 12 | 4 | 2 | 6 |
| South Dakota | 19 | 14,139 | 6,975 | 1,205 | 944 | | 261 | 2 | | 2 | |
| 1969 | 14 | 12,191 | 6,001 | 964 | 763 | | 201 | 2 | | 2 | |
| 1970 | 5 | 1,948 | 974 | 241 | 181 | | 60 | | | | |
| Tennessee | 25 | 32,268 | 16,798 | 1,293 | 966 | | 327 | 2 | | | 2 |
| 1969 | 15 | 13,272 | 6,900 | 587 | 457 | | 130 | 2 | | | 2 |
| 1970 | 10 | 18,996 | 9,898 | 706 | 509 | | 197 | | | | |
| Texas | 156 | 246,999 | 123,273 | 10,441 | 9,631 | | 810 | 22 | 12 | 7 | 3 |
| 1969 | 132 | 203,614 | 101,581 | 8,035 | 7,225 | | 810 | 22 | 12 | 7 | 3 |
| 1970 | 24 | 43,385 | 21,692 | 2,406 | 2,406 | | | | | | |
| Utah | 57 | 70,845 | 35,424 | 2,842 | 1,607 | | 1,235 | 11 | 4 | | 7 |
| 1969 | 57 | 70,845 | 35,424 | 2,842 | 1,607 | | 1,235 | 11 | 4 | | 7 |
| 1970 | | | | | | | | | | | |
| Vermont | 22 | 20,785 | 5,719 | 601 | 207 | | 394 | 4 | 4 | | |
| 1969 | 14 | 14,354 | 3,264 | 363 | 107 | | 256 | 1 | 1 | | |
| 1970 | 8 | 6,431 | 2,455 | 238 | 100 | | 138 | 3 | 3 | | |
| Virginia | 63 | 188,148 | 101,773 | 5,045 | 4,611 | | 434 | 22 | | 3 | 19 |
| 1969 | 37 | 90,631 | 48,138 | 2,113 | 1,913 | | 200 | 15 | | 2 | 13 |
| 1970 | 26 | 97,517 | 53,635 | 2,932 | 2,698 | | 234 | 7 | | 1 | 6 |
| Washington | 24 | 68,574 | 17,737 | 1,275 | 1,237 | | 38 | 2 | | | 2 |
| 1969 | 19 | 59,459 | 16,299 | 1,044 | 1,006 | | 38 | 2 | | | 2 |
| 1970 | 5 | 9,115 | 1,438 | 231 | 231 | | | | | | |

## Summary of Anticipated Construction of Hospitals and Related Health Facilities (Under Title VI of the Public Health Service Act, 1964 Amendments) if There Were no Limitation on Federal Assistance for Fiscal Years 1969 and 1970—Continued

UNITED STATES AND TERRITORIES—Continued

| State and fiscal year | Number of projects | Estimated cost (thousands) | | Beds or related health facilities added, by type of facility | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | | | | Number of beds | | | | Number of related health facilities | | | | |
| | | Total cost | Federal share | Total | General hospital | TB hospital | Long-term care facilities | Total | Diagnostic or treatment center | Rehabilitation facility | Public health center | State health laboratory |
| West Virginia | 56 | 109,721 | 54,860 | 3,900 | 2,211 | ---- | 1,689 | 13 | 6 | 5 | 2 | ---- |
| 1969 | 33 | 69,256 | 34,628 | 2,031 | 1,528 | ---- | 503 | 12 | 6 | 4 | 2 | ---- |
| 1970 | 23 | 40,465 | 20,232 | 1,869 | 683 | ---- | 1,186 | 1 | ---- | 1 | ---- | ---- |
| Wisconsin | 94 | 167,838 | 67,055 | 6,921 | 4,635 | ---- | 2,286 | 14 | 6 | 7 | 1 | ---- |
| 1969 | 43 | 81,944 | 32,697 | 3,368 | 2,307 | ---- | 1,061 | 7 | 2 | 4 | 1 | ---- |
| 1970 | 51 | 85,894 | 34,358 | 3,553 | 2,328 | ---- | 1,225 | 7 | 4 | 3 | ---- | ---- |
| Wyoming | 3 | 8,338 | 3,000 | 266 | 266 | ---- | ---- | ---- | ---- | ---- | ---- | ---- |
| 1969 | 3 | 8,338 | 3,000 | 266 | 266 | ---- | ---- | ---- | ---- | ---- | ---- | ---- |
| 1970 | ---- | ---- | ---- | ---- | ---- | ---- | ---- | ---- | ---- | ---- | ---- | ---- |
| American Samoa.[1] Guam | 5 | 2,462 | 1,542 | ---- | ---- | ---- | ---- | 4 | ---- | ---- | 3 | 1 |
| 1969 | 4 | 2,312 | 1,442 | ---- | ---- | ---- | ---- | 3 | ---- | ---- | 2 | 1 |
| 1970 | 1 | 150 | 100 | ---- | ---- | ---- | ---- | 1 | ---- | ---- | 1 | ---- |
| Puerto Rico | 73 | 145,923 | 97,284 | 4,729 | 4,169 | ---- | 560 | 40 | 15 | ---- | 25 | ---- |
| 1969 | 35 | 81,923 | 54,616 | 2,832 | 2,432 | ---- | 400 | 18 | 9 | ---- | 9 | ---- |
| 1970 | 38 | 64,000 | 42,668 | 1,897 | 1,737 | ---- | 160 | 22 | 6 | ---- | 16 | ---- |
| Virgin Islands.[1] | | | | | | | | | | | | |

[1] Not available.

SUBCOMMITTEE RECESS

It is now 10 minutes after 1. We are going to have to recess.

Can you be with us Monday morning?

We stand in recess then until 10 a.m. Monday morning.

Thank you for your statement.

(Whereupon, at 1:10 p.m. Friday, April 26, the subcommittee recessed, to reconvene at 10 a.m., Monday, April 29.)

# DEPARTMENTS OF LABOR, AND HEALTH, EDUCATION, AND WELFARE, AND RELATED AGENCIES APPROPRIATIONS FOR FISCAL YEAR 1969

MONDAY, APRIL 29, 1968

U.S. SENATE,
SUBCOMMITTEE OF THE COMMITTEE ON APPROPRIATIONS,
*Washington, D.C.*

The subcommittee met at 10 a.m. in room 1224, New Senate Office Building, Hon. Lister Hill (chairman) presiding.

Present: Senator Hill.

## DEPARTMENT OF HEALTH, EDUCATION, AND WELFARE

### PUBLIC HEALTH SERVICE

### DENTAL HEALTH

**STATEMENT OF DR. VIRON L. DIEFENBACH, DIRECTOR, DIVISION OF DENTAL HEALTH**

**ACCOMPANIED BY:**

**DR. LEONARD D. FENNINGER, DIRECTOR, BUREAU OF HEALTH MANPOWER**
**DR. JOHN GREENE, DEPUTY DIRECTOR, DIVISION OF DENTAL HEALTH**
**JOHN W. HAMBLETON, FINANCIAL MANAGEMENT OFFICER, BUREAU OF HEALTH MANPOWER**
**DR. JAMES A. SHANNON, DIRECTOR, NATIONAL INSTITUTES OF HEALTH**
**DR. WILLIAM H. STEWART, SURGEON GENERAL**
**CHARLES MILLER, CHIEF FINANCE OFFICER**
**JAMES B. CARDWELL, DEPUTY ASSISTANT SECRETARY, BUDGET**

APPROPRIATION ESTIMATE

*"DENTAL HEALTH*

*"To carry out, to the extent not otherwise provided, sections 301 and 311 of the Act, and for training grants under section 422 of the Act, $11,173,000."*

## AMOUNTS AVAILABLE FOR OBLIGATION

| | 1968 | 1969 |
|---|---|---|
| Appropriation | $9,635,400 | $11,173,000 |
| Transferred to: "Operating expenses, Public Buildings Service," General Services Administration | −2,035 | |
| Cutback required by H.J. Res. 888—Reduction below obligation level in the 1968 President's budget: Unobligated balance lapsing | −206,000 | |
| Total cutback | −206,000 | |
| Total currently authorized for obligation | 9,427,365 | 11,173,000 |
| Plus: Proposed release of reserves for increased pay and postal costs | 85,300 | |
| Total available for obligation | 9,512,665 | 11,173,000 |
| Disposition of cutback: | | |
| To be used for pay and postal costs in this account | 85,300 | |
| To be transferred to "Office of the Surgeon General, salaries and expenses" for pay and postal costs | 29,900 | |
| To be returned to the Treasury | 90,800 | |
| Total cutback | 206,000 | |

## OBLIGATIONS BY ACTIVITY

| | 1968 estimate | | 1969 estimate | | Increase or decrease | |
|---|---|---|---|---|---|---|
| | Positions | Amount | Positions | Amount | Positions | Amount |
| Grants: | | | | | | |
| Research | | $1,259,000 | | $1,259,000 | | |
| Fellowships | | 100,000 | | 150,000 | | +$50,000 |
| Training | | 3,500,000 | | 4,700,000 | | +1,200,000 |
| Direct operations | 264 | 4,653,665 | 273 | 5,064,000 | +9 | +410,335 |
| Total obligations | 264 | 9,512,665 | 273 | 11,173,000 | +9 | +1,660,335 |

## OBLIGATIONS BY OBJECT

| | 1968, estimate | 1969, estimate | Increase or decrease |
|---|---|---|---|
| Total number of permanent positions | 264 | 273 | +9 |
| Full-time equivalent of all other positions | 30 | 35 | +5 |
| Average number of all employees | 261 | 279 | +18 |
| Personnel compensation: | | | |
| Permanent positions | $2,343,300 | $2,503,900 | +$160,600 |
| Positions other than permanent | 152,400 | 178,000 | +25,600 |
| Other personnel compensation | 5,000 | 5,000 | |
| Total personnel compensation | 2,500,700 | 2,686,900 | +186,200 |
| Personnel benefits | 273,000 | 288,000 | +15,000 |
| Travel and transportation of persons | 199,000 | 212,500 | +13,500 |
| Transportation of things | 40,000 | 47,000 | +7,000 |
| Rent, communications, and utilities | 84,965 | 98,100 | +13,135 |
| Printing and reproduction | 67,000 | 80,000 | +13,000 |
| Other services | 353,000 | 417,500 | +64,500 |
| Project contracts | 945,000 | 987,000 | +42,000 |
| Payment to "National Institutes of Health Management Fund" | 6,000 | 6,000 | |
| Supplies and materials | 93,000 | 131,000 | +38,000 |
| Equipment | 92,000 | 110,000 | +18,000 |
| Grants, subsidies, and contributions | 4,859,000 | 6,109,000 | +1,250,000 |
| Total obligations by object | 9,512,665 | 11,173,000 | +1,660,335 |

## SUMMARY OF CHANGES

| | |
|---|---|
| 1968 enacted appropriation | $9,635,400 |
| Transferred to: "Operating expenses, Public Buildings Service," General Services Administration (space rental) | −2,035 |
| Cutback required by H.J. Res. 888: Unobligated balance lapsing | −206,000 |
| Proposed release of reserves for increased pay and postal costs | 85,300 |
| 1968 total estimated obligations | 9,512,665 |
| 1969 estimated obligations | 11,173,000 |
| Total change | +1,660,335 |

| | Base | | Change from base | |
|---|---|---|---|---|
| | Positions | Amount | Positions | Amount |
| Increases: | | | | |
| A. Built in: | | | | |
| 1. Annualization of new positions authorized in 1968 | | | | $43,800 |
| 2. 1 extra day's pay (260 days in 1968; 261 days in 1969) | | | | 7,800 |
| 3. Annualization of 1968 pay raise | | | | 33,400 |
| B. Program: | | | | |
| 1. Dental auxiliary utilization grants | | $3,000,000 | | 1,000,000 |
| 2. Fellowships | | 100,000 | | 50,000 |
| 3. Research training grants | | 300,000 | | 200,000 |
| 4. Direct operations | 264 | 4,653,665 | 9 | 347,335 |
| Total, program increases | | | 9 | 1,597,335 |
| Decreases: | | | | |
| A. Built in: | | | | |
| 1. Nonrecurring program costs | | | | −22,000 |
| Total, net changes requested | | | +9 | +1,660,335 |

## Explanation of Changes

*Dental auxiliary utilization grants.*—The requested increase of $1,000,000 will add an additional school in 1969 to this program which provides undergraduate dental students with comprehensive chairside experience with auxiliaries under professional supervision. It will also initiate developmental programs at two institutions planning dental schools and will strengthen existing programs by lengthening the time of clinical experience and broadening the scope to include other types of auxiliaries.

*Fellowships.*—The requested increase of $50,000 will provide for three additional fellowships for research proposals in such areas as economics, political science, statistics, and psychology. Seven fellows were supported in 1968.

*Research training grants.*—The requested increase of $200,000 will support two additional programs concerning behavioral sciences and dental care administration. Three programs were supported in 1968.

*Direct operations.*—The requested increase of nine positions and $347,335 is for the following programs: two positions and $65,000 for continuing education activities at the Dental Health Center; one position and $20,000 to develop new teaching media; two positions and $163,000 to expand cleft lip and palate study activities; two positions and $43,335 to extend oral cancer detection demonstrations; and two positions and $56,000 for dental productivity studies at Louisville, Kentucky.

## JUSTIFICATION

### GRANTS

| | 1968 estimate | | 1969 estimate | | Increase or decrease | |
|---|---|---|---|---|---|---|
| | Positions | Amount | Positions | Amount | Positions | Amount |
| Personnel compensation and benefits | | | | | | |
| Other expenses | | $4,859,000 | | $6,109,000 | | +$1,250,000 |
| Total | | 4,859,000 | | 6,109,000 | | +1,250,000 |
| Subactivities: | | | | | | |
| Research | | 1,259,000 | | 1,259,000 | | |
| Fellowships | | 100,000 | | 150,000 | | +50,000 |
| Training: | | | | | | |
| Dental auxiliary utilization | | 3,000,000 | | 4,000,000 | | +1,000,000 |
| Research training | | 300,000 | | 500,000 | | +200,000 |
| Continuing education | | 200,000 | | 200,000 | | |
| Total | | 4,859,000 | | 6,109,000 | | +1,250,000 |

*Research grants*

The authority for this program is contained in section 301 of the Public Health Service Act with an indefinite authorization for 1969.

| | 1968 appropriation | | 1969 estimate | | Increase or decrease | |
|---|---|---|---|---|---|---|
| | Number | Amount | Number | Amount | Number | Amount |
| Noncompeting continuations | 26 | $739,000 | 19 | $772,000 | −7 | +$33,000 |
| New grants | 10 | 497,000 | 10 | 462,000 | | −35,000 |
| Supplementals | (1) | 23,000 | (2) | 25,000 | +(1) | +2,000 |
| Total | 36 | 1,259,000 | 29 | 1,259,000 | −7 | |

A principal task for the Division is the development of research to determine ways of increasing and improving the productivity of dental manpower, improving teaching of dental personnel, improvement of the distribution, organization and financing of dental services and improvement of preventive, control and treatment procedures. In each of these areas, research grants will be used to complement the intramural program effort.

Research now being supported by grants includes the testing of agents and procedures for controlling dental caries; impact of fluoridation on dental practice; the relationship of oral hygiene to periodontal disease, the design of a mathematical model for dental insurance plans; the clinical testing of dental materials; evaluation of methods to improve health education in the schools; and studies of more effective ways of teaching dental students.

Research projects and programs are planned on communication of research findings and dental health information; control of pain in dental patients, evaluation of simulation in teaching dental students, more efficient use of dental auxiliaries and use of devices in treatment of orthodontic disorders. The request for $1,259,000 will provide for continuation of 19 current projects and 10 new grants.

*Fellowships*

The authority for this program is contained in section 301 of the Public Health Service Act with an indefinite authorization for 1969.

| | |
|---|---|
| 1968 appropriation | $100,000 |
| 1969 estimate | 150,000 |
| Increase or decrease | +50,000 |

The Dental Health research fellowships program which began in fiscal year 1967 provides support for training graduate students in research skills needed in dental public health. Fellowships currently support training in advanced computer technology, the sociology of family health action, dental care administration and the epidemiology of periodontal disease. During the remainder of 1968, applications will be considered in these fields as well as in the testing of clinical materials and procedures.

In 1969, the increase of $50,000 will provide 3 additional fellowships, in such fields as economics, political science, statistics and psychology as they relate to dental health. The funds requested will provide for 10 fellowships.

*Dental auxiliary utilization grants*

The authority for this program is contained in section 422 of the Public Health Service Act with an indefinite authorization for 1969.

| | |
|---|---|
| 1968 appropriation | $3,000,000 |
| 1969 estimate | 4,000,000 |
| Increase or decrease | +1,000,000 |

Construction grants, made possible by the Health Professions Educational Assistance Act of 1963, as amended, have provided a significant stimulus in the educational field to help meet dental objectives in this country. The potential offered by the Division's grant program, designed to expand the productivity of the individual dentist through effective utilization of auxiliary personnel, is equally significant as a program seeking solutions to dental manpower problems. Grants to dental schools for instruction in the use of dental auxiliaries provides a clinical experience for dental students in the team concept of clinical service. This pro-

gram is rapidly attaining a goal which assures that every graduating dentist has an experience that will enable him to provide a more efficient and more economical service to his patient.

At present, 49 of the nation's 50 dental schools participate in the program. An increase of $1,000,000 will add an additional school in 1969 and will initiate the development of similar programs at two new dental schools which are being planned. These additional funds will also provide more intensive chairside experience and experience in the use of other types of auxiliaries.

*Research training grants*

The authority for this program is contained in section 301 of the Public Health Service Act with an indefinite authorization for 1969.

| | 1968 appropriation | | 1969 estimate | | Increase or decrease | |
|---|---|---|---|---|---|---|
| | Number | Amount | Number | Amount | Number | Amount |
| Noncompeting continuations | 2 | $198,000 | 2 | $302,000 | -------- | +$104,000 |
| New grants | 1 | 49,000 | 3 | 188,000 | +2 | +139,000 |
| Supplementals | (1) | 53,000 | (1) | 10,000 | -------- | −43,000 |
| Total | 3 | 300,000 | 5 | 500,000 | +2 | +200,000 |

Established in 1966, the Division's research training activity is now in its third year. Four training programs in the areas of dental epidemiology, dental educational research and medical sociology have been initiated at geographically dispersed educational centers. Growing interest in all aspects of dental public health research has led to the receipt of applications for graduate training under these programs from more students than can be accommodated. Additional programs are needed both to increase training capability in these fields and to obtain coverage in other important research areas. A new grant is planned in 1969 which would establish a program of summer on-the-job traineeships to provide initial exposure of dental students to applied dental health research.

The increase of $200,000 requested for fiscal year 1969 will provide for the funding of a program to prepare students for research training in the behavioral science aspects of dental practice, and a training program in dental care administration research will also be initiated.

*Continuing education grants*

| | |
|---|---|
| 1968 appropriation | $200,000 |
| 1969 estimate | 200,000 |
| Increase or decrease | ------- |

Grant funds available for continuing education were first appropriated in 1967 and have provided support for five projects. Over the next three to seven years, existing projects will contribute directly to upgrading the skills of 39,000 dentists. In addition to this direct effect on the dental practitioner, a vehicle is provided for the transmission of new knowledge about needs, resources, and educational methods, media and systems for continuing education, and for automated, self-instructional materials on such subjects as periodontics, operative dentistry, preventive dentistry, endodontics and community dental care programs for children. This new knowledge and utilization of these new educational materials and techniques have through these grants a potential of extension to ell educational institutions, professional organizations, and dentists, thus facilitating the development of an effective, economical, continuing education system which assures life-long educational opportunities for all dentists.

The $200,000 requested will provide for the continuation of the existing programs.

DIRECT OPERATIONS

| | 1968 estimate | | 1969 estimate | | Increase or decrease | |
|---|---|---|---|---|---|---|
| | Positions | Amount | Positions | Amount | Positions | Amount |
| Personnel compensation and benefits | 264 | $2,773,700 | 273 | $2,974,900 | +9 | +$201,200 |
| Other expenses | | 1,879,965 | | 2,089,100 | | +209,135 |
| Total | 264 | 4,653,665 | 273 | 5,064,000 | +9 | +410,335 |
| Subactivities: | | | | | | |
| Manpower and education | 141 | 1,871,000 | 146 | 2,044,000 | +5 | +173,000 |
| Dental technology | 93 | 2,315,000 | 95 | 2,498,000 | +2 | +183,000 |
| Community programs | 30 | 467,665 | 32 | 522,000 | +2 | +54,335 |
| Total | 264 | 4,653,665 | 273 | 5,064,000 | +9 | +410,335 |

To carry out its functions, the Division is organized into three major operational areas—Manpower and Education, Dental Technology and Community Programs.

*Manpower and education.*—In cooperation with the American Association of Dental Examiners our Resource Analysis program is developing a National Data Compilation System for dentists and hygienists. Beginning with the 1965 reregistradition of dentists, the collection has progressed and is now including licensed dental hygienists. In 1968, 40 states will be included in the system, and by the end of 1969, data on dentists and the services they supply will be available in all 50 states.

A study is also being conducted with the assistance of the Medical Foundation of Boston to provide information which will be used to develop a methodology for the gathering and organization of manpower and resource data in a large metropolitan area, and to demonstrate the feasibility of such a method for planning for dental service needs. Findings from this study will offer the opportunity to establish a workable system in another large metropolitan area in 1969. Studies are continuing in the behavioral aspects of dental auxiliary manpower to assess the effectiveness of auxiliary manpower and its application in the dental profession today.

The alarming shortage of dentists in the United States requires programs to alleviate major deficiencies which have been identified in educational programs for dental workers. The Division's programs in educational research attack the most critical of these defects including: (1) the acute shortage of qualified teachers, (2) the lack of qualified applicants to dental schools, (3) a crowded and rigid curriculum, (4) outmoded administrative practices, and (5) lack of innovation in design of instructional facilities. Qualified teachers are acutely lacking in schools of dental hygiene and dental assisting. There is an urgent need to develop new teaching media and to improve teaching methods as well as to train more teachers.

The Dental Health Center in San Francisco seeks to improve teacher recruitment, selection and development. The development of educational programs especially suited to the interest and abilities of students already identified as potential successes in teaching and/or research is one example of current projects.

Major emphasis has been placed on the use of new teaching methods in 1968. Various mechanical and electrical devices are being used to improve teaching methods for dental educators. Computer-assisted instruction shows promise towards improving teaching methodology in its application to the teaching of dental skills. Greater emphasis will be placed upon exploring these possibilities in schools for dental auxiliary personnel. We will promote teaching methodology in three additional schools of dental hygiene.

*Dental productivity.*—Progress in dental productivity is dependent upon continued exploration of those functions that can be delegated to dental auxiliaries and devising methods of training auxiliaries to undertake these functions in conjunction with the dentist. Since 1964 studies at Louisville, Kentucky have provided a unique opportunity for evaluation and the delegating of expanded duties and responsibilities to chairside assistants. Beginning in 1969, additional variables will be introduced into the study such as number of dental assistants and the degree of their technical versatility in situations of revised operatory designs. This phase of the project will study the team of one dentist and five auxi-

liaries. At the suggestion of nationally recognized leaders in dental health there is now an opportunity to conduct training seminars at the Center in Louisville. With the assistance of those experts we can now attain more widespread acceptance of the team concept in dental practice. An increase of two positions and $56,000 is requested for these activities.

*Continuing dental education.*—The obstacles faced by practicing dentists in keeping with scientific advances are many, and the solution to developing a sound continuing education system for all dentists will depend upon solving complex problems. Programs are designed to overcome two major obstacles to the development of such a system: (1) the broad geographic distribution of dentists throughout the nation, and (2) the lack of teaching manpower available for a continuing education program of this magnitude.

The Division program at the Dental Health Center in San Francisco focuses primarily on the development, evaluation and demonstration of new educational methods and media for continuing education outside the dental school. New audio-visual approaches to automated programed instruction to meet the special needs of dentists are reaching an estimated 7 percent of the dental population as compared with less than four percent in 1967. The demonstration courses developed for individual and group instruction have contributed to improving the knowledge and skills of over 10,000 practicing dentists. Funds provided in 1969 for the intramural program will continue this activity.

To demonstrate the feasibility of a coordinated, statewide, off-campus continuing dental education program, a prototype state-wide distribution system will be developed and demonstrated in 1969. This system will be designed to incorporate new instructional methods and media, extend the utilization of available instructional materials and develop new courses that will meet the continuing educational needs of practicing dentists. To accelerate the development of an adequate nationwide program for dentists, a distribution system will be developed to assure the prompt dissemination of information on needs, new methods, media and resources in continuing dental education. The system is designed to reach 500 department heads and deans of schools in addition to over 1,000 state and local dental societies' leaders, other individuals and groups responsible for the nation's continuing education.

Funds requested this year will support the initiation of a program in dental care education for the dental patient. Emphasis is placed on the development of patient education systems within the private dental offices and clinics. The programs are designed to conserve the productivity of the dental health team and to motivate the patient to seek adequate dental services.

An increase of $65,000 and two positions will be used to augment the continuing education program at the Dental Health Center in San Francisco, and $20,000 and one position will be used to develop new teaching media in schools of dentistry and dental assisting.

*Dental technology.*—The Epidemiology programs of the Division have been seeking methods to protect the teeth of children living in areas not serviced by central water supplies. Two of these methods show considerable promise. The first, fluoridation of school water supplies, has been studied in pilot projects and rural areas of Pennsylvania, Kentucky and the Virgin Islands. The second consists of self-administration of fluoride solutions under the supervision of dental auxiliaries of school teachers. Studies on the self-administration of topical fluorides have been initiated in Louisiana, Oregon and Brazil. Additional studies will be conducted to determine optimal amounts of fluorides for school fluoridation and the use of the new fluoride agents and techniques for self-application.

Studies of oral congenital defects—in an attempt to discover causes for the occurrence of cleft lip and palate more than 12,000 birth certificates on which clefts are recorded have been collected at the Dental Health Center and are being analyzed to determine the factors that surround the occurrence of clefts. For example, from this effort it was determined that the likelihood of a child being born with a cleft increases with the mother's age. When the knowledge gained from these analyses identifies possible leads regarding the etiology of clefts, epidemiological field investigations will be designed and conducted.

A major field study on twins which seeks to shed light on the relative contribution of genetics and environmental forces in the causation of clefts has already been initiated. Physician examination of 80 pairs of twins in which a cleft has affected at least one of the twins, as well as interviews of the twins' families are being carried out on the West Coast. Emphasis will be given to identifying the similarities and differences that occur in twins that have developed from the same egg.

An increase of $163,000 and two positions is requested to expand the Cleft Lip and Palate Twin Study to include additional pairs identified from birth records and to institute a study leading to the establishment of a network of rehabilitation centers for the treatment of clefts.

*Periodontal disease.*—Epidemiological and supporting laboratory studies conducted by the center have demonstrated a definite and consistent relationship between oral hygiene status and the health of the soft and hard tissues supporting the teeth. The potential effectiveness of oral hygiene in the prevention and control of periodontal disease is being demonstrated by a continuing study being conducted at Mt. View, California. Shortly, a major investigation will begin to evaluate clinically the efficiency of a dentifrice that holds considerable promise in being able to prevent the formation of calculus (tartar) on the teeth. Studies such as these are essential for the planning and development of major national programs for the prevention and control of periodontal disease which attack's virtually all adults in this country and is the major cause of tooth loss after age 35.

Malocclusion results from the improper alignment or arrangements of the teeth and jaws. Degrees of malocclusion range from minor imperfections to major jutting or recession of the jaws and teeth. Extensive malocclusion is crippling and psychologically injurious. Only meager information is available on the prevalence and development history of these conditions. The Division will initiate a study in 1968 to determine the prevalence and severity of malocclusion in selected population groups and assess the potential public health use of selected control measures.

The Materials and Technology Branch of the division conducts applied clinical research to evaluate and compare new and conventional dental materials, dental procedures, and dental devices and to link basic laboratory research findings in the physical and biological sciences with clinical practice.

Fundamental information about the clinical, physical and biological properties and the safety of dental materials has been established through laboratory experimentation. Laboratory testing does not provide information about the behavior and performance of the materials when exposed to the oral environment. Long-range clinical studies conducted under controlled conditions, are necessary to ascertain the practical value of properties such as adhesion, color stability. strength, solubility, resistence to wear and long-term effect on the hard and soft tissues of the mouth.

Such long-range studes are being conducted by the Division in cooperation with dental personnel in public health service hospitals. VA hospitals, the Bureau of Prisons, the Division of Indian Health and in dental schools. By coordination of such studies and by the development of special evaluation methods, information is being accumulated which will lead to improved dental care for the public and reduced manpower requirements for delivery of high quality dental care.

*Community programs.*—In the past year, greater understanding and support of fluoridation by the public were evidenced by increased activity in coordinated state-wide approaches to fluoridation. Mandatory state fluoridation laws exists only in three states, Connecticut, Minnesota, and Illinois. Two states, Kentucky and Michigan, have interpreted existing state statutes as the necessary authority for the Board of Health to issue rules regarding fluoridation of water supplies. Community action has now raised to over 75 million the number of people benefitting from fluoridated public water supplies. Until fluoridation is available to all, we must continue our efforts to extend the coverage by providing direct technical assistance to state and local jurisdictions and utilizing every effort to develop a completely informed public in the benefits of a fluoridated water supply.

*Control of oral cancer.*—Encouraged by earlier success, the program to control oral cancer is pursued with increased intensity. Built on the experience we have gained so far, a concerted effort will be made to assure that the diagnostic procedure for oral cancer is incorporated into the practice of every dentist in the country. In 1969 oral cancer detection demonstrations will be extended and contracts negotiated with three additional agencies extending the demonstration program for local practitioners on cytological testing for oral malignancies to approximately 500 more dental practitioners. An increase of $43,335 and two positions is requested for this purpose.

*Economics of dental care.*—The Division continues to provide consultation and technical assistance on dental care economics to groups interested in developing dental insurance programs. Preliminary analysis of the Public Health Service survey of prepaid dental care plans indicates that member enrollment

in existing plans is constantly growing and that the number of new plans is increasing. Preliminary estimates based on the incomplete on-going survey, at the end of 1967, show 1,074 privately sponsored prepaid dental care plans in existence, with membership of 4.1 million persons eligible for dental care benefits. These benefits include at least diagnostic services and continuing restorative care, with the bulk of the beneficiaries being eligible for one or more specialty services, i.e., prosthetics, orthodontics, periodontics, etc. Although the trend indicates an increase in the number of people being covered under various prepaid dental care programs, dental insurance remains inaccessible to a large portion of the population.

The Division continues to compile information on State and local dental health programs. A model state dental health plan is being developed which will serve as a guide to state dental directors in the development of comprehensive plans for dental activities. Information is being collected and two documents, "Federal Assistance for Dental Activities" and "Recent Legislation Affecting Dentistry" will be published in 1969 which will enable state and local dental directors to keep abreast of dental activities at the Federal level.

In summary the increase of $410,335 for Dental Health and nine new position are requested to cover the institution of two new programs in Oral Cancer, provide for the evaluation of dental productivity studies at Louisville, Kentucky, enable the Dental Health Center in San Francisco, California to develop projects leading to the establishment of Cleft Lip and Palate treatment centers throughout the United States and support the study of wins having his malformation, extend the continuing education programs at the Dental Health Center aimed at producing automated teaching devices and programmed instruction which will double the number of programs demonstrating these techniques in 1969. The increase also includes $63,000 for built-in costs for annualization of positions new in 1968 and the annualization of the recent pay increase.

NEW POSITIONS REQUESTED FISCAL YEAR 1969

| | Grade | Annual salary |
|---|---|---|
| Medical officer | GS–16 | $20,982 |
| Assistant branch chief | GS–15 | 18,404 |
| Medical officer | GS–15 | 18,404 |
| Public health program specialist | GS–14 | 15,841 |
| Public health program specialist | GS–13 | 13,507 |
| Administrative staff assistant | GS–9 | 8,054 |
| Clerical assistant (2) | GS–5 | 11,130 |
| Clerical assistant | GS–3 | 4,466 |
| Total new positions (9) | | 110,788 |

## Biographical Sketch

Name: Viron Leroy Diefenbach, D.D.S.

Position: Assistant Surgeon General and Director, Division of Dental Health, U.S. Public Health Service, Woodmont Building, Bethesda, Maryland.

Birthplace and date: Baltimore, Maryland, February 9, 1922.

Education: Western Maryland College, 1940–42 (interrupted by World War II); Pratt Institute of Engineering, 1943; Harvard University (predental), 1944; Baltimore College of Dental Surgery, Dental School, University of Maryland, 1949 (D.D.S.); Graduate School of Public Health, University of Pittsburgh, 1954 (M.P.H.); Diplomate of the American Board of Dental Public Health, 1960.

Experience:

1966–Present: Acting Chief and Director, Division of Dental Health, Bethesda, Maryland.

1962–65: Deputy Chief, Division of Dental Health, Bethesda, Maryland.

1959–61: Regional dental consultant, USPHS, Denver, Colorado.

1957–59: Information Officer, Division of Dental Public Health.

1954–55: Assistant regional dental consultant, USPHS, Chicago, Illinois; Office of Personnel, OSG, USPHS, Washington, D.C.

1952–53: Dental public health field training, USPHS.

1950–52: Various clinical assignments, USPHS.

1949–50: Dental intern, USPHS Hospital, Norfolk.

Assignments and offices: Dental Health Section Council, American Public Health Association, 1956–59; secretary of the Dental Health Section and member of the governing council, American Public Health Association, 1961–66; vice-chairman of the Dental Health Section, 1965; chairman of the Dental Health Section, 1966; member of the executive board, Commissioned Officers Association, USPHS, 1963–65, and chairman of the board, 1966–67; member educational advisory board, Kettering Laboratory, University of Cincinnati, 1961 to present.

Honors: University of Maryland Gold Medal for Scholarships, 1949; magna cum laude, dental school, University of Maryland, 1949; omicron kappa upsilon, 1949; president of class at graduate school of Public Health, University of Pittsburgh, 1954; fellow, American Public Health Association; fellow, American Association for the Advancement of Science; fellow, American College of Dentists.

Scientific organizations: American Dental Association, American Public Health Association, American Association for the Advancement of Science, American Association of Public Health Dentists, American College of Dentists, American Board of Dental Public Health; and Federation Dentaire Internationale.

### DENTAL DISEASES

Senator HILL. The committee will kindly come to order.

Dr. Diefenbach, will you proceed, sir.

Dr. DIEFENBACH. Thank you very much. I welcome the opportunity to present the Division's program for fiscal year 1969.

The annual attack of dental diseases in the United States reaches epdiemic proportions—a continuous dental plague which affects almost everyone eventually.

The full effects on dental diseases are not entirely measurable. But we do know that: Dental bills of American families total nearly $3 billion a year. The average recruit entering the Armed Forces requires 8 to 9 hours of dental treatment which would cost on the average of about $175 in a private dental office.

Senator HILL. And he is a young man.

Dr. DIEFENBACH. That is right, sir. Most of these men are under age 21 when they come into the armed services.

American industry by conservative estimates loses over 100 million man-hours of produtcion time annually, due to dental problems.

### UNIVERSALITY AND UNIQUENESS OF DENTAL PROBLEMS

These problems are universal and their nature is unique: They are neither self-healing nor curable by drugs alone; they are irreversible and become progressively more severe without treatment. Nearly every pacticing dentist in the United States has a full patient schedule and yet: There are 800 million unfilled dental cavities; half the adult population by middle age has pyorrhea or destructive periodontal disease; more than 6,000 babies are born each year with a cleft lip or palate; nearly 25 million Americans have lost all of their natural teeth——

Senator HILL. That many have lost all their teeth?

Dr. DIEFENBACH. That is correct, sir. And oral cancer strikes 23,000 of our people annually, causing one in every 40 deaths from cancer.

### PREVENTION OF TOOTH DECAY WITH FLUORIDES

Science has encountered great difficulty in understanding the nature of dental diseases. Except in the case of tooth decay, which yields dramatically before fluorides, there are no mass methods of preventing dental diseases.

Although the number of Americans drinking fluoridated water has increased to 75 million, an equal number is still denied its benefits.

By preventing dental caries, fluoridation of community and rural school water supplies will have a major impact on reducing cavities caused by decay and toothaches resulting from dental neglect of children both rich and poor.

### CLEFT LIP AND PALATE

There is no counterpart to fluoridation for preventing the gross deformities of cleft lip and palate or for preventing pyorrhea. Our efforts here have been epidemiological studies which may provide important leads for their eventual prevention and control.

Current studies are aimed at families with twins to determine the relative importance of genetic and nongenetic forces in causation of clefts.

### DESTRUCTIVE PERIODONTAL DISEASES

The relationship between oral hygiene and destructive periodontal diseases is being documented and community-based programs to detect and prevent periodontal disease will be designed and tested this year.

### ORAL CANCER

We must also extend programs for the early detection of oral cancer using the Nation's practicing dentists as the basic resource.

### CLEFT LIP AND PALATE

Senator HILL. Doctor, in that connection, from the studies on the cleft palate, what have you learned there?

Dr. DIEFENBACH. We identify our cleft palate program as the National Cleft Lip and Palate Intelligence Service. We have learned over the past few years that there is an uneven geographical distribution of the occurrence of cleft lip and palate.

Senator HILL. What do you ascribe that to?

Dr. DIEFENBACH. We are not entirely sure, sir. The patterns of occurrence do not appear to follow any seasonal pattern. They do not follow the birth trend patterns either. When we can identify the causes of such geographic variations we may be able to explain the causation of clefts and other birth defects.

We do not believe that differences in the occurrence among the races account for the geographic pattern. However, we have learned there is considerable variation in incidence among the racial groups in this country.

We have learned that clefts appear more often in males than in females. They occur more often on the left side than on the right side and most clefts occur on one side rather than both sides of the mouth.

We have also learned that the cleft lip and palate cases frequently are associated with other birth defects such as clubfoot and congenital heart disease.

Senator HILL. That is from one extreme to the other.

Dr. DIEFENBACH. From head to toe.

The association of heart defects with oral clefts may have more significance. than we can appreciate at the present time.

We have come along a good way, I believe, in describing the patterns of occurrence of these defects,

### PROFESSIONAL CARE AND EVALUATION OF TREATMENTS

All of the Division's efforts certainly are benefiting our people, but the massive backlog of untreated dental needs a major health problem. And the only recourse for treating dental problems once they occur is a lifelong regimen of direct professional care provided to the individual patient by the individual dentist.

Our evaluation of new and conventional dental filling materials, procedures, and devices will improve the treatment technics and clinical effectiveness of practicing dentists.

Studies of airborne bacterial hazards occurring during clinical treatment in dentists' offices will yield practical information relevant to preventive measures for dentists and their patients.

### GRANTS FOR EDUCATING PRACTITIONERS

Grant programs are creating a network of continuing education for practitioners, centers of research training in applied dental science, and fellowships in dental health research and education.

Our educational research programs are concentrating on the development or adaptation of timesavings teaching materials and devices. They range from the development of self-instruction textbooks to the programing of courses for self-teaching machines, television, and computer-assisted teaching.

All of them will advance dental education and keep practicing dentists up to date on dental science and technology.

### DENTAL MANPOWER EXPANSION AND PATIENT COST

Paradoxically, the prospect of more and better care for more people intensifies other already serious problems. As treatment demands rise, we must achieve, over a very few years, marked expansion of dental manpower, more efficient organization of dental services, and improved methods of financing dental care.

### DENTAL FILLING MATERIALS

Senator HILL. Are you studies on dental fillings directed toward new materials that will last longer?

Dr. DIEFENBACH. They are directed in part, sir, toward the development or determination of the quality of new filling materials. But I might say that they are also directed toward learning more about the strength, the solubility, the resistance to wear, and the color characteristics of existing filling materials that dentists use in their office every day.

What we are looking for is better and longer lasting materials, because if fillings don't have to be replaced as frequently, fewer dental man-hours will be required to keep existing patients in good repair.

So, this activity has manpower implications as well as a service implication for patients.

TRAINING OF ALLIED DENTAL PERSONNEL

By far the best way of securing the most efficient use of scarce dental skills is through greater use of auxiliaries. The Division supports, through grants to dental schools, programs to teach students the effective use of trained auxiliaries.

Adjunctive to these programs are Division activities to increase and improve training opportunities for allied dental personnel.

ECONOMIC BARRIER TO DENTAL CARE

But the major question is how to bring receipt of dental services into better balance with needs. Economic want is the greatest barrier to dental care. Other impediments are ignorance of dental hygiene, inaccessibility of dentists' services, and the lack of efficiently organized dental programs for groups of people.

Senator HILL. You say that economic want is the greatest barrier?

Dr. DIEFENBACH. The single most important barrier between people and the dental care they need is their inability to pay for needed service.

To reduce the economic barrier, the Division is promoting the development of prepaid dental plans, dental service corporations, and studying new systems of dental insurance.

PILOT DENTAL HEALTH PROGRAMS FOR CHILDREN

To improve public understanding, we are emphasizing dental health education for underprivileged children and their parents.

To improve accessibility of care, we are increasing the supply and productivity of dental and allied personnel and improving dental technology.

To extend care, we are initiating new dental programs for children and youth, especially the disadvantaged.

Senator HILL. What will these programs do, Doctor?

Dr. DIEFENBACH. The programs I am referring to here, sir, are those authorized under the Amendments of the Social Security Act of 1967. Under title V of this act, there is a provision for pilot dental health programs for children, particularly poor children.

Through administrative arrangements which are now underway with Dr. Lee's office, the plan is that the professional, technical and the programing responsibilities for these pilot dental health programs for children will be conducted by the Dental Division in conjunction with the Children's Bureau.

HEADSTART AND NEIGHBORHOOD HEALTH CENTER PROGRAMS

The other programs that I refer to here are the OEO programs in which we are providing assistance under a contract.

Senator HILL. Are you doing quite a bit there?

Dr. DIEFENBACH. Yes, sir; under a reimbursable agreement with the Office of Economic Opportunity in 1966 we are providing professional advice and evaluation of their dental programs and what the taxpayer is getting for the money spent for dental care under Headstart, Neighborhood Health Center and other OEO programs.

We also provide technical assistance in the development and operation of their dental programs.

We must now act upon the axiom that the dental health of adults is largely determined by the dental protection afforded them as children.

The protection of school-age children against the ravages of dental disease could, within a generation, be reflected in better dental health among young people and eventually raise the level of dental health of the Nation.

Senator HILL. In other words, you have to start when they are children to get the results?

Dr. DIEFENBACH. That is exactly the point.

I believe we have perhaps for too long thought that we could cover an entire population with services and preventive measures. It is now time, I think, to focus our efforts upon a part of the population—specifically the children—so that in a generation we can find better dental health will be reflected among young people and eventually raise the level of the dental health of the whole Nation.

### SCHOOL-AGE CONCENTRATION

There are three noteworthy reasons for concentrating on school-age children: First, the child's entrance to school usually coincides with the appearance of his first permanent teeth and marks the beginning of the critical period of oral health; second, the schools, themselves, provide a matrix in which continuous access to the largest number of children is assured and the most efficient use of dental resources can be achieved; and third, the cost effectiveness of the services provided are greatest and longest lasting.

The supply and demand of dental services will not be balanced until the most common dental diseases are prevented.

In the meantime, those which defy prevention must be brought to cure by an efficiently organized profession applying the most efficacious technology at the most propitious time.

Therefore, the Division will place its priorities in such ways that preventive measures, manpower development, and organization of services will be concentrated on the dental health of children and youth.

Such emphasis in all of our programs will contribute most to the dental and total health of the Nation.

### BUDGET REQUEST

In summary, the Division of Dental Health requests an appropriation of $11,173,000 for 1969, an increase of $1,660,335 and nine positions over the 1968 level.

Mr. Chairman, I shall be glad to answer any questions you may have about this program and the budget request.

### DENTAL AUXILIARY GRANTS

Senator HILL. I note for the dental auxiliary grants program there is an increase of a $1 million requested.

How is this program progressing? What will the increase of $1 million do for the program?

Dr. DIEFENBACH. I am pleased to say, Mr. Chairman, that the dental auxiliary utilization program is one of the most effective and the most appreciated of all our grant programs.

In this program dental students are being trained to use chairside assistants efficiently and effectively before they graduate from dental school.

Our followup studies of graduates from this program show they are in fact putting this training to good use. At the end of this year approximately 22,000 dental students will have graduated from dental schools with this kind of training. This increase that we have asked for will provide students with a longer training period in auxiliary utilization.

The increase requested will also provide training for the students not only in chairside assisting or "four handed dentistry" but in their utilization of dental hygienists and technicians as auxiliaries to improve the productivity of dental graduates.

### PROGRAM SCHOOLS

Then there are two additional schools that will be included in the program next year that have not participated before, simply because they are newly opened.

Senator HILL. Where are those schools, Doctor?

Dr. DIEFENBACH. They are the University of Connecticut and the University of South Carolina. There is one school, Meharry Dental College, that will join this year with the other 49 schools in participating in the program.

In short, all schools that are able to use the grants next year will do so and participate in the program.

Senator HILL. All of them that are able?

Dr. DIEFENBACH. Yes, sir.

### LOUISVILLE STUDY ON INCREASING DENTAL PRODUCTIVITY

Senator HILL. Do you have a report on the Louisville study for increasing dental productivity?

Dr. DIEFENBACH. I do not have a printed or published report to date, sir, but one is now being prepared.

Senator HILL. When will it be forthcoming?

Dr. DIEFENBACH. We expect the first report to be available in September and we plan to present it at the American Dental Association's annual session in October.

The second report will be available about a year from now and will describe the improvement in quality and productivity dentists can achieve using more than the conventional types of auxiliaries. This research project, I might add, is on schedule.

It is attracting widespread attention in the field of dental education. Many dental educators are visiting the Louisville manpower development site to observe the program.

The Center is being visited also by practicing dentists who are interested in finding out what new techniques they might adapt to their private practices.

INFORMATIONAL SEMINARS

We are planning to begin a series of seminars next year for teachers of dental schools and other dental leaders at the Louisville Center to provide them with the latest information on the project.

CENTER EXPANSION

Senator HILL. As you know, of course, last year we appropriated $2,558,000 for expansion of the Dental Health Center.

What is the status of that project as of now?

Dr. DIEFENBACH. The progress has been excellent up to this point. We are pretty much on the original schedule. The design of the facility has been completed. We are confident that the building will be esthetically attractive and functionally efficient.

The architectural planning contract was awarded to the firm of Neil Smith & Associates from the $250,000 made available by the Congress in 1966.

During the last 6 months, the architects have made a thorough investigation of the proposed site for which the building has been designed.

RELOCATION OF UTILITY WIRES

This investigation revealed a significant error in the original estimates for planning and constructing the facility.

The original estimate and the subsequent contract with the architects was approved on the presumption that the utilities of the expanded Dental Health Center would be connected to existing utilities of the main hospital complex.

The construction money that was appropriated by the Congress in 1968 included $50,000 for both site work and for connecting to existing utilities.

Now the architects' survey and investigation have revealed that the main utility lines which serve the entire building complex including the hospital are located underground at the proposed site for the new wing.

We learned about this a little over a week ago.

Senator HILL. What is the effect of that?

Dr. DIEFENBACH. It means that the lines must be relocated for the hospital and the rest of the facility before construction on the Dental Health Center expansion can begin.

I have been advised that the planning money for relocating the existing facilities will be made available from the Public Health Service's buildings and facilities fund.

The money to pay for relocating these utility lines has yet to be made available.

Senator HILL. That has to be done, of course, as you say, doesn't it?

Dr. DIEFENBACH. Yes, sir.

Senator HILL. Is there any money in this budget for that purpose?

Dr. DIEFENBACH. There is no money in the $2,558,000 appropriation for the relocation of utility lines because we did not know this would be necessary.

Senator HILL. There is no money in the 1969 budget, is there?

Dr. DIEFENBACH. No, sir.

### Revised Cost Estimate

Senator Hill. Is there any estimate of the cost for doing this?

Dr. Diefenbach. The estimated cost for relocating the utility lines is in the neighborhood of $170,000 to $190,000. This is in addition to the cost for planning the relocation of the lines which estimates are between $30,000 and $50,000 for the plans.

Senator Hill. You need over $200,000, don't you?

Dr. Diefenbach. Approximately $225,000 to $240,000 will be the total amount of money that will be needed to carry out this work.

### Construction Schedule

Senator Hill. And this work is absolutely essential if you are going forward, isn't it?

Dr. Diefenbach. Absolutely, sir. It will not be possible for us to actually begin the construction; that is, break ground, now scheduled for January of 1969—it will not be possible for us to do that until this unforeseen difficulty has been cleared up.

Senator Hill. Even if you had money, how long would it take to solve the problem?

Dr. Diefenbach. If the planning money were made available today and we were able to proceed on an uninterrupted basis, it would probably require about 8 months to complete the necessary changes for the relocation of the utility lines.

If that were the case, then we would be able to continue on with the present schedule for construction.

Senator Hill. Do you think you will be able to break the ground next January?

Dr. Diefenbach. I have every intention of doing so, sir.

Senator Hill. But you have to have this money?

Dr. Diefenbach. Yes, sir; it is essential that an arrangement be worked out either with existing funds available in the buildings and facilities budget of the Public Health Service or that some additional resources be made available.

### Funding Requests

Senator Hill. Couldn't you use some funds in the Public Health Service today for this purpose so that you would not have all this delay?

Dr. Stewart. Mr. Chairman, there are funds in the buildings and facilities budget to do the planing for the relocation but there are not funds in the buildings and facilities budget for the actual relocation costs.

We could proceed with the planning in a reasonably short time from now.

But there really isn't anything in the buildings and facilities budget for 1969 that would cover the cost of this relocation.

Senator Hill. You would have to have those funds appropriated then?

Dr. Stewart. That is correct.

Senator Hill. What will be the total now?

Dr. DIEFENBACH. The information I have is that the estimate we have from the General Services Administration on construction is $190,000.

In addition, the amount needed for planning is between $30,000 to $50,000.

I have been given assurances by the Public Health Service that this money for planning is available in existing funds. It that correct, Dr. Stewart?

Dr. STEWART. That is correct.

Senator HILL. But you need this minimum of $190,000 for relocating the lines?

Dr. STEWART. Yes, sir.

Senator HILL. Doctor, you have brought us a good statement. We want to thank you for it. I am sorry that you don't have all your money. We appreciate your statement very much.

Is there anything you want to add, Dr. Stewart?

Dr. STEWART. No, sir.

Senator HILL. It was a very good statement. We certainly appreciate it.

Dr. DIEFENBACH. Thank you, sir.

## Construction of Health Educational Facilities

STATEMENT OF DR. LEONARD D. FENNINGER, DIRECTOR, BUREAU OF HEALTH MANPOWER

ACCOMPANIED BY:

DR. JOSEPH A. GALLAGHER, DEPUTY DIRECTOR
DR. VIRON L. DIEFENBACH, DIRECTOR, DIVISION OF DENTAL HEALTH
MISS JESSIE SCOTT, DIRECTOR, DIVISION OF NURSING
JOHN W. HAMBLETON, FINANCIAL MANAGEMENT OFFICER, BUREAU OF HEALTH MANPOWER
DR. JAMES A. SHANNON, DIRECTOR, NATIONAL INSTITUTES OF HEALTH
DR. WILLIAM H. STEWART, SURGEON GENERAL
CHARLES MILLER, CHIEF FINANCE OFFICER
JAMES B. CARDWELL, DEPUTY ASSISTANT SECRETARY, BUDGET

### Appropriation Estimate

"CONSTRUCTION OF HEALTH EDUCATIONAL FACILITIES

"To carry out parts B and G of title VII and part A of title VIII of the Act, [$203,000,000] *$84,800,000*, of which [$175,000,000] *$75,000,000* is for grants to assist in construction of new, or replacement or rehabilitation of existing, teaching facilities pursuant to section 720 of the Act [including $35,000,000 for dental facilities as authorized by subsections (2) and (3) of said section, $10,000,000]; *$4,800,000* is for grants to assist in construction if new, or replacement or rehabilitation of existing, facilities for collegiate schools of nursing: [$15,000,000] *$3,200,000* is for grants to assist in construction of new, or replacement or rehabilitation of existing, facilities for associate degree and diploma schools of nursing; and [$3,000,000] *$1,800,000* is for grants to assist in construction of new, or replacement or rehabilitation of existing, facilities for training centers for allied health professions: *Provided*, That amounts appropriated herein shall remain available until expended."

### APPROPRIATION LANGUAGE CHANGE

The language change deletes reference to the $35,000,000 limitation for dental construction.

AMOUNTS AVAILABLE FOR OBLIGATIONS

| | 1968 | 1969 |
|---|---|---|
| Appropriation | $203,000,000 | $84,800,000 |
| Unobligated balance brought forward | 59,057,513 | 126,657,513 |
| Cutback required by H.J. Res. 888 (unobligated balances carried forward): | | |
| Reduction below obligation level in the 1968 President's budget | −67,600,000 | |
| Reduction because of unanticipated carryover balances | −59,057,513 | |
| Total cutback | −126,657,513 | |
| Other unobligated balances carried forward | | −60,000,000 |
| Total available for obligation | 135,400,000 | 151,457,513 |
| Disposition of cutback: Carried forward for obligation in 1969 | | 126,657,513 |
| Total cutback | | 126,657,513 |

AMOUNTS AVAILABLE FOR OBLIGATION

| | 1968 | 1969 |
|---|---|---|
| Appropriation | $203,000,000 | $84,800,000 |
| Total | 203,000,000 | 84,800,000 |

OBLIGATIONS BY ACTIVITY

| | 1968, estimate | 1969, estimate | Increase or decrease |
|---|---|---|---|
| Grants for construction of teaching facilities: | | | |
| Schools of medicine, osteopathy, pharmacy, optometry, podiatry, veterinary medicine, and public health | $93,400,000 | [1] $127,194,907 | +$33,794,907 |
| Schools of dentistry | 23,300,000 | | −23,300,000 |
| Nurses | 16,700,000 | 21,462,606 | +4,762,606 |
| Allied health professions | 2,000,000 | 2,800,000 | +800,000 |
| Total obligations [2] | 135,400,000 | 151,457,513 | +16,057,513 |

[1] Includes dental construction.
[2] Includes funds brought forward from prior years and excludes funds carried forward to subsequent years.

OBLIGATIONS BY OBJECT

| | | 1968, estimate | 1969, estimate | Increase or decrease |
|---|---|---|---|---|
| 41 | Grants, subsidies, and contributions | $135,400,000 | $151,457,513 | +$16,057,513 |

SUMMARY OF CHANGES

| | |
|---|---|
| 1968 enacted appropriation | $203,000,000 |
| Unobligated balance brought forward | 59,057,513 |
| Cutback required by H.J. Res. 888: | |
| Reduction below obligation level in the 1968 President's budget | −67,600,000 |
| Reduction because of unanticipated carryover balances | −59,057,513 |
| 1968 estimated obligations | 135,400,000 |
| 1969 requested appropriation | 84,800,000 |
| Unobligated balance brought forward | 126,657,513 |
| Unobligated balance carried forward | −60,000,000 |
| 1969 estimated obligations | 151,457,513 |
| Total change | +16,057,513 |

| Increases | Base | Change from base |
|---|---|---|
| A. Program: | | |
| 1. Increase in construction of teaching facilities for schools of medicine, osteopathy, dentistry, pharmacy, optometry, podiatry, veterinary medicine, and public health | 116,700,000 | +10,494,907 |
| 2. Increase in construction of teaching facilities for schools of nursing | 16,700,000 | +4,762,606 |
| 3. Increase in construction of teaching facilities for the allied health professions | 2,000,000 | +800,000 |
| Total, net changes requested | | +16,057,513 |

EXPLANATION OF CHANGES

*Grants for construction of teaching facilities for schools of medicine, osteopathy, dentistry, pharmacy, optometry, podiatry, veterinary medicine, and public health.*—Funds requested for 1969, $75,000,000, together with funds brought forward from 1968, will permit construction awards of $127,194,907 in 1969. This compares to planned awards in 1968 of $116,700,000. The estimated obligations will provide 877 new first-year places in 1969 and 820 in 1968.

*Grants for construction of teaching facilities for schools of nursing.*—Funds requested for 1969, $8,000,000, together with funds brought forward from 1968 will permit construction awards of $21,462,606 in 1969, providing 1,533 new first-year places. In 1968, the estimated obligations of $16,700,000 will provide 1,193 first-year places.

*Grants for construction of teaching facilities for the allied health professions.*—Funds requested for 1969, $1,800,000, together with funds brought forward from 1968 will permit construction awards of $2,800,000 in 1969. This will provide 336 new first-year places. In 1968 the expected obligations of $2,000,000 will provide 240 new first-year places.

JUSTIFICATION

| | 1968 estimate | 1969 estimate | Increase or decrease |
|---|---|---|---|
| Grants for construction of teaching facilities: | | | |
| Schools of medicine, osteopathy, dentistry, pharmacy, optometry, podiatry, veterinary medicine and public health | $116,700,000 | $127,194,907 | +$10,494,907 |
| Nurses | 16,700,000 | 21,462,606 | +4,762,606 |
| Allied health professions | 2,000,000 | 2,800,000 | +800,000 |
| Total obligations [1] | 135,400,000 | 151,457,513 | +16,057,513 |

[1] Includes funds brought forward from prior years and excludes funds carried forward to subsequent years.

Table showing new obligational authority follows:

| | 1968 appropriation | 1969 estimate | Increase or decrease |
|---|---|---|---|
| Schools of medicine, dentistry, osteopathy, pharmacy, optometry, podiatry, veterinary medicine, and public health | $140,000,000 | $60,000,000 | −$80,000,000 |
| Schools of dentistry | 35,000,000 | [1] 15,000,000 | −20,000,000 |
| Schools of nursing | 25,000,000 | 8,000,000 | −17,000,000 |
| Schools of allied health | 3,000,000 | 1,800,000 | −1,200,000 |
| Total, new obligational authority | 203,000,000 | 84,800,000 | −118,200,000 |

[1] This item entered at direction of committee.

*General*

This program provides financial assistance for the construction of new and expansion and rehabilitation of existing schools of medicine, osteopathy, dentistry, nursing, pharmacy, optometry, podiatry, veterinary medicine, public health, and the allied health professions.

The marked shortages in health manpower make it essential that more new schools are constructed and existing schools expanded to provide for the education and training of our increasing health manpower requests. This mission assumes

major importance when considered in terms of the shortage of physicians and other health manpower.

The amount of $84,800,000 is requested for the program for 1969. This amount provides $75,000,000 for grants under the Health Professions Educational Assistance Amendments of 1965 to assist in the construction of teaching facilities for schools of medicine, dentistry, osteopathy, pharmacy, optometry, podiatry, veterinary medicine, and public health; $8,000,000 for the construction of teaching facilities for training professional nursing personnel under the provisions of the Nurse Training Act of 1964; and $1,800,000 for the construction of training centers for the allied health professions under the provisions of the Allied Health Professions Personnel Training Act of 1966.

*Health professions educational facilities*

Schools of medicine, dentistry, osteopathy, pharmacy, optometry, podiatry, veterinary medicine, and public health (obligations):

| | |
|---|---|
| 1968 estimate | $116,700,000 |
| 1969 estimate | 127,194,907 |
| Increase or decrease | +10,494,907 |

The Health Professions Educational Assistance Act Amendments (P.L. 89–290, approved October 22, 1965) extended the Health Professions Educational Facilities construction program for three years through 1969 with a total authorization of $480,000,000. The Veterinary Medical Education Act of 1966 (P.L. 89–709, approved November 2, 1966) authorized a program of construction of teaching facilities for schools of veterinary medicine under the Health Professions Educational Assistance authorization of the Public Health Service Act. A total of $135,000,000 was appropriated by Congress for 1967, $175,000,000 was appropriated for 1968, and $75,000,000 is requested for 1969. These funds remain available until expended. Of the funds available in the program, we plan to make commitments for construction totaling $116,700,000 in 1968 and $127,194,907 in 1969 with unused balances carried forward into 1970.

Estimates indicate a need for approximately 400,000 physicians by 1975; however, present projections indicate that approximately 334,000 will be available by 1973 and approximately 350,000 by 1975. Similar situations exist in the other health professions covered by the Act.

In order to provide for the health needs of our people it is essential that we have an adequate supply of high quality health personnel. At the present time approximately 14% of our practicing physicians are from foreign countries that, due to their own critical manpower shortages, can ill afford to export their health professionals.

The Nation's supply of dental manpower has been lagging behind the growth of the population for more than a third of a century. At the same time, the public's desire and ability to purchase dental care is at an all time high. It is estimated that a minimum increase of 40,000 practicing dentists, over and above presently projected expansions, will be needed by 1985 if we are to achieve continued progress in the field of dental health. To realize such an expansion would require an additional 12,000 dental graduates by 1980, with at least 5,300 by 1973.

Federal financial assistance in the construction of dental teaching facilities can be augmented by other programs. The one with the greatest potential in expanding the productivity of the individual practicing dentist is through a more effective utilization of auxiliaries. A realistic graduating capacity requiring 4,500 additional first-year dental students has been selected as a 1973 goal. The amount for construction of dental teaching facilities in 1969 is included in the total program request of $75,000,000.

Many existing schools cannot, with only their own resources, expand existing facilities nor can new schools be created without considerable financial assistance. It is essential that Federal funds continue to assist construction of new schools and the expansion of existing schools of the health professions. There is also a continuing need to modernize and replace existing schools and teaching hospitals that are obsolete, overcrowded, or deficient in teaching space.

From the beginning of the Health Professions Educational Facilities construction program in 1964 to January 1, 1968, a total of 132 projects have been awarded grants totaling $337,385,871 in Federal funds and creating 3,848 first-year places. A breakdown of these projects follows:

| Type | Total number of projects | New | Expansion or rehabilitation | Total 1st year student places provided |
|---|---|---|---|---|
| Medical | 66 | 10 | 56 | 1,537 |
| Osteopathy | 1 | | 1 | 5 |
| Dental | 26 | 4 | 22 | 682 |
| Pharmacy | 12 | | 12 | 329 |
| Optometry | 5 | | 5 | 157 |
| Public Health | 6 | 1 | 5 | 352 |
| Nursing [1] | 16 | 2 | 14 | 786 |
| Total | 132 | 17 | 115 | 3,848 |

[1] Funded prior to the passage of Nurse Training Act of 1964.

The Health Professions Educational Facilities construction program has provided effective incentive to schools, to increase their undergraduate enrollment, particularly in the fields of medicine and dentistry. As of January 1, 1968, $230,100,000 of the total $337,385,871 awarded for construction projects is for medical schools and $71,300,000 is for dental schools.

Projects which will be funded by the $127,194,907 available in 1969 will provide an estimated 877 new first-year places.

The following table indicates: (1) applications approved but not funded as of January 1968; (2) applications expected to be approved by the Council for funding in 1968; (3) expressions of schools' intent to construct educational facilities under this program in the near future.

| | Approved not funded | | Pending council action | | Expressions of intent to submit applications | | Total need | |
|---|---|---|---|---|---|---|---|---|
| | Number of projects | Federal share | Number of projects | Federal share | Number of projects | Federal share | Number of projects | Federal share |
| Medical | 14 | $75,423,857 | 9 | $76,838,846 | 55 | $485,300,000 | 78 | $637,562,703 |
| Dental | 6 | 21,519,467 | 3 | 19,846,996 | 24 | 94,600,000 | 33 | 135,966,463 |
| Other disciplines | 7 | 11,218,654 | 2 | 6,342,634 | 23 | 54,100,000 | 32 | 71,661,288 |
| Total | 27 | 103,161,978 | 14 | 103,028,476 | 102 | 634,000,000 | 143 | 845,190,454 |

*Nursing educational facilities*

Construction of teaching facilities for nurses:

| | |
|---|---|
| 1968 estimate | $16,700,000 |
| 1969 estimate | 21,462,606 |
| Increase or decrease | +4,762,606 |

The Nurse Training Act of 1964 authorized construction funds totaling $90,000,000 of which $15,000,000 was appropriated in 1966, $25,000,000 in 1967, and $25,000,000 in 1968. These funds remain available until expended. The amount requested for 1969 is $8,000,000. Funds from prior years totaling $13,462,606 will be made available for obligation in 1969. The total of $21,462,606 for construction in 1969 would provide additional facilities to accommodate approximately 1,533 additional first-year places in schools of nursing. The 1,533 first-year places are 3.1 percent of the increase in the estimated number of places needed by 1973. Lead time of from three to six years will be required before students filling these new places will be ready to enter the active nurse supply.

Baccalaureate, diploma school and junior colleges must construct new teaching facilities if we are to increase enrollments to meet the national needs for nurse manpower. Many nursing education programs occupy makeshift buildings, such as barracks, dormitories, former hospitals, and basement areas. Many are unsafe, poorly ventilated, and noisy. It is essential that these obsolete educational facilities be replaced with modern teaching facilities. Every year the need for construction funds for schools of nursing becomes more critical as many of the existing facilities deteriorate and need for expansion of enrollments increases.

As of December 31, 1967, 73 grant awards totaling approximately $42,000,000 have provided construction funds for 2,863 additional first-year places and for

maintenance of approximately 12,000 existing places in nursing education facilities.

| Type | Total number of projects | New | Expansion or rehabilitation | Total 1st year student places provided |
|---|---|---|---|---|
| Baccalaureate | 28 | 3 | 25 | 1,802 |
| Junior colleges | 8 | 6 | 2 | 429 |
| Diploma schools | 37 | | 37 | 632 |
| Total | 73 | 9 | 64 | 2,863 |

As of December 1, 1967, 120 letters of intent have been received indicating future applications for construction grant funds. Of these, 66 letters estimated the Federal share for construction at approximately $47,000,000. Estimating comparable costs for the other 54 letters indicates that an additional $38,000,000 will be requested for a total of $85,000,000.

*Allied health professions educational facilities*

Construction of teaching facilities for the allied health professions:

| | |
|---|---|
| 1968 estimate | $2,000,000 |
| 1969 estimate | 2,800,000 |
| Increase or decrease | +800,000 |

The Allied Health Professions Personnel Training Act of 1966 authorized a program of construction grants for the renovation and rehabilitation of existing allied health professions teaching facilities and the construction of new allied health training centers. Funds for this program were first appropriated in 1968 in the amount of $3,000,000; in 1969, $1,800,000 is requested. These funds remain available until expended. We plan to make commitments for construction totaling $2,000,000 in 1968 and $2,800,000 in 1969.

An essential element in a total national effort to increase significantly the number of and improve the training opportunities for allied health manpower is the expansion and improvement of our educational facilities. Funds for this program will complement the other allied health grant programs for support of improved educational programs in junior colleges, colleges and universities; advanced training of individuals; and development of new educational methods.

Current estimates of need for allied health manpower indicate that the annual output of graduates in the curricula currently eligible for support must more than double—from approximately 15,000 to more than 30,000—over the next five years. Such an increase will require improvement of educational facilities through upgrading and expansion of existing facilities as well as the establishment of new training centers. Construction of new and expansion of existing educational facilities in addition to increasing the greater numbers of allied health workers encourage each institution to assess the relationship of the teaching program to technological change, improved educational techniques, changing organizational concepts and improved facility planning.

In 1968, approximately 240 new first-year places in junior colleges, colleges, and universities will be provided through grants for construction of new and upgrading of existing educational facilities for allied health occupations. It is estimated that 9 applications requesting $8,000,000 in Federal funds will be received during 1968. We have received expressions of interest from 43 institutions indicating that they plan to submit applications to construct educational facilties under this program requiring approximately $67,000,000 in Federal funds. The $2,800,000 available in 1969 will provide 336 new first-year places.

STATUTORY AUTHORIZATIONS FOR GRANTS

Senator HILL. Dr. Fenninger.

Dr. FENNINGER. Mr. Chairman and members of the committee, I would like to discuss the three construction programs administered by the Bureau of Health Manpower.

These programs, authorized under the Health Professions Educational Assistance Act, the Nurse Training Act, and the Allied Health

Professions Personnel Training Act, provide a mechanism through which Federal funds can be granted for the construction of educational facilities for students in the various health disciplines.

Such construction is of critical importance for the training of vitally needed health manpower. As health services become more complex and their scope increases, training requirements become much greater.

As the Nation's poor and aged avail themselves of health services through medicare and other health and welfare programs and as an expanding population requires better and broader health care, the currently overloaded and frequently obsolete educational facilities are unable to fulfill the demand for adequate training for the health manpower needed to serve the people of the United States.

### INTERESTED SCHOOLS

Although a number of schools of the health professions had tentative plans for improvement and expansion of their facilities prior to enactment of the Health Professions Educational Assistance Act in 1963, they saw little possibility of obtaining the necessary funds.

With the passage of the act, great interest was aroused in improving and substantially expanding existing schools and in the creation of new schools.

Funds just became available in fiscal year 1965 and with the availability of funds, schools progressed rapidly in their plaanning.

### IMPROVED QUALITY OF PLANS

The establishment of review committees and the acquisition of expert staff by the Public Health Service, the review by peer groups and consultation and advice available to the schools has led to a rapid improvement of the quality of the plans of the schools.

There have been significantly greater opportunities for the exchange of ideas and information and the exchange of expert knowledge than was possible prior to the passage of the act.

The momentum that has been gained is largely the result of wise congressional action in making funds available to the schools.

This momentum must be continued if we are to have more well-qualified people in the health professions in the future. The funds which we are requesting are essential to sustain this momentum.

### BUDGET REQUEST

Senator HILL. How much are you requesting this year?

Dr. FENNINGER. The total request is $84,800,000.

### PLANNING AND CONSTRUCTION PERIODS

The planning and construction of a new school requires a long period of time. Key staff members must be recruited before definitive planning can take place for they must be involved in planning on the basis of the educational programs which they intend to carry out.

A new medical or dental school requires 10 to 12 years from its conception to the graduation of its first class. New schools in the other health professions require somewhat less time, but it is seldom less than 6 to 8 years.

While the development of new schools is extremely important in producing more professional personnel, it is equally important to insure the continuing operation, the expansion and the improvement of existing schools.

Thus, while we anticipate a significant demand for the Federal support of construction of new schools, in fiscal year 1969 we must recognize the critical and in some cases desperate need of the existing schools for Federal support of construction.

Competition for funds is now severe and will become more so in the foreseeable future.

### HEALTH PROFESSIONS EDUCATIONAL ASSISTANCE CONSTRUCTION PROGRAM

From the beginning of the program in 1965 through February 23, 1968, 209 applications for assistance have been received from 130 schools.

Of these, 140 applications at 114 schools have been approved and grants awarded. Upon completion of construction of project school applications presently supported, 3,974 new first-year student places will be created. These include 1,604 student places in medicine and 719 in dentistry.

These places will make it possible to continue to admit this increased number of students each year resulting in a substantial increase in the number of people serving in the health professions in the future.

Federal funds provided by this program have contributed significantly to the establishment and development in 10 new medical schools, four new schools of dentistry and one new school of public health.

In addition, 40 existing medical schools, 19 dental schools, two schools of osteopathy, five schools of public health, five schools of optometry, 11 schools of pharmacy, and one school of veterinary medicine have received construction funds enabling them to substantially expand enrollment and improve their educational programs.

#### Program Funding

The total construction costs for these projects including applicants' share and Federal assistance is $670,993,754. The Federal assistance amounted to $365,240,984. From the beginning of the program in 1965 through fiscal year 1968, $372,805,000 in Federal funds were available for awarding grants.

Senator Hill. You did not quite grant all those?

Dr. Fenninger. No, sir, not at the present time.

Senator Hill. Are they available for grant now?

Dr. Fenninger. They are available for grant now.

#### Applications

As of February 23, 1968, 18 applications requesting $78,806,998 in Federal assistance have been approved and are ready for funding. There are 21 additional applications for $174,007,373 pending this year's council action.

We are in communication with sponsors of 102 school applications who intend to request Federal assistance from this program within the

next 4 or 5 years. These schools would require an estimated $634 million in Federal participation.

NURSING EDUCATIONAL FACILITIES

Construction funds for schools of nursing are needed (1) to increase the capacity of those educational programs in nursing which could and should expand and, (2) to replace and renovate obsolete facilities to improve quality of education and maintain enrollments.

During the past few years, some nursing schools have been unable to accept qualified applicants for admission because of lack of space.

There is evidence that additional thousands of students would be admitted to nursing programs if urgent needs for improvement and expansion of schools are met.

Senator HILL. You think you could get them in?

Dr. FENNINGER. We think we could.

Senator HILL. We certainly need them.

Dr. FENNINGER. Yes, sir.

Many nursing education programs occupy makeshift buildings, such as barracks, dormitories, former hospitals, and basement areas. Many are unsafe, poorly ventilated, and noisy.

It is essential that these obsolete educational facilities be replaced with modern teaching facilities. Every year the need for construction funds for schools of nursing becomes more critical as many of the existing facilities deteriorate and need for expansion of enrollments increases.

APPLICATIONS

As of January 31, 1968, and during the 29 months that funds have been available under the Nurse Training Act of 1964, 137 applications have been received and 73 have been approved and funded.

These 73 applications represent total construction costs of $75,400,000 and Federal participation totaling $42 million.

Through fiscal year 1968, $51,537,000 in Federal funds were available for awarding grants. Upon completion of construction the projects will provide 2,863 additional first-year places, and for maintenance of approximately 12,000 existing places in nursing education facilities.

Nine new schools of nursing will have been built and many more expanded. Twenty-three additional applications representing a total construction cost of $21,300,000 and requesting over $12,300,000 in Federal funds have been approved but not yet funded.

Senator HILL. You haven't had the money to do the funding?

Dr. FENNINGER. That is correct, sir.

Twenty-two other applications requesting $26,400,000, and requesting Federal funds of $15 million, are awaiting Council action.

As of January 31, 1968, 120 letters of intent show that many more applications are in the active planning stage. These applications represent a total construction cost of $150 million with Federal participation amounting to $85 million.

CONSTRUCTION OF TEACHING FACILITIES FOR THE ALLIED HEALTH PROFESSIONS

The Allied Health Professions Personnel Training Act authorizes a construction program similar to that for the health professions pro-

viding support for facilities for training centers for the allied health professions.

These grants are essential in the national effort to increase the number, improve the quality, and enlarge the training opportunities for these extremely important members of the health team.

It is anticipated that by the close of fiscal year 1969, 43 applications will be submitted for approximately $67 million in Federal funds with nine applications amounting to $8 million in fiscal year 1968.

BUDGET REQUEST

For the Bureau of Health Manpower's construction programs, a request in the amount of $84,800,000 is submitted.

Senator HILL. That $84,800,000 is way under your request; isn't it?

Dr. FENNINGER. Yes, sir.

Senator HILL. According to the figure I have, it was $116,200,000.

Dr. FENNINGER. That is correct.

Senator HILL. They didn't cut you in half, they cut you a good deal more.

You asked for $201 million and they gave you only $84,800,000; is that correct?

Dr. FENNINGER. That is correct, sir.

Senator HILL. You can't do anything like meet the demands of these applicants, can you?

Dr. FENNINGER. No, sir; we cannot. We cannot meet the demand nor can we meet the need.

Senator HILL. When I said meet the applicants' demands, I meant the needs too, because the need is the basis of the application; is that right?

Dr. FENNINGER. That is right.

ALLOCATION OF FUNDS

Dr. FENNINGER. $75 million for grants to assist in the construction of schools of medicine, osteopathy, dentistry, pharmacy, optometry, podiatry, veterinary medicine, and public health; $8 million for grants to assist in the construction of teaching facilities for nurses; and $1,800,000 for grants for construction of teaching facilities for the allied health professions.

By using funds available from prior years, together with the $84,800,000 appropriation request, we anticipate awards to be made in fiscal year 1969 totaling $151,457,000—an increase of $16,057,000 over awards planned for fiscal year 1968.

The $151,457,000 program level in fiscal year 1969 is distributed by activity as follows:

| | |
|---|---|
| Schools of medicine, osteopathy, dentistry, pharmacy, optometry, podiatry, and public health | $127,194,907 |
| Nurses | 21,462,606 |
| Allied | 2,800,000 |
| Total | 151,457,513 |

INCREASED FIRST-YEAR STUDENT PLACES

With the planned obligation of $127,194,907 for schools of the health professions in fiscal year 1969, we expect to provide 887 more first-year student places.

For nursing, it is anticipated that $21,462,000 will be awarded to increase the number of students of nursing and to reduce the critical shortage.

This amount will provide 1,533 new first-year student places.

With the $2,800,000 which we plan to award for construction for the allied health professions, 336 new first-year student places would be created.

This concludes my statement on construction. We should be glad to answer questions which you may have.

May I add a brief comment at this point:

We have been recently notified by the Bureau of the Budget that $37 million of the $126 million reserve noted in the budget presentation has been released to provide for construction awards made in fiscal year 1967, but not recorded until 1968. This change does not affect the appropriation requested or the obligations for fiscal years 1968 or 1969 as shown in the budget for new awards. It will reduce, however, the carryover balances in fiscal year 1969 and fiscal year 1970 by that amount.

BUDGET REQUEST REDUCTIONS

Senator HILL. Your cut in the construction of facilities for nurses was some $17 million, wasn't it?

Dr. FENNINGER. Yes, sir.

Senator HILL. And for the allied health professions personnel some $4,200,000; is that right?

Dr. FENNINGER. That is correct.

Senator HILL. That, together with the facilities for medical, dental, and other health personnel, approximates that $116,200,000 cut; is that right?

Dr. FENNINGER. Yes, sir.

Senator HILL. Our population is growing all the time, too.

Dr. FENNINGER. Yes, sir.

Senator HILL. People are living longer, too.

Dr. FENNINGER. Yes, sir.

Senator HILL. They need more and more medical, dental, and other health care?

Dr. FENNINGER. Yes, sir.

Senator HILL. But you are getting cut down more, certainly this year; is that right?

NONEARMARKING OF FUNDS

Dr. FENNINGER. Yes, sir.

Senator HILL. Incidentally, the budget reference shows a change which deletes reference to the $35 million for dental construction in order to add greater program flexibility.

Will you tell us why you intend to do this?

Dr. FENNINGER. Yes, sir. The applications and their review determine the readiness of schools to be funded. This varies from one type of discipline to another and from one institution to another.

It has been our experience that by having the funds not specifically earmarked for any discipline one can fund individual projects on their merits and their readiness to be undertaken. Recommendation is made in the order in which the institutions are ready to carry out their projects and the priority judged by a review committee and by a council which then recommends to the Surgeon General.

Senator HILL. Of course, we have had this earmarking for the past 4 years; haven't we?

Dr. FENNINGER. Yes, sir.

Senator HILL. I had our old friend Dr. Bob Felix; you knew him, of course?

Dr. FENNINGER. Yes, sir.

Senator HILL. From St. Louis University. He saw me not too many days ago. They are closing down their dental school for lack of funds.

Dr. FENNINGER. I think, Senator, Dr. Gallagher might be able to speak a little more extensively to the construction program.

Senator HILL. All right, doctor.

Dr. GALLAGHER. Mr. Chairman, with reference to the decrease in funds, if we do set up separate categories for dental or for others and the different disciplines are dependent one on the other in the construction of the facility; for example, in joint applications for medical and dental facilities, if the medical portion can't start construction because of the program's inability to make a grant award due to lack of sufficient construction funds, it is unlikely that the dental construction can begin. Design and construction of one is so dependent upon design and construction of the other that one cannot stand alone. Generally in joint applications, all parts are so interrelated that they are planned together and must be constructed together.

This is another one of the problems created by categorizing.

Senator HILL. A lot of times they are joined together?

Dr. GALLAGHER. Yes, sir. One cannot be constructed without the other being constructed.

Senator HILL. Without the other going forward, too?

Dr. GALLAGHER. Yes, sir.

## Health Professions Education Fund and Nurse Training Fund

STATEMENT OF DR. LEONARD D. FENNINGER, DIRECTOR, BUREAU OF HEALTH MANPOWER

ACCOMPANIED BY:

RAYMOND F. DIXON, DIRECTOR, DIVISION OF HEALTH MANPOWER EDUCATIONAL SERVICES

JOHN W. HAMBLETON, FINANCIAL MANAGEMENT OFFICER, BUREAU OF HEALTH MANPOWER

DR. JAMES A. SHANNON, DIRECTOR, NATIONAL INSTITUTES OF HEALTH

DR. WILLIAM H. STEWART, SURGEON GENERAL

CHARLES MILLER, CHIEF FINANCE OFFICER

JAMES B. CARDWELL, DEPUTY ASSISTANT SECRETARY, BUDGET

### Appropriation Estimates

"HEALTH EDUCATION LOANS

"The Secretary is hereby authorized to make such expenditures, within the limits of funds available in the following revolving funds, and in accord with law, and to make such contracts and commitments without regard to fiscal year limitation as provided by section 104 of the Government Corporation Control Act, as amended, as may be necessary in carrying out the programs set forth in the budget for the current fiscal year for the 'Health Professions Education Fund' and the 'Nurse Training Fund'.

"[PARTICIPATION SALES AUTHORIZATION]

"[The Federal National Mortgage Association, as trustee, is hereby authorized to issue beneficial interests or participations in such loan assets of the Health Professions Education Fund and the Nurse Training Fund as may be placed in trust with such association in accordance with section 302(c) of the Federal National Mortgage Association charter act, as amended, in an aggregate principal amount of not to exceed $15,000,000: *Provided*, That this authorization shall remain available until June 30, 1969.]"

"PAYMENT OF SALES INSUFFICIENCIES

"For the payment of such insufficiencies as may be required by the trustee on account of outstanding beneficial interest or participations in [assets of the Public Health Service in] *the* Health Professions Education Fund assets or Nurse Training Fund assets, authorized by [this act] *the Department of Health, Education, and Welfare Appropriation Act, 1968*, to be issued pursuant to said section 302(c), [$250,000] *such sums as may be necessary, to remain available without fiscal year limitations.*"

### Explanation of Language Changes

*Participation Sales Authorization*

The language for Participation Sales Authorization is bracketed since it is not anticipated that there will be any sale of participation certificates in 1969 by the Federal National Mortgage Association.

*Payment of Sales Insufficiencies*

The language provides for an indefinite appropriation for Payment of Sales Insufficiencies to ensure timely payments to the holders of Federal National

Mortgage Association notes which are secured by notes from health professions and nursing schools. This provision assures lenders and the public that funds from the Treasury will be available to make payments when due in the event that payments to holders of notes exceed the amounts received in repayments from schools.

AMOUNTS AVAILABLE FOR OBLIGATION

| | 1968 | 1969 |
|---|---|---|
| Appropriation (indefinite) | | $154,000 |
| Authorization to spend agency debt receipts | $11,500,000 | |
| Receipts and reimbursements from non-Federal sources | 448,000 | 1,062,000 |
| Transferred from other accounts | 2,015,000 | |
| Unobligated balance brought forward | 12,380,000 | 14,436,000 |
| Cutback required by H.J. Res. 888: | | |
| Reduction below obligation level in the 1968 President's budget: Unobligated balance carried forward | −1,344,000 | |
| Reduction because of unanticipated carryover balances: Unobligated balance carried forward | −2,380,000 | |
| Total cutback | −3,724,000 | |
| Other unobligated balances carried forward | −10,712,000 | −3,288,000 |
| Total available for obligation | 11,907,000 | 12,364,000 |
| Disposition of cutback: To be carried forward for obligation in future years | 3,724,000 | |

OBLIGATIONS BY ACTIVITY

| | 1968 | 1969 | Increase or decrease |
|---|---|---|---|
| Loans to health professions schools | $11,659,000 | $11,429,000 | −$230,000 |
| Federal National Mortgage Association fees for sale of notes | 6,000 | | −6,000 |
| Interest accrued on participation certificates | 77,000 | 770,000 | +693,000 |
| Interest to Treasury | 165,000 | 165,000 | |
| Total obligations | 11,907,000 | 12,364,000 | +457,000 |

OBLIGATIONS BY OBJECT

| | | 1968 | 1969 | Increase or decrease |
|---|---|---|---|---|
| 25.1 | Other services | $6,000 | | −$6,000 |
| 33.0 | Investments and loans | 11,659,000 | $11,429,000 | −230,000 |
| 43.0 | Interest and dividends | 242,000 | 935,000 | +693,000 |
| | Total obligations by object | 11,907,000 | 12,364,000 | +457,000 |

AMOUNTS AVAILABLE FOR OBLIGATION

| | 1968 | 1969 |
|---|---|---|
| Appropriation (indefinite) | | $46,000 |
| Authorization to spend agency debt receipts | $3,500,000 | |
| Receipts and reimbursements from non-Federal sources | 258,000 | 640,000 |
| Transferred from other accounts | 4,395,000 | |
| Unobligated balance brought forward | 8,347,000 | 9,748,000 |
| Cutback required by H.J. Res. 888: | | |
| Reduction because of unanticipated carryover balances: Unobligated balance carried forward | −1,595,000 | |
| Total cutback | −1,595,000 | |
| Other unobligated balances carried forward | −8,153,000 | −2,892,000 |
| Total available for obligation | 6,752,000 | 7,542,000 |
| Disposition of cutback: | | |
| To be carried forward for obligation in future years | 1,595,000 | |

OBLIGATIONS BY ACTIVITY

| | 1968 | 1969 | Increase or decrease |
|---|---|---|---|
| Loans to schools of nursing | $6,715,000 | $7,300,000 | +$585,000 |
| Federal National Mortgage Association fees for sale of notes | 2,0000 | | −2,000 |
| Interest accrued on participation certificates | 23,000 | 230,000 | +207,000 |
| Interest to Treasury | 12,000 | 12,000 | |
| Total obligations | 6,752,000 | 7,542,000 | +790,000 |

OBLIGATIONS BY OBJECT

| | | 1968 | 1969 | Increase or decrease |
|---|---|---|---|---|
| 25.1 | Other services | $2,000 | | −$2,000 |
| 33.0 | Investments and loans | 6,715,000 | $7,300,000 | +585,000 |
| 43.0 | Interest and dividends | 35,000 | 242,000 | +207,000 |
| | Total obligations | 6,752,000 | 7,542,000 | +790,000 |

STUDENT LOAN REVOLVING FUNDS

*General*

The Allied Health Professions Personnel Training Act of 1966 (P.L. 89–751, dated November 3, 1966) established two revolving funds to provide loans to students of medicine, osteopathy, dentistry, pharmacy, optometry, podiatry, veterinary medicine, and nursing.

An institution which borrows funds from the health professions education fund or the nurse training fund to provide loans to its students will execute a note payable for the amount of the loan. This note will bear an interest rate determined by the Secretary to be adequate to cover the cost of the funds to the Treasury and estimated losses from defaults.

At specified times during the year, these notes will be placed in a trust fund against which certificates of participation are issued and sold by the Federal National Mortgage Association. $15,000,000 is the maximum authorized amount of participation certificates which can be sold in 1968. Funds derived from the proceeds of these certificates will be deposited in the revolving funds. The Secretary will pay the institution (1) 90% of its losses from defaults, (2) the amount by which the interest payable by the school on such sums exceeds the interest received by the institutions on student loans made from such sums, (3) collection costs, and (4) amount of loans cancelled.

Principal and interest collected by the institution on student loans made from borrowed capital will be given to the Secretary for deposit in the revolving funds or for payment to the Federal National Mortgage Association.

*Health Professions Education Fund*

Approximately 11,800 health professions students will receive loans totalling $11,429,000 from the Health Professions Education Fund in 1969. This is about the same level of loans as in 1968. This revolving fund supplements the existing Federal capital contributions method of capitalizing loan funds in the schools which is budgeted for in the appropriation "Health Manpower Education and Utilization." The schools are free to choose either or both methods of obtaining student loan funds. In 1969, the total health professions student loan program will be $28,729,000: $17,300,000 in appropriations for Federal capital contribution and $11,429,000 in revolving fund monies. From the combined funds, approximately 4,420 additional students will be provided loans in 1969 over the number in 1968 for a total in 1969 of 29,083.

*Nurse Training Fund*

Approximately 11,500 nursing students will receive loans totalling $7,300,000 from the Nurse Training Fund in 1969. This is a slight increase over the 1968 level. This fund supplements the existing Federal capital contributions method of capitalizing loan funds in the schools which is budgeted for in the appropriation "Health Manpower Education and Utilization." The schools are free to choose either or both methods of obtaining student loan funds.

In 1969, the total nursing student loan program will be $17,000,000: $9,700,000 in appropriations for Federal capital contributions and $7,300,000 in revolving fund monies. From the combined funds approximately 2,468 additional students will be provided loans in 1969 over the number in 1968 for a total in 1969 of 27,000.

ALLIED HEALTH PROFESSIONS TRAINING ACT

Senator HILL. You are going to tell us about the training program, Doctor?

Dr. FENNINGER. Yes, Senator Hill.

Mr. Chairman, the enactment in November 1966 of the Allied Health Professions Personnel Training Act provided an additional loan source for easing the financial burden of needy students entering the field of health by establishing the health professions education fund and the nurse training fund.

REVOLVING FUND FOR LOANS

These funds were established on a revolving basis to enable greater utilization of Federal funds, to provide an opportunity for the private sector of the economy to participate more directly in supporting health professional and nursing students, and to enable more students to obtain loans.

LOAN PROCEDURES

The schools may choose to borrow from these revolving funds, or receive a Federal capital contribution from our regular appropriation, or both.

The health profession student may borrow from the schools up to $2,500, and the nursing student may borrow up to $1,000.

Institutions electing to borrow are relieved of their present obligations to contribute at least 10 percent of the capital of their loan funds.

In fiscal year 1968, we are authorized to have the Federal National Mortgage Association sell participation certificates amounting to $15 million backed by notes given the Bureau of Health Manpower by the institutions that borrowed funds from the health professions fund and the nurse training fund.

The student loan capital, made available to participating health professions schools from either the Federal capital contribution or the revolving fund, will enable these schools to provide loans to 29,803 financially handicapped students in 1969.

In the same manner, Federal funds will provide the necessary capital to enable some 27,000 needy young people enrolled in nursing programs to receive loans.

INDEFINITE APPROPRIATION FOR SALES INSUFFICIENCIES

In 1969, an indefinite appropriation is requested for sales insufficiencies. This would provide authority to spend from general funds such amounts as may be necessary to assure interest payments to holders of Federal National Mortgage Association certificates which are secured by notes from health profession and nursing schools.

It is estimated that the amount of these insufficiencies in 1969 will be $200,000. This represents the difference between interest due private investors and the interest accruing on notes from the institutions receiving loans.

I shall be glad to answer any questions.

Senator HILL. You got some reduction from your request, didn't you? Reductions of $576,000 for your health professions and $189,000 for your nurse training, is that right?

Mr. HAMBLETON. That is correct.

Senator HILL. Is there anything you gentlemen would like to add?

Dr. FENNINGER. No, sir, thank you very much.

Senator HILL. Is there anything you would like to add, Dr. Stewart?

Dr. STEWART. No, Mr. Chairman.

Senator HILL. You have brought us some very clear testimony. Thank you very much.

Dr. FENNINGER. Thank you, Mr. Chairman.

## National Library of Medicine

STATEMENT OF DR. MARTIN M. CUMMINGS, DIRECTOR, NATIONAL LIBRARY OF MEDICINE

ACCOMPANIED BY:

DR. RUTH M. DAVIS, ASSOCIATE DIRECTOR, RESEARCH AND DEVELOPMENT

DAVID F. KEFAUVER, ASSOCIATE DIRECTOR, EXTRAMURAL PROGRAMS

GEORGE F. RUSSELL, JR., EXECUTIVE OFFICER

DR. JAMES A. SHANNON, DIRECTOR, NATIONAL INSTITUTES OF HEALTH

DR. WILLIAM H. STEWART, SURGEON GENERAL

CHARLES MILLER, CHIEF FINANCE OFFICER

JAMES B. CARDWELL, DEPUTY ASSISTANT SECRETARY, BUDGET

### Appropriation Estimate

"NATIONAL LIBRARY OF MEDICINE"

"To carry out section 301 of the Act and for expenses, not otherwise provided for, necessary to carry out the National Library of Medicine Act (42 U.S.C. 275), and the Medical Library Assistance Act of 1965 (79 Stat. 1059), [$19,912,000] *$19,172,000*, of which [$5,250,000] *$1,500,000* shall remain available until June 30, [1969] 1970."

AMOUNTS AVAILABLE FOR OBLIGATION

| | 1968 | 1969 |
|---|---|---|
| Appropriation | $19,912,000 | $19,172,000 |
| Transfer from "Communicable diseases" | 1,762,000 | |
| Unobligated balance brought forward | 10,567,462 | 4,171,000 |
| Cutback required by H.J. Res. 888: | | |
| Reduction below obligation level in the 1968 President's budget: | | |
| Unobligated balance lapsing | −248,000 | |
| Unobligated balance carried forward | −1,304,000 | |
| Subtotal | −1,552,000 | |
| Reduction because of unanticipated carryover balances: Unobligated balance carried forward | −2,867,000 | |
| Total cutback | −4,419,000 | |
| Other unobligated balances carried forward | | −27,000 |
| Total currently authorized for obligation | 27,822,462 | 23,316,000 |
| Plus proposed release of reserves for increased pay and postal costs | 184,000 | |
| Total available for obligation | 28,006,462 | 23,316,000 |
| Disposition of cutback: | | |
| To be used for pay and postal costs in this account | 184,000 | |
| To be returned to the Treasury | 64,000 | |
| To be carried forward for obligation in 1969 | 4,171,000 | |
| Total cutback | 4,419,000 | |

## OBLIGATIONS BY ACTIVITY

| | 1968 estimate | | 1969 estimate | | Increase or decrease | |
|---|---|---|---|---|---|---|
| | Positions | Amount | Positions | Amount | Positions | Amount |
| Grants: | | | | | | |
| Construction | | $10,000,000 | | $1,250,000 | | −$8,750,000 |
| Training | | 1,143,127 | | 1,433,000 | | +289,873 |
| Special scientific projects | | 120,000 | | 200,000 | | +80,000 |
| Research | | 1,261,000 | | 2,288,000 | | +1,027,000 |
| Library resources | | 3,537,392 | | 2,800,000 | | −737,392 |
| Regional medical libraries | | 680,128 | | 2,415,000 | | +1,734,872 |
| Publications support | | 371,815 | | 300,000 | | −71,815 |
| Total, grants | | 17,113,462 | | 10,686,000 | | −6,427,462 |
| Direct operations: | | | | | | |
| Library operations | 289 | 5,085,400 | 295 | 6,147,000 | +6 | +1,061,600 |
| Toxicology information | 30 | 1,152,000 | 34 | 1,452,000 | +4 | +300,000 |
| National Medical Audiovisual Center | 105 | 1,762,000 | 105 | 1,962,000 | | +200,000 |
| Research and support contracts | | 533,000 | | 585,000 | | +52,000 |
| Review and approval of grants and contracts | 45 | 800,600 | 45 | 780,000 | | −20,600 |
| Program direction | 67 | 1,560,000 | 67 | 1,704,000 | | +144,000 |
| Total, direct operations | 536 | 10,893,000 | 546 | 12,630,000 | +10 | +1,737,000 |
| Total obligations | 536 | 28,006,462 | 546 | 23,316,000 | +10 | −4,690,462 |

## OBLIGATIONS BY OBJECT

| | 1968 estimate | 1969 estimate | Increase or decrease |
|---|---|---|---|
| Total number of permanent positions | 536 | 546 | +10 |
| Full-time equivalent of all other positions | 12 | 20 | +8 |
| Average number of all employees | 477 | 493 | +16 |
| Personnel compensation: | | | |
| Permanent positions | $4,516,300 | $4,670,000 | +$153,700 |
| Positions other than permanent | 123,000 | 198,300 | +75,300 |
| Other personnel compensation | 30,500 | 55,000 | +24,500 |
| Total personnel compensation | 4,669,800 | 4,923,300 | +253,500 |
| Personnel benefits | 373,900 | 388,700 | +14,800 |
| Travel and transportation of persons | 217,800 | 298,000 | +80,200 |
| Transportation of things | 26,100 | 25,000 | −1,100 |
| Rent, communications, and utilities | 334,800 | 363,000 | +28,200 |
| Printing and reproduction | 313,200 | 334,000 | +20,800 |
| Other services | 163,900 | 236,000 | +72,100 |
| Project contracts | 3,280,600 | 3,516,000 | +235,400 |
| Services of other agencies | 247,000 | 326,000 | +79,000 |
| Payment to "National Institutes of Health Management Fund" | 743,000 | 653,000 | −90,000 |
| Supplies and materials | 214,200 | 378,000 | +163,800 |
| Equipment | 308,700 | 1,189,000 | +880,300 |
| Grants, subsidies, and contributions | 17,113,462 | 10,686,000 | −6,427,462 |
| Total obligations by object | 28,006,462 | 23,316,000 | −4,690,462 |

## SUMMARY OF CHANGES

| | |
|---|---|
| 1968 enacted appropriation | $19,912,000 |
| Transfer from "Communicable diseases" | 1,762,000 |
| Unobligated balance brought forward | 10,567,462 |
| Cutback required by H.J. Res. 888: | |
| Reduction below obligation level in the 1968 President's budget | −1,552,000 |
| Reduction because of unanticipated carryover balances | −2,867,000 |
| Proposed release of reserves for increased pay and postal costs | 184,000 |
| 1968 estimated obligations | 28,006,462 |
| 1969 requested appropriation | 19,172,000 |
| Unobligated balance brought forward | 4,171,000 |
| Unobligated balance carried forward | −27,000 |
| 1969 estimated obligations | 23,316,000 |
| Total change | −4,690,462 |

| | Base | | Change from base | |
|---|---|---|---|---|
| | Positions | Amount | Positions | Amount |
| **INCREASES** | | | | |
| A. Built in: | | | | |
| 1. Annualization of new positions authorized in 1968 | | | | $98,800 |
| 2. Annualization of Pay Act costs (Public Law 90–206 and 90–207) | | | | 65,000 |
| 3. Pay above stated annual rate in 1968 (260 days in 1968; 261 days in 1969) | | | | 18,993 |
| B. Program: | | | | |
| 1. Training grants | | $1,142,805 | | $289,873 |
| 2. Special scientific project grants | | 120,000 | | 80,000 |
| 3. Research grants | | 1,261,000 | | 1,027,000 |
| 4. Regional medical library grants | | 680,128 | | 1,734,872 |
| 5. Development and partial installation of second-generation medlars | 126 | 800,000 | +6 | 1,054,415 |
| 6. Toxicology information exchange planning, systems design, and engineering | 30 | 1,152,000 | +4 | 257,507 |
| 7. National Medical Audiovisual Center program maintenance and expansion | 105 | 1,762,000 | | 182,964 |
| 8. Research and support contracts | | 533,000 | | 52,000 |
| 9. Program direction | 67 | 1,560,000 | | 134,014 |
| Subtotal, program increases | | | 10 | 4,812,645 |
| Total increases | | | 10 | 4,995,438 |
| **DECREASES** | | | | |
| A. Built in: 1. Nonrecurring items of equipment | | | | −77,000 |
| B. Program: | | | | |
| 1. Construction grants | | 10,000,000 | | −8,750,000 |
| 2. Library resource grants | | 3,537,392 | | −737,392 |
| 3. Publication support grants | | 371,815 | | −71,815 |
| 4. Review and approval of grants and contracts | 45 | 800,600 | | −49,693 |
| Total decreases | | | | −9,685,900 |
| Total net changes requested | | | +10 | −4,690,462 |

EXPLANATION OF CHANGES

*Training grants.*—An increase of $289,873 will bring the total for this program up to $1,433,000 composed of $433,000 carryover of 1968 funds and $1,000,000 requested in new obligational authority. This will support approximately 24 training grants.

*Special scientific project grants.*—An increase of $80,000 will bring the total for this program up to $200,000 consisting of $100,000 carryover of 1968 funds and $100,000 requested in new obligational authority. This will support seven awards to health science scholars.

*Research grants.*—An increase of $1,027,000 for a total of $2,288,000 in 1969 consisting of $888,000 carryover in 1968 funds and $1,400,000 requested in new obligational authority will fund approximately 30 research projects in 1969.

*Regional medical library grants.*—An increase of $1,734,872 will bring the total for this program to $2,415,000 composed of $915,000 carryover in 1968 funds and $1,500,000 requested in new obligational authority. This will fund approximately eight regional medical library grants in 1969.

*Development and partial installation of second generation MEDLARS.*—An increase of $1,054,415 and six positions will provide project management, systems design, computer software purchase, a portion of hardware purchase, and additional staff to accomplish partial development and installation of an improved and expanded Medical Literature Analysis and Retrieval System (MEDLARS).

*Toxicology information.*—An increase of $257,507 and four positions will provided funds and additional manpower for planning, systems design, and engineering related to development of the Toxicology Information Exchange and the toxicological information subsystem of the health information network.

*National Medical Audiovisual Center.*—An increase of $182,964 is requested to replace unserviceable audiovisual media in the worldwide distribution system, to acquire professional medical television taped programs and research material for radio dissemination for duplication and distribution to support

continuing education of health scientists and medical practitioners, and to cover increased costs of producing and distributing audiovisual materials.

*Research and support contracts.*—A total of $585,000 is recommended for this purpose in 1969, an increase of $52,000 over 1968. The 1969 funding level includes $258,000 remaining available from 1968 and $327,000 in new funds. These funds will be used for systems engineering and network design contracts for the health information network and publications support contracts.

*Program direction.*—An increase of $134,014 will cover the increased administrative support and program management costs resulting from growing needs of programs which were new in 1968.

*Construction grants.*—No new obligational authority is requested for construction grants in 1969. Funds in the amount of $1,250,000 remaining available from 1968 will support one construction project in 1969 compared to 10 projects funded in the amount of $10,000,000 during 1968. The difference between the program levels of the two years is a reduction of $8,750,000.

*Library resource grants.*—A total of $2,800,000 is recommended for this purpose in 1969, a decrease of $737,392 from 1968. The 1969 funding level includes $300,000 remaining available from 1968 and $2,500,000 in new funds. These funds will support approximately 300 grants, the same number that was funded in 1968. The average award, however, will be lower in 1969.

*Publications support grants.*—A total of $300,000 is requested for this purpose in 1969, a reduction of $71,815 below the $371,815 available in 1968. The 1969 request will support 10 grant awards as compared with the 12 being funded in 1968.

*Review and approval of grants and contracts.*—A decrease of $49,693 in the 1969 request results from a reduction in the printing budget of this activity and reduced costs of grant review and processing support under the NIH management fund agreement.

EXPLANATION OF TRANSFERS

| *1968 estimate* | *Purpose* |
|---|---|
| Transfer from "Communicable Diseases", $1,762,000 | The Public Health Service Audiovisual Facility was transferred organizationally from the Bureau of Disease Prevention and Environmental Control and redesignated National Medical Audiovisual Center. |

JUSTIFICATION—NATIONAL LIBRARY OF MEDICINE

| | 1968 estimate | | 1969 estimate | | Increase or decrease | |
|---|---|---|---|---|---|---|
| | Positions | Amount | Positions | Amount | Positions | Amount |
| Personnel compensation and benefits | 536 | $5,043,700 | 546 | $5,312,000 | +10 | +$268,300 |
| Other expenses | | 22,962,762 | | 18,004,000 | | −4,958,762 |
| Total | 536 | 28,006,462 | 546 | 23,316,000 | +10 | −4,690,462 |

GENERAL STATEMENT

The application of new biomedical knowledge to the people's health requires the conversion of traditional libraries to active information servicing and disseminating agencies. The National Library of Medicine, by virtue of its statutory mission and its leadership in the employment of new communications technologies has become a principal focus for this aspect of the national health effort.

The goal of the NLM is to assist the advancement of medical and related sciences through the support and operation of programs to improve the flow of health information from the point of generation to ultimate users for its application to research, education, and medical practice (thus contributing to the general health by bringing the latest advances in health care to the patient).

The 1969 budget request includes the provision of funds for all categories of support authorized under the Medical Library Assistance Act of 1965 whose purpose it is to assist in the development and support of the Nation's biomedical information resources. Increases are requested for training of biomedical infor-

mation specialists, special scientific projects, research in medical library science, and development of regional medical libraries.

The budget contains increases for the Library's direct operations to: (1) continue the design and development of a second-generation MEDLARS computer system; (2) further the design and operation of a Toxicology Information Program; (3) fund project contracts for health information network design; (4) augment resources available to provide services at the National Medical Audiovisual Center; and, (5) strengthen program direction and administrative support for all Library programs.

GRANTS

The Medical Library Assistance Act of 1965 authorizes a program of grants for the purpose of assisting the health community in the acquisition, organization, dissemination and application of medical knowledge. The purpose of this Act is to encourage and assist the development of medical libraries and related resources to provide for the improved flow of biomedical information throughout the areas of research, education and medical practice, so that existing medical knowledge can be utilized to the fullest extent in improvement of health throughout the Nation.

CONSTRUCTION

| | 1968 estimate | | 1969 estimate | | Increase or decrease | |
|---|---|---|---|---|---|---|
| | Positions | Amount | Positions | Amount | Positontis | Amount |
| Grants | | $10,000,000 | | $1,250,000 | | −$8,750,000 |

According to current estimates of total national needs for the construction and renovation of health library facilities, a priority group of 200 academic institutions and a secondary group of 750 medical care institutions are in need of assistance.

For 1969, NLM expects to receive approximately 30 library construction applications for partial funding from medical schools and other major institutions. Of the 30 anticipated applications, it is expected 20 will be recommended for approval. At an estimated average request of $1,300,000 per applicant the total recommended for approval in 1969 is estimated at $26,000,000. In 1967, nine construction grant applications were approved amounting to $7,000,000. It is expected that 15 applications will be approved in 1968 amounting to $18,000,000.

In 1968, $11,250,000 will be available for funding construction grants of which we expect to obligate $10,000,000. Funds in the amount of $1,250,000 appropriated in 1968 will be available for the award of one construction grant in 1969. No new obligational authority is being requested in 1969. The decrease of $8,750,000 is consistent with the general requirement for reduction in federal expenditures as expressed by the Congress in enacting the Continuing Resolution and as implemented by the Administration in establishing constraints on federal support for new construction projects.

TRAINING

| | 1968 estimate | | 1969 estimate | | Increase or decrease | |
|---|---|---|---|---|---|---|
| | Number of awards | Amount | Number of awards | Amount | Number of awards | Amount |
| Noncompeting continuation grants | 15 | $877,251 | 11 | $718,000 | −4 | −$159,251 |
| New grants | 5 | 265,876 | 13 | 715,000 | +8 | +449,124 |
| Total | 20 | 1,143,127 | 24 | 1,433,000 | +4 | +289,873 |

The Library requests an increase of $289,873 in 1969 for training grants. This will result in total obligational authority of $1,433,000 in 1969 composed of $433,000 brought forward from 1968 plus $1,000,000 in new obligational authority (the amount of yearly authorization in the Medical Library Assistance Act). The 1968 base of $1,143,127 is composed of $579,834 brought forward from 1967 plus $563,293 of new obligational authority.

The Medical Library Assistance Act authorization of $1,000,000 per year for training can support approximately 100 trainees per year for a total of approximately 500 during the five year period authorized by the Act. Since the fiscal authorization for training cannot approach fulfillment of the estimated total professional medical librarian manpower requirement, the program focuses on training persons for creative leadership in positions of major responsibility. A conference at the University of Washington on Education for Medical Librarianship conducted during 1968 has helped to define these goals.

In 1968 five innovative graduate programs in medical librarianship are being supported in library schools at the University of Chicago, University of Minnesota, University of Illinois, University of California at Los Angeles, and Case Western Reserve University. A doctoral program in biological sciences communication is being supported at George Washington University, and a new postdoctoral training program in biomedical communication has been initiated at Tulane University. Five postgraduate internship programs in medical librarianship are being supported in medical schools at Washington University, Wayne State University, Johns Hopkins University, University of Tennessee, and University of California at Los Angeles. Approximately 60 trainees are enrolled in these 12 programs during 1968.

The number of training programs in medical librarianship and biomedical communication is expected to increase to 24 in 1969 with an enrollment of approximately 100 trainees. New training grant applications now in the review process and others in preparation propose innovative programs for the development of various new careers in biomedical communications. The increasing uses of complex automated systems and the potential applications of various new communications media require the training of biomedical communications specialists who have the capability for the design, development, and management of multi-media information systems. There is increasing interest in doctoral and postdoctoral training programs for biomedical communication specialists. Continued grant assistance will be provided for graduate training programs in history of medicine at Yale University and Johns Hopkins University.

SPECIAL SCIENTIFIC PROJECTS

| | 1968 estimate | | 1969 estimate | | Increase or decrease | |
|---|---|---|---|---|---|---|
| | Positions | Amount | Positions | Amount | Positions | Amount |
| Grants | | $120,000 | | $200,000 | | +$80,000 |

The purpose and intent of the Special Scientific Project Awards program is to support outstanding scholars in contributing to the professional and scientific literature.

The awards support senior health science scholars in their full-time analysis and synthesis of existing publications and reports of research findings. These studies result in the creation of digests and texts necessary to the advance of medicine. These awards also support scholarly studies on social and cultural aspects of health sciences.

This program has been announced to all medical school faculties and to certain other academic and research centers. While three awards have been made to outstanding scholars, approximately 40 persons have indicated interest in applying for these awards. In response to this interest it is estimated that the number of awards will increase to seven in 1969 for a total amount of $200,000.

RESEARCH

| | 1968 estimate | | 1969 estimate | | Increase or decrease | |
|---|---|---|---|---|---|---|
| | Number of awards | Amount | Number of awards | Amount | Number of awards | Amount |
| Noncompeting continuations | 15 | $564,160 | 11 | $300,000 | −4 | −$264,160 |
| New grants | 6 | 696,840 | 19 | 1,988,000 | +13 | +1,291,160 |
| Total | 21 | 1,261,000 | 30 | 2,288,000 | +9 | +1,027,000 |

The efficient, rapid, and effective flow of biomedical information requires innovative tools and systems which must be developed through studies, experiments, and investigations. Careful studies must be made to determine the information requirements and patterns of biomedical researchers, students, educators, and practitioners. New and constantly improved methods for organizing, preserving, and transmitting information must be developed. Automation must be further introduced, developed, and evaluated. Synthesis of behavioral and technical research must be explored and accomplished. The components of information flow systems must be assembled and organized to form total systems and comprehensive networks.

The Extramural research program has initiated support of studies and experiments in the above areas. Many of these studies and experiments require long-term and expanding financial support. An increasing number of grant applications are being received for larger and more comprehensive studies and for development of major systems. It is expected that more than 20 research projects will be supported in 1968 and that this number will increase to more than 30 projects by 1969. Research projects being supported during 1968 which will require continued support in 1969 include studies on communications processes and the flow of medical information, the relationships between various biomedical information facilities and services, the cost-effectiveness of certain indexing techniques, the use of self-instructional materials, historical studies, and the introduction and evaluation of new techniques and systems in medical libraries.

LIBRARY RESOURCES

| | 1968 estimate | | 1969 estimate | | Increase or decrease | |
|---|---|---|---|---|---|---|
| | Positions | Amount | Positions | Amount | Positions | Amount |
| Grants | | $3,537,392 | | $2,800,000 | | −$737,392 |

Obligations for resources grants in 1968 consist of $2,200,000 in new obligational authority plus $1,337,392 brought forward from 1967. The $2,800,000 requested for 1969 represents a net decrease of $737,392 in obligational authority.

The purpose of the medical library resources program is to provide financial assistance and incentive for improving the basic materials, equipment and services of medical libraries. Although it has been estimated that there are approximately 6,300 medical libraries in the United States, the resources grants program will focus on assisting approximately 500 of the major libraries which serve comparatively large and varied health science clientele. The amount of each resource grant is computed by a formula based on the annual operating budget of the library. A library receiving an initial award may request continued support for subsequent years in decreasing amounts.

This program is vital and essential for the immediate and rapid improvement of the several hundred medical libraries which are major stations and links in the development and operation of the national health sciences information network.

During 1967 awards were made to 136 academic libraries in the amount of $2,523,669; 105 hospital libraries in the amount of $562,411; 17 medical societies and other institutions in the amount of $249,620; for a total of 258 awards amounting to $3,335,700. Estimated 1969 continuing commitments from these 258 awards will amount to approximately $2,200,000. It is estimated that 42 new awards will be made in 1968 in the amount of $700,000 which will generate an additional $583,000 in continuing commitments for 1969. Thus, approximately $2,800,000 will be required to fund continuing commitments on resources awards activated in 1967 and 1968. No new awards are planned for 1969. Since continuation commitments on resources grants are on an annually decreasing formula basis and no new awards will be made in 1969, the request is $737,392 below the amount provided in 1968.

REGIONAL MEDICAL LIBRARIES

| | 1968 estimate | | 1969 estimate | | Increase or decrease | |
|---|---|---|---|---|---|---|
| | Positions | Amount | Positions | Amount | Positions | Amount |
| Grants | | $680,128 | | $2,415,000 | | +$1,734,872 |

The Medical Library Assistance Act of 1965 authorized appropriations to assist in the development of a national system or regional medical libraries each of which would have facilities of sufficient depth and scope to supplement the services of other medical libraries within a specific region. Grants are awarded to improve, augment, and strengthen regional service in selected libraries which already have a sound base for providing expanded services in a defined region. These libraries will be critical service complexes for the developing network system.

The intent of this program is to provide support to existing superior institutions, permitting them to extend their services in support of libraries (and individuals) in the agreed region. Statutory limitations on funding strictly limit the number of regional libraries which can be supported.

In 1967 the first regional library grant was made to Countway Medical Library of Harvard University. This enabled the activation of the New England regional medical library system. In 1968 two more regional medical libraries are being established, in Seattle for the Pacific Northwest (including Alaska) and in Philadelphia, for the Delaware Valley complex. Negotiations are underway for a regional medical library in New York, in Illinois, Texas, and the Southeast. The Library requests $2,415,000 for continued support of the three established in 1967 and 1968 and for five additional regional libraries in 1969.

PUBLICATIONS

| | 1968 estimate | | 1969 estimate | | Increase or decrease | |
|---|---|---|---|---|---|---|
| | Positions | Amount | Positions | Amount | Positions | Amount |
| Grants | | $371,815 | | $300,000 | | −$71,815 |

The Library provides financial assistance for non-profit biomedical publications, concentrating on "secondary publications" (indexes, abstracts, bibliographies, translations, handbooks, etc.) which assist in making available to the health professions information of importance to the national health effort.

The first grants made in the publications program have yielded important bibliographies and indexes and additional publications in the form of abstracts, translations, handbooks, and biomedical atlases are in preparation. It is expected that 15 new publications grants and contracts will be approved in 1968, and it is estimated that 20 may be approved in 1969.

An important focus for the Library's activities in the 1969 program will be a study covering the review and evaluation of the needs of American health sciences personnel for biomedical information originally published in a foreign language.

DIRECT OPERATIONS

| | 1968 estimate | | 1969 estimate | | Increase or decrease | |
|---|---|---|---|---|---|---|
| | Positions | Amount | Positions | Amount | Positions | Amount |
| Personnel compensation and benefits | 536 | $5,043,700 | 546 | $5,312,000 | +10 | +$268,300 |
| Other expenses | | 5,849,300 | | 7,318,000 | | +1,468,700 |
| Total | 536 | 10,893,000 | 546 | 12,630,000 | +10 | +1,737,000 |
| Subactivities: | | | | | | |
| Library operations | 289 | 5,085,400 | 295 | 6,147,000 | +6 | +1,061,600 |
| Toxicology information | 30 | 1,152,000 | 34 | 1,452,000 | +4 | +300,000 |
| National Medical Audiovisual Center | 105 | 1,762,000 | 105 | 1,962,000 | | +200,000 |
| Research and support contracts | | 533,000 | | 585,000 | | +52,000 |
| Review and approval of grants and contracts | 45 | 800,600 | 45 | 780,000 | | −20,600 |
| Program direction | 67 | 1,560,000 | 67 | 1,704,000 | | +144,000 |
| Total | 536 | 10,893,000 | 546 | 12,630,000 | +10 | +1,737,000 |

LIBRARY OPERATIONS

| | 1968 estimate | | 1969 estimate | | Increase or decrease | |
|---|---|---|---|---|---|---|
| | Positions | Amount | Positions | Amount | Positions | Amount |
| Personnel compensation and benefits | 289 | $2,621,200 | 295 | $2,805,700 | +6 | +$184,500 |
| Other expenses | | 2,464,200 | | 3,341,300 | | +877,100 |
| Total | 289 | 5,085,400 | 295 | 6,147,000 | +6 | +1,061,600 |

The Library requests a net increase of $1,061,600 and six positions to continue the design and begin installation of a second generation Medical Literature Analysis and Retrieval System (MEDLARS II) and to cover the costs of built-in increases of $84,185 for positions new in 1968 and extra day's pay in 1969 less built-in decreases of $77,000 for nonrecurring equipment costs.

The program increase of $1,054,415 and six positions is requested to continue design and begin installing MEDLARS II. The increasing volume of published medical literature and increasing service demands will soon exceed the capacity and capability of the present MEDLARS system to absorb the growing workload. The present system which became operational in 1964 is performing as planned over its projected system life of five years which ends June 1969. It is now operating at 95% of capacity, and, before the end of the year, NLM will have to find time on other equipment to augment this system.

The MEDLARS II computer configuration will incorporate: (1) increased processing capability; (2) intermediate access storage; (3) time-sharing; and, (4) on-line access to data bases from remote terminals. Translated into program capabilities, these new features will provide: (1) a greatly increased file capacity which will allow the maintenance of abstracts on the data record; (2) quicker response to an increasing volume of bibliographic service requests including demand searches and recurring bibliographies; (3) more current data through on-line record up-dating; (4) an automated acquisition and cataloging system with cataloging data availability to other medical libraries through remote terminal access to the NLM record files; (5) a graphic image storage and retrieval system for more rapid provision of interlibrary loans through automated search and print-out capability; (6) development of specialized information services supporting the toxicology information and drug literature programs through the addition of chemical structure search capabilities in the new system; and, (7) additional information management capabilities to be utilized in support of the health information network described below under the research and support contract subactivity.

The bulk of the increase will provide funds for the purchase of computer hardware and software, contractual services for project management and systems design, and to pay salaries for six new positions at the Library to support and monitor system development and conversion to the new system.

By agreement with the Library of Congress and the National Agricultural Library, every effort will be made to insure compatibility among the systems under development at the three National libraries.

TOXICOLOGY INFORMATION

| | 1968 estimate | | 1969 estimate | | Increase or decrease | |
|---|---|---|---|---|---|---|
| | Positions | Amount | Positions | Amount | Positions | Amount |
| Personnel compensation and benefits | 30 | $372,700 | 34 | $407,500 | +4 | +$34,800 |
| Other expenses | | 779,300 | | 1,044,500 | | +265,200 |
| Total | 30 | 1,152,000 | 34 | 1,452,000 | +4 | +300,000 |

The harmful effects of chemicals in man's environment has become a matter of great social concern. As a result, many agencies, governmental, academic, and industrial have been compiling information files in considerable variety relating to the toxic effects of chemical substances. The objective of the Toxicology Information Program is to design intercommunication linkages so that these files may be made accessible as a national information resource for use of scientists, administrators, and planners, thereby responding to the requirements expressed by the President's Science Advisory Committee.

In 1969 the requested increase of $300,000 includes $42,493 for built-in increases. A program increase of $257,507 is requested to fund contracts and four positions for systems engineering and network design relating to toxicology information.

During 1968 the Toxicology Information Program has made considerable progress in preliminary design of the network through the convening of professional advisory groups, coordination with other government agencies, the National Academy of Science-National Research Council, and the private sector, the award of contracts for user studies and source identification and recruitment of a core top-flight program staff. All of these program accomplishments contribute to the planning of a nationwide toxicology information system fully integrated with the emerging national health information network. When operational, the toxicology program will:

1. Identify, classify, and maintain current descriptions of all toxicology information users and all significant centers and services which accumulate and analyze toxicology information.
2. Propose compatible systems standards and guidelines within Government for storage and retrieval of toxicology information including common vocabulary systems and compatible computer programming, and promote their adoption by the non-Government sector.
3. Respond to incoming requests for stored information, directly or by referral, and provide or arrange repackaging of stored information where significantly large user-groups are identified.
4. Provide a data base for the study of biological effects of chemicals which have a meaning to life systems.

The Toxicology program will contribute to the Nation's health by providing a central resource for information on the toxic effects of chemical agents on man.

Preliminary design conducted in 1968 will include the following factors:

1. availability of facilities;
2. network control features; and
3. information content and sources.

The $257,507 program increase allocated to toxicological network design and systems engineering in 1969 will be used for contractual support and four new positions to assist in the detailing and description of the above-listed design factors and in the modelling of a nationwide public service-oriented network.

The National Toxicological Information Network will utilize the facilities and capabilities of existing related systems to enhance the services provided to its customers. During the latter part of 1968 and throughout 1969 the NLM will establish an interconnection with the Army Chemical Information Data System (CIDS) via a remote console-to-computer link and will experiment with the utilization of this related Government-sponsored system to increase its own effectiveness within the health and pharmacological community.

In-house and contractual efforts concerned with toxicological network design in 1969 will resolve problems associated with the organization of computer data banks in order to permit easy access by individual specialists and qualified users of the system.

Following the preliminary design efforts of 1968 and 1969, the Toxicological Information Network will be ready for phased implementation with some experimental services by 1970.

NATIONAL MEDICAL AUDIOVISUAL CENTER

| | 1968 estimate | | 1969 estimate | | Increase or decrease | |
|---|---|---|---|---|---|---|
| | Positions | Amount | Positions | Amount | Positions | Amount |
| Personnel compensation and benefits | 105 | $1,072,800 | 105 | $1,090,700 | ..... | +$17,900 |
| Other expenses | ..... | 689,200 | ..... | 871,300 | ..... | +182,100 |
| Total | 105 | 1,762,000 | 105 | 1,962,000 | ..... | +200,000 |

In 1968 the newly designated National Medical Audiovisual Center (NMAC) was transferred from the Bureau of Disease Prevention and Environmental Control to the NLM. The National Medical Audiovisual Center was founded in Atlanta in 1942, as a part of the Malaria Control in War Areas Program. It came into existence during World War II when emergency training efforts proved that visual teaching media were efficient tools for instructing military and civilian personnel in new, sometime highly specialized, jobs. With the formation of the Communicable Disease Center in 1947, the audiovisual programs become a Branch of the Center. The Branch was later designated the Public Health Service Audiovisual Facility.

The program of the NAMC includes:

(1) operation of a central facility in the Public Health Service for the development, production, distribution, evaluation, and utilization of motion pictures, videotapes and other audiovisual forms;

(2) provision of consultation and assistance in the development of specialized audiovisual activities; and,

(3) promotion of the production, dissemination, and utilization of medical films and other audiovisuals in the schools of health professions and elsewhere.

With the explosion of population, knowledge, and curriculum content, and the increasingly unfavorable teacher/student ratios, there is an urgent and expanding need for the development and use of audiovisual resources in schools of the health professions and for use in national programs for continuing education in the health sciences.

During the last several years, the National Medical Audiovisual Center program has achieved significant progress toward implementation of portions of the recommendations of the President's Commission on Heart Disease, Cancer, and Stroke, relating to the use of audiovisual media in the health sciences. In addition, a prototype community medical television network (12 stations) was established in the Atlanta area linking this Center with Grady Memorial Hospital, Emory University Medical School, the Veterans Administration Hospital, the Georgia Department of Public Health and several other hospitals in the community. This instructional system was pretested in 1967 and became fully operational during 1968. Medical schools and hospitals in other areas of the United States have observed and studied the results of the programs transmitted under the system. Consultation, program materials, and selected assistance were made available as required. In 1969 this demonstration project will not receive major fiscal support from the Center but will continue to operate as a community system However, the Center will participate actively as a member of the consortium.

The requested increase of $200,000 includes built-in increases of $17,036 and a program increase of $182,964 which will be applied to: an essential replacement of audiovisual media in the worldwide distribution system including motion pictures, filmstrips, audiotapes, and television tapes to maintain an effective biomedical audiovisual distribution program for health practitioners, researchers, and schools of the health professions; and, an expanded review and selection program of professional medical television taped resorce material which is essential for the rapid dissemination of biomedical information to support continuing medical education of health scientists and practitioners. A considerable quantity of current and outstanding medical education material is now available in this format and maximum use of its potential should be made. In addition to the above, the increased funding will also permit a minimal expansion of on-going biomedical audiovisual support by increasing the production output of

biomedical videotapes, motion pictures, filmstrips, slide series, and audiotapes; increasing the loan and sale of audiovisuals through the worldwide distribution system; and increasing on-site surveys and reports on communications resources and facilities at schools of the health professions.

RESEARCH AND SUPPORT CONTRACTS

| | 1968 estimate | 1969 estimate | Increase or decrease |
|---|---|---|---|
| Contracts | $533,000 | $585,000 | +$52,000 |

The Medical Library Assistance Act authorizes the Library to use contractual funding in addition to grant funding for research and publications support.

The net increase of $52,000 results from an increase of $75,000 for research contracts and a partially offsetting decrease of $23,000 from the 1968 level for publications support contracts as summarized in the following table:

| | 1968 estimate | 1969 estimate | Increase or decrease |
|---|---|---|---|
| Research contracts | $225,000 | $300,000 | +$75,000 |
| Publications support contracts | 308,000 | 285,000 | −23,000 |
| Total | 533,000 | 585,000 | +52,000 |

In 1969 the $300,000 in research contracts are requested for health communications systems engineering and network design directed toward the design and development of a national health information network.

The Biomedical Communications Network has been established as a national multimedia communications network to serve the information needs of the health community and to assist in the continuing education of health professionals. This effort was undertaken on the recommendation of the House and Senate Appropriations Committees in 1966 and the Special Subcommittee on the Investigation of the Department of Health, Education, and Welfare, pp. 156–157, in 1966. The Network is comprised of four service components and one support component as follows:

(1) The library component.
(2) The specialized information component.
(3) The educational and instructional TV component.
(4) The audio and audiovisual component.
(5) Data processing and data transmission facilities.

In 1968 in-house and contractual efforts are directed principally toward the design and configuration of the library component of the network. In particular, a nationwide, service-oriented network centered around the existing NLM MEDLARS System has been in preliminary design. The geographical coverage, the scope of services to be provided and the means of access by both individual and institutional users are the primary design factors being formulated in 1968. The present effort is directed toward delineating the communication media themselves, the determination of the benefits of using common carriers versus dedicated communication links, and the determination of the terminal devices needed.

The $300,000 allocated to Systems Engineering and Network Design Research and Development contracts in 1969 will permit the detailed design of the library component and the first experimental operation of improved selected services. Direct access to medical literature data bases from remote sites by individual health professionals will be made available. Interrogation of several complementary data bases from a single site will enhance medical information services to the health community and will permit the more profitable utilization of the time spent in seeking information on the part of health practitioners.

In addition, a first model of the specialized education (ETV and ITV) component of the network will be formulated. This model will include alternative combinations of satellite communications and terrestrial communications such as microwave and cable. It will be heavily dependent for subsistence on the library component and although it will have to await increased funding before it can contribute substantially to the improvement of continuing medical education, it

will provide an initial demonstration of the feasibility and value of utilizing these information channels.

Contractual effort during 1969 will be focused on experimental operations of direct access services to central data banks from remote sites, on multi-file query from a single site, on modelling a specialized educational services network utilizing satellite communications as one alternative, and on determining final configuration of the library component in terms of network node locations and services, as well as the specific techniques and services to be embedded in the system.

The $285,000 allocated to publications support contracts in 1969 will be used for the same types of projects described under publications grants.

REVIEW AND APPROVAL OF GRANTS AND CONTRACTS

| | 1968 estimate | | 1969 estimate | | Increase or decrease | |
|---|---|---|---|---|---|---|
| | Positions | Amount | Positions | Amount | Positions | Amount |
| Personnel compensation and benefits | 45 | $376,100 | 45 | $380,200 | ---------- | +$4,100 |
| Other expenses | ---------- | 424,500 | ---------- | 399,800 | ---------- | −24,700 |
| Total | 45 | 800,600 | 45 | 780,000 | ---------- | −20,600 |

This activity of the Library is responsible for the scientific review and evaluation and administration of the extramural grant and contract program.

The net decrease of $20,600 for review and approval of grants and contracts is comprised of a program decrease of $49,693 partially offset by built-in increases of $29,093. The program decrease in 1969 consists of reductions in the printing budget of this activity and reduced grant review and processing support under the NIH management fund agreement.

PROGRAM DIRECTION

| | 1968 estimate | | 1969 estimate | | Increase or decrease | |
|---|---|---|---|---|---|---|
| | Positions | Amount | Positions | Amount | Positions | Amount |
| Personnel compensation and benefits | 67 | $600,900 | 67 | $627,900 | ---------- | +$27,000 |
| Other expenses | ---------- | 959,100 | ---------- | 1,076,100 | ---------- | +117,000 |
| Total | 67 | 1,560,000 | 67 | 1,704,000 | ---------- | +144,000 |

The total amount requested for program direction is $1,704,000, an increase of $144,000 over the amount provided in 1968. This activity includes salaries and other expenses for the overall program and administrative management of the NLM including physical plant maintenance, communications and utilities, security, and various centralized administrative and maintenance services provided by the NIH. Positions funded from this acivity are those in the immediate Office of the Director including public information and publications management and the Office of Administrative Management staff.

In 1969, the increase of $144,000 comprised of built-in increases in the amount of $9,986 and a program increase of $134,014, will provide the additional administrative support and program management required by the increasing demands of programs which were new in 1968. Factors which contribute directly to increased workloads and costs in program direction include the organizational transfer this year of the National Medical Audiovisual Center located in Atlanta, Georgia, to the NLM, increasing participation and cooperation of the NLM in international support and exchange programs, growth in the contract administration and management load on program direction staff resulting from program increases for toxicology information, research and development, and MEDLARS II development, and increases in the costs of goods and services. The bulk of the increase will cover increased payment to the NIH management fund for centralized administrative services including project contract negotiation and administration, increased travel costs between Atlanta and Bethesda, and increased overtime and consultative services related to increasing workload on program direction staff.

NEW POSITIONS REQUESTED FISCAL YEAR 1969

| | Grade | Annual salary |
|---|---|---|
| Second generation MEDLARS development and partial installation: | | |
| Public health program specialist | GS–15 | $18,404 |
| Systems analyst | GS–13 | 13,507 |
| Programer | GS–12 | 11,461 |
| Programer | GS–11 | 9,657 |
| Secretary | GS–7 | 6,734 |
| Secretary | GS–5 | 5,565 |
| Total (6) | | 65,328 |
| Toxicology information: | | |
| Public health program specialist | GS–14 | 15,841 |
| Systems analyst | GS–13 | 13,507 |
| Programer | GS–9 | 8,054 |
| Secretary | GS–5 | 5,565 |
| Total (4) | | 42,967 |
| Total new positions, all activities (10) | | 108,295 |

Name: Martin Marc Cummings.

Position: Director, National Library of Medicine.

Birthplace and date: Camden, New Jersey, September 7, 1920.

Education: B.S., Bucknell University, 1941; M.D., Duke University School of Medicine, 1944; mixed internship, Boston Marine Hospital, 1944–45; assistant resident, medicine, Boston Marine Hospital, 1945–46.

Experience: Director, National Library of Medicine, 1964 to present; DHEW representative on the Committee on Science and Technological Information (COSATI) of the Federal Council on Science and Technology, 1965 to present; associate director for research grants, NIH, 1963; chief, Office of International Research, NIH, 1961–63; consultant, Office of the Director, NIH, 1960–61; consultant to Department of Medicine and Surgery, Veterans Administration, 1959–61; chairman and professor, Department of Microbiology, University of Oklahoma School of Medicine, Oklahoma City, Oklahoma, 1959–61; chairman, Panel on Sarcoidosis, National Research Council, National Academy of Sciences, 1958–60; chairman, Committee on Medical Research, National Tuberculosis Association, 1958–59; director, Research Service, Veterans Administration Central Office, Washington, D.C., 1953–59; special lecturer in microbiology, George Washington University School of Medicine, Washington, D.C., 1953–59; chief, Tuberculosis Research Laboratory, Veterans Administration Hospital, Atlanta, Georgia, 1949–53; associate professor of bacteriology, 1953, and instructor through associate professor of medicine at Emory University School of Medicine, Atlanta, Georgia, 1948–53; director, Tuberculosis Evaluation Laboratory, Communicable Disease Center, U.S. Public Health Service, Atlanta, Georgia, 1947–49; commissioned officer, U.S. Public Health Service, served in New York, Minnesota, Michigan, and Denmark, working with diseases of the chest and bacteriology.

Association memberships: American Academy of Microbiology, Inc.; American Federation for Clinical Research; American Society for Clinical Investigation—Emeritus Member; American Thoracic Society and National Tuberculosis Association; Association of American Medical Colleges; Medical Library Association: National Association on Standard Medical Vocabulary (Honorary Member); The Society of the Sigma XI; American Documentation Institute; Council of Biology Editors, Inc., The Royal Society of Medicine; one of twelve permanent members of the Federal Library Committee; Science Information Council, National Science Foundation; Association of Research Libraries—Automation Committee; Pacific Science Association, U.S. Panel, Standing Committee on the Communication of Scientific Information; consultant to the Special Joint Committee on Libraries in International Education (Association of Research Libraries, Spec. Libraries Association, The Council of National Library Associations and the American Library Association); consultant, American Hospital Association, Committee on Library Services for Hospitals; Board of Directors, Gorgas Memorial Foundation; Board of Directors, Council on Biological Science Information, NRC, NAS, Board of Visitors of the Medical Center of Duke University.

Special awards, citations, or publications: VA Distinguished Service Award; DHEW Superior Service Award; more than seventy articles on subjects ranging

from tuberculosis to information retrieval systems; coauthor of a textbook on tuberculosis and contributor to four medical texts.

INTRODUCTION OF NEW STAFF MEMBERS

Senator HILL. Now Dr. Cummings, of the National Library of Medicine. We are glad to have you here and you may proceed in your own way, sir.

Dr. CUMMINGS. Thank you, Mr. Chairman. I would like the privilege of introducing some new staff members, if I may.

Senator HILL. Good.

Dr. CUMMINGS. I have with me Mr. George Russell, the Library's Executive Officer. Mr. David Kefauver, our Associate Director for Extramural programs, and Dr. Ruth Davis, our new Associate Director for Research and Development.

Senator HILL. It is nice to have all of you here.

HEALTH INFORMATION ROLE OF THE LIBRARY

Dr. CUMMINGS. Mr. Chairman, the National Library of Medicine has been the major health information resource in the United States for more than a century.

It contributes to the improved health of the Nation by providing timely access to the constantly expanding mass of health information for practitioners, researchers, educators, and students in the health sciences.

HEALTH SCIENCES PUBLICATIONS AND INFORMATION

The expanding national investment in medical research and the delivery of health services has accelerated publication and utilization of information in the health sciences.

While this committee meets today, more than 1,000 new medical articles are being published.

Senator HILL. More than 1,000?

Dr. CUMMINGS. More than 1,000 new scientific articles relating to medicine are being published today.

The National Library of Medicine has long been in the forefront of the development of new and better methods for collecting, organizing, processing, and disseminating health information.

MEDICAL LITERATURE ANALYSIS AND RETRIEVAL SYSTEM (MEDLARS)

We pioneered in the establishment of the medical literature analysis and retrieval system (MEDLARS) which contains more than 750,000 augmented bibliographic citations in a high-speed computer memory.

INDEX MEDICUS

With this system we produce Index Medicus, which each month indexes over 15,000 current journal articles, as well as special recurring and demand bibliographies. To derive more benefits nationally from this system, the Library supports six university-based decentralized MEDLARS search centers.

Even this application of modern technology, however, will not be sufficient to meet the growing demands of health information users.

This fact has been recognized by the Congress and the executive branch and the Library has been given a mandate to design and oper-

ate improved systems for the processing and delivery of health-related information.

I am pleased to report that we have made significant progress during the last year toward achieving these ends.

### BIOMEDICAL COMMUNICATIONS NETWORK DESIGN

Pursuant to the recommendations of the House Appropriations Committee Report, 1967, and the Rogers Special Subcommittee on Investigation of HEW (89th Cong., second sess., H. Rept. 2266), the Library has established and successfully staffed a program of developmental and engineering work relating to a biomedical communication network.

The staff of this program has prepared a preliminary design for such a network, which encompasses medical libraries, specialized information centers, audiovisual communications, and related components.

### NATIONAL MEDICAL AUDIOVISUAL CENTER

Consistent also with the recommendations of the Rogers special subcommittee, the National Medical Audiovisual Center in Atlanta, Ga., was transferred administratively to the National Library of Medicine last July.

Senator HILL. You now have it here, don't you?

Dr. CUMMINGS. The physical facility remains in Atlanta.

Senator HILL. But it remains under your jurisdiction?

Dr. CUMMINGS. It is under the Library's jurisdiction.

Significant progress has been made on the coordination of the NLM and the NMAC funcitons, and their orientation to common objectives in such areas as continuing education of health professionals.

### SECOND GENERATION MEDLARS

Increases provided in the 1968 appropriation are being used to fund the effort to develop a second generation computer system for MEDLARS.

We have developed functional specifications, received bids, established a painstaking evaluation procedure, and we will negotiate a contract this fiscal year for the first portion of a more powerful and sophisticated information system.

The Library is conducting experiments to gain experience in access to remote files of machine readable information.

The new MEDLARS system incorporating this feature will be used to support library-based information services in the network, to provide for the highly specialized requirements for the processing of toxicological information, and to improve the effectiveness of the Library's internal operations.

### TOXICOLOGY INFORMATION

Planning for the toxicological information program, mandated by the President's Science Advisory Committee, has accelerated with professional staffing made available this year.

The Library has awarded a contract this year for a definitive user study and will let another contract to build a source file on authorities in toxicological information.

Most recently we have acquired the assistance of the National Research Council—National Academy of Sciences in the choice of substantive information within the system.

Senator HILL. That will be helpful, won't it?

Dr. CUMMINGS. That will be most helpful, Mr. Chairman.

### REGIONAL MEDICAL LIBRARIES

Funds available from the 1968 appropriation were used to fund a grant establishing a regional medical library—the first of a system envisaged by the Medical Library Assistance Act of 1965—at Harvard University.

Two more have been approved for Philadelphia and Seattle. Applications for several others are in the negotiation stage. These regional libraries will become operating units in the library component of the network.

### NATIONAL LIBRARY COOPERATION

Working with the two other "national" libraries, the Library of Congress and the National Agricultural Library, NLM has initiated an effort to insure compatibility among the computer-based systems under development in the three libraries, and to relate them to agreed upon national goals for library cataloging and for locating publications required by scientists and scholars.

### EFFECTIVE COMMUNICATIONS

All of this has been done in recognition of the fact that progress in medical research and the application of new knowledge to health practice is largely dependent on effective communication.

The average practitioner can no longer rely on a few selected journals and local medical society conferences to keep him abreast of new developments.

New and more effective methods and media must be developed to meet the continuing education needs of physicians and other health professionals.

Unnecessary duplication of effort and waste of precious research manpower in unproductive investigations are possible costs to the Nation for maintaining an imperfect and overburdened health information system.

In order to modernize and transform the present overburdened informal system, the NLM has undertaken the preliminary development of a network model and design that will associate the NLM, the present set of medical and freestanding libraries, audiovisual and telecommunications resources, and specialized information centers in an integrated network.

The plan utilizes existing resources and introduces innovative technology in such areas as computer-based search and interchange through modern transmission devices.

In 1969, work will continue on the detailed analysis and investigation connected with fully implemented design and engineering.

### 1968 APPROPRIATION AND 1969 BUDGET REQUEST

In summary, the National Library of Medicine is developing and will implement a plan for a national health information network for

practitioners, researchers, educators, and students in the health professions.

The integrated network will incorporate the latest technology and media and will contribute to the general health through the provision of timely service to the community of health information users.

Our budget request for 1969 is $19,172,000, a decrease of $2,502,000 in new obligational authority from the amount appropriated in 1968.

I shall be glad to answer any questions the committee may have.

Senator HILL. You got this decrease from what you had this year and then you got a decrease of about $13 million or a little over $13 million from what you requested; isn't that right?

Dr. CUMMINGS. That is correct, sir.

### BUDGET REDUCTION EFFECT

Senator HILL. What will be the effect of all this decrease?

Dr. CUMMINGS. The principal adverse effect on the development of health programs for the Nation will come through the postponement or deferment of new library construction for the medical schools and universities of our Nation.

The major cutback is in this particular area.

Senator HILL. It is in that area?

Dr. CUMMINGS. Yes, sir.

Senator HILL. That is quite a reduction though; isn't it?

Dr. CUMMINGS. Yes; I think it is fair to say it was a significant reduction from the amount requested; that is true.

Senator HILL. The truth is that with the National Library of Medicine your program is entering a whole new era of acquisition of medical knowledge.

### TRANSFER AND UTILIZATION OF KNOWLEDGE

Dr. CUMMINGS. I think we are not only entering into a new era of acquisition of medical knowledge but for me, Mr. Chairman, the more exciting prospect relates to the dissemination and utilization of this new knowledge which is being generated, as you know, as a result of research and scholarship throughout the world.

It seems to me that the most judicious investment of our resources should be on the end of the transfer and utilization of knowledge rather than merely the collection and acquisition of it.

Senator HILL. As important as acquisition is, it does not benefit us very much unless it is transmitted?

Dr. CUMMINGS. I agree with that statement. It is an exercise in futility to have information and knowledge that can't be applied because there is no access to it.

Senator HILL. You sure got quite a cut. This cut will retard your anticipated program very much; isn't that right?

Dr. CUMMINGS. Yes. The total evolution of our library and network planning will be retarded seriously as a result of this action.

### BUDGET REDUCTION EFFECT

We will make tough decisions based on our judgment as to which elements of the network should receive the highest priority for the first phase of planning and implementation.

Senator HILL. That means others will be left out; is that right?

Dr. CUMMINGS. The principal losses, will, I believe affect the educational system of the Nation which has a massive need for refurbishment, renovation, and actual replacement of some of the library facilities which have been in a sad state of disarray for almost a decade.

### DETERIORATION OF HISTORICAL MATERIALS

Senator HILL. A few years ago, Doctor, you brought several rather ancient books, shall I say, down with you.

Have you received sufficient funds to take care of this problem?

Dr. CUMMINGS. In the past, as you recall this committee has provided some assistance to the National Library to permit us to make microfilms of our deteriorating historical materials.

We have in the past succeeded in making copies of approximately 10 million deteriorating pages.

We have, however, facing us, more than 20 million pages for which we do not have funds for continued microfilming or other preservation techniques to be applied to this collection.

Senator HILL. This budget will not allow it?

Dr. CUMMINGS. This budget does not permit us to increase the rate of preserving this collection.

Senator HILL. Did you request more funds for this purpose?

### ORIGINAL BUDGET REQUEST

Dr. CUMMINGS. In our original submission through the Public Health Service to the Department we did request funds for this purpose.

Senator HILL. How much?

Dr. CUMMINGS. I am not sure I can recall that figure, Mr. Chairman.

I will ask my executive officer if he has it available.

Mr. RUSSELL. I don't have the exact figure for how much of an increase we had requested for microfilming.

Senator HILL. Will you get that for the record and how much of your request was allowed and how much was disallowed so that we may have that in the record.

(The information follows:)

### REQUEST FOR INCREASE FOR PRESERVATION FILMING, 1969 BUDGET

The National Library of Medicine requested an increase of $297,500 for microfilming of 4,000,000 pages of deteriorating materials.

The budget allowance for the National Library of Medicine issued by the Department required substantial cuts in Library Operations activities. Increased preservation filming was one of several activities which were selected by the National Library of Medicine for deferment. Therefore the Department request to the Bureau of the Budget contained no increase for preservation filming.

### SEARCH FOR AND UTILIZATION OF KNOWLEDGE

Senator HILL. I don't think there is anything more important than getting this knowledge out.

Dr. CUMMINGS. I agree with that.

Senator HILL. There is a whole lot more knowledge that we need but it is vital when we get it that we get it out.

Dr. CUMMINGS. I think that is correct. We need to continue our search for new knowledge and to continue our effort to utilize the existing knowledge concurrently.

Senator HILL. To put it to practical application, is that right?

Dr. CUMMINGS. That is correct, in my view.

Senator HILL. You are certainly right. Is there anything you would like to add, Dr. Stewart?

Dr. STEWART. No, sir.

Senator HILL. Is there anything you would like to add, Dr. Cummings?

Dr. CUMMINGS. I would like to thank you, Mr. Chairman, not only for the staff of the Library but for the Board of Regents of the Library who are most grateful and appreciative of the deep interest you have had in this national institution.

We would like to have the record show that we will be keenly aware of your absence in the future.

Senator HILL. I appreciate it very much. I am going to miss being here with you.

I want to express my great appreciation to you and your staff for the fine work that you have done out there at the Library.

Dr. CUMMINGS. Thank you very much.

Senator HILL. You have done a fine job.

Dr. CUMMINGS. Thank you very much.

## ACQUISITION OF KNOWLEDGE

Senator HILL. I recall Sir William Osler said he could not have written his monumental work on the practice of medicine if he had not had the Surgeon General's library which is now the National Library of Medicine.

He was over in Baltimore where he had the B. & O. Railroad train that would bring him over in an hour's time.

A lot of doctors could not come here that way.

Dr. CUMMINGS. That is correct. I am delighted you know of his use of our library because I am told that he still is charged with a book that he signed out of the institution 60 years ago which he did not return.

We think it is missing because he lost it on the train between here and Baltimore. He sent Dr. Billings a letter offering to pay for it.

Senator HILL. We want to fix it so that they won't have to ride the train?

Dr. CUMMINGS. That is right. We would like the information to go to users by other more quick and more reliable means.

Senator HILL. Particularly most of your doctors, of course, are not within the Baltimore and Washington area but much more distant.

Dr. CUMMINGS. That is correct.

Senator HILL. I had the acquisition of new knowledge brought home to me when I had typhoid fever many years ago. My father was a doctor. He subscribed to the London Lancet. He had been there in London under Joseph Lister. He subscribed to the London Lancet like he did to a number of other foreign publications.

The fever had a way of going down at night and starting up in the afternoon. As long as it did that you had to stay in bed. While I was

in bed with this typhoid fever he found an article in the London Lancet telling of a medication that you could use to break that fever.

He used it on me and I got out of bed soon. I am very much interested in getting this knowledge out, Doctor.

Doctor, are you an M.D.?

Dr. DAVIS. No, sir, I am a mathematician, Mr. Chairman.

Senator HILL. Where did you go to school?

Dr. DAVIS. University of Maryland.

Senator HILL. You didn't have to come too far to the library then?

Dr. DAVIS. No, I didn't.

LIBRARY COMMUNICATIONS

Dr. STEWART. I think Dr. Davis illustrates, Mr. Chairman, that the field of communications in libraries is not as we have always visualized it. It is a lot more complicated.

Senator HILL. Much more complicated.

Well, you have brought us mighty good, compelling testimony, Doctor.

Dr. CUMMINGS. Thank you.

## National Institutes of Health

STATEMENT OF DR. JAMES A. SHANNON, DIRECTOR
ACCOMPANIED BY:
DR. G. BURROUGHS MIDER, DIRECTOR OF LABORATORIES AND CLINICS
DR. JOHN F. SHERMAN, ASSOCIATE DIRECTOR FOR EXTRAMURAL PROGRAMS
RICHARD L. SEGGEL, EXECUTIVE OFFICER
JAMES A. HICKEY, ACTING FINANCIAL MANAGEMENT OFFICER
DR. MILO D. LEAVITT, JR., DIRECTOR, OFFICE OF PROGRAM PLANNING, NATIONAL INSTITUTES OF HEALTH
DR. WILLIAM H. STEWART, SURGEON GENERAL
CHARLES MILLER, CHIEF FINANCE OFFICER
JAMES F. KELLY, ASSISTANT SECRETARY, COMPTROLLER
JAMES B. CARDWELL, DEPUTY ASSISTANT SECRETARY, BUDGET

(Biographical sketch follows:)

### Curriculum Vitae

Name: James Augustine Shannon.
Date and place of birth: August 9, 1904; Hollis, New York City, N.Y.
Education:
A.B.: College of Holy Cross, 1925.
M.D.: New York University, 1929.
Ph.D: New York University, 1935.
Professional positions held:
1929–1931: Intern, Bellevue Hospital, New York City.
1931–1932: Clinical Assistant Visiting Physician, Third (N.Y.U.) Medical Division, Bellevue Hospital, New York City.
1931–1932: Assistant in Physiology, New York University College of Medicine, New York City.
1932–1935: Instructor in Physiology, New York University College of Medicine, New York City.
1935–1941: Assistant Professor of Physiology, New York University College of Medicine, New York City.
1936: Guest Investigator, Physiological Laboratory, Cambridge University, England.
1938–1942: Assistant Visiting Physician, Third (N.Y.U.) Medical Division, Bellevue Hospital, New York City.
1941–1942: Assistant Professor of Medicine, New York University College of Medicine, New York City.
1941–1946: Director, Research Service, Third (N.Y.U.) Medical Division, Goldwater Memorial Hospital, New York City.
1942–1946: Associate Professor of Medicine, New York University College of Medicine, New York City.
1944: Associate Visiting Neuropsychiatrist, Third Psychiatric Service (Third Medical Division), Bellevue Hospital, New York City.
1944–1945: Acting Director, Third (N.Y.U.) Medical Division, Goldwater Memorial Hospital, New York City.
1946–1947: Chairman, Malaria Study Section, National Institutes of Health, Bethesda, Maryland.

1946–1949: Director, Squibb Institute for Medical Research, New Brunswick, New Jersey.
1946–49: Special Consultant to Surgeon General, U.S. Public Health Service.
1946–1949: Member, Study Section, National Institutes of Health, Bethesda, Maryland.
1949–1952: Associate Director (In Charge of Research), National Heart Institute, National Institutes of Health, Bethesda, Maryland. (Appointed to Commissioned Corps, Public Health Service, 1949).
1952–1955: Associate Director (In Charge of Intramural Affairs), National Institutes of Health, Bethesda, Maryland.
1955: Director, National Institutes of Health, Bethesda, Maryland.

Activities during the War:
1941–1946: Malaria Conference, National Research Council Chairman, Atabrine Conference, National Research Council. Member, Subcommittee for Coordination of Malarial Studies, National Research Council. Member, Board for Coordination of Malarial Studies. Chairman, Panel on Clinical Testing of Antimalarials. Consultant to Secretary of War.
1948: Medal for Merit (Presidential).

Scientific societies:
American Physiological Society.
American Public Health Association; Governing Council 1959–1962; Fellow 1956.
American Society for Pharmacology and Experimental Therapeutics.
American Society for Clinical Investigation.
Society for Experimental Biology and Medicine.
American Association for the Advancement of Science.
Association of American Physicians.
Washington Academy of Sciences.
Harvey Society.
Alpha Omega Alpha.
Sigma Xi.
American Academy of Arts and Sciences.
American Philosophical Society.

Professional activities:
1951–1956: Member, Subcommittee on Malaria of the Committee on Medicine, National Research Council.
1952–1956: Member, Subcommittee on Shock of the Committee on Surgery, National Research Council.
1953–1956: Chairman, Malaria Panel, National Research Council.
1953–1954: Member, Panel on Allocation of Gamma Globulin, National Research Council.
1953: Member, Division of Medical Sciences, National Research Council.
1953–1960: Member, Executive Committee, Division of Medical Sciences, National Research Council.
1955: Public Health Service Representative, Division of Medical Sciences, National Research Council.
1955–1962: Member, United States National Committee for the International Union of Physiological Sciences.
1954: Member, Board of Directors, Gorgas Memorial Institute of Tropical and Preventive Medicine.
1956–1966: Member, Expert Advisory Panel on Malaria, World Health Organization.
1959–1963: Member, Advisory Committee on Medical Research, World Health Organization.
1959–1964: Member, Standing Committee, Federal Council for Science and Technology.
1959–1965: Consultant, President's Science Advisory Committee.
1962–1966: Member, Advisory Committee on Medical Research, Pan American Health Organziation.
1963: Consultant to Advisory Committee on Research to the Agency for International Development.
1965: Department of Health, Education, and Welfare, Alternate Representative to Federal Council for Science and Technology.
1965: U.S. Delegate to the United States-Japan Cooperative Medical Science Committee.
1967–1969: Member, President's Committee on the National Medal of Science.
1967: Member, Board on Medicine, National Academy of Sciences.

Honorary degrees:
1952: Doctor of Science, College of the Holy Cross.
1957: Doctor of Laws, Notre Dame.
1958: Doctor of Science, Duke University.
1958: Doctor of Science, Providence College.
1959: Doctor of Science, Loyola University, Chicago.
1960: Doctor of Science, Catholic University.
1960: Doctor of Science, University of West Virginia.
1962: Doctor of Humane Letters, Albert Einstein College of Medicine, Yeshiva University.
1964: Doctor of Medicine, Catholic University of Louvain, Belgium.
1964: Doctor of Medicine, Karolinska Institute, Stockholm, Sweden.
1965: Doctor of Science, University of Maryland.
1965: Doctor of Science, New York University.
1965: Doctor of Science, The Jefferson Medical College and Medical Center, Philadelphia.
1967: Doctor of Science, Columbia University College of Physicians and Surgeons.

Honors and awards
1945: Harvey Lecturer.
1956: John F. Anderson Lecturer.
1958: Scientific Award for Outstanding Achievements in the Field of Renal Physiology, Malaria Control, and National Administration of Medical Research, New York University.
1961: The Mendel Medal Award, Villanova University.
1962: Public Welfare Medal, National Academy of Sciences.
1964: Rockefeller Public Service Award.
1965: Election to Membership in the National Academy of Sciences.
1965: Honorary Fellowship in American Association of Hospital Administrators.
1966: Public Health Service Distinguished Service Medal.
1966: The Modern Medicine Award for Distinguished Achievement in Medicine.
1966: Presidential Distinguished Federal Civilian Service Award.
1966: Honorary Member, American Hospital Association.
1966: John M. Russell Award, Markle Foundation.
1966: Abraham Flexner Award, Association of American Medical Colleges.
1966: Alan Gregg Lecturer.
1968: Hadassah's Myrtle Wreath.

Senator HILL. Now, Dr. Shannon. We are glad to have you back with us.

We will be happy to have you proceed, sir.

Dr. SHANNON. Thank you very much, Senator Hill. I have a statement of some length. At your pleasure, I can cut that substantially or present it in total.

Senator HILL. You may proceed and touch on all the important matters you think should be brought out.

You have enough honorary degrees here to sink a battleship, haven't you?

Dr. SHANNON. If I may go off the record.

(Off the record discussion.)

BUDGET REQUEST

Senator Hill, the aims and accomplishments of the specific activities supported by the 13 separate appropriations for the National Institutes of Health will be discussed by the Director of the Institute or Division directly responsible for the activity.

My comments are, therefore, devoted to general problems and will reflect the current deployment of our resources rather than what

might be needed for the full exploitation of the opportunities before us.

The budget estimates for the fiscal year 1969 are Spartan in character. Overriding circumstances, resulting from national commitments elsewhere, have necessarily limited the President's estimates for NIH to the amounts that can be justified as essential if the medical research establishment of the Nation is to be maintained at an effective level and not be threatened with disarray and deterioration.

The fiscal year 1969 budget is based on fiscal year 1968 obligations that are some $50 million lower than the amount appropriated by the Congress.

The budget thus continues to be responsive to the congressional directive that a conscientious effort be made to reduce expenditures.

In fact, I believe that it is as lean a budget request as is possible without seriously curtailing the activities which it is designed to support.

RESEARCH AND EXPANSION

The budget does provide for the orderly continuation of the major existing programs and will enable us to meet our existing commitments to the research community.

With some rearrangement of plans, it will also allow a minimal expansion of a few of the most critical activities.

Frankly, it is not a budget that makes me happy but it is a budget that maintains a critical mass of biomedical activity while we plan for the most effective deployment of resources when dollar constraints on these activities will be less severe.

I have, on past occasions, contrasted the tremendous advances that have been made in medicine with the tremendous gaps that still exist in our knowledge of biological processes and in our ability to deal with disease.

You are well aware—and in large measure responsible for—the development of the NIH programs which are now contributing so significantly to narrowing these gaps.

This year is the last time that I shall appear before this committee to defend the NIH budget.

And I must add, Senator Hill, that all of us at NIH were saddened by your decision that this is also the last time that you will be conducting these hearings.

Senator HILL. So we are both leaving?

Dr. SHANNON. It looks that way.

Senator HILL. Can they function without us?

Dr. SHANNON. It is going to be rough, you know. I think they will miss you more than they will miss me, sir.

Senator HILL. I can't agree with you on that, Doctor.

Dr. SHANNON. I should like to talk briefly about the future directions of these programs.

POPULATION

One of the areas of research activity that has particular national significance is population control and fertility studies.

Although exact figures are not available, it was estimated in 1950 that the world's population was 2.5 billion.

By mid-1966, the estimate had risen to 3.4 billion—a 36 percent increase in 15 years.

At this rate there will be between 7 and 8 billion people by the year 2000—which is only 32 years away.

Many very serious economic, social, and geopolitical problems are raised by these figures—and by the probable geographical distribution of these staggering increases.

These problems are not problems that fall within the purview of NIH and I do not propose to discuss them. Nor can policy decisions to deal with these problems be medical decisions; they must be social and political decisions.

### Control

However, medical research will continue to contribute to this population explosion both by saving more babies and by keeping more older people alive. It also has a responsibility for developing an adequate science base for meaningful population control.

Despite recent advances, readily acceptable and generally applicable antifertility techniques are not available.

Population control and fertility studies should not be solely concerned with their negative aspects. There is as great a need for solving the puzzling problems of infertility as the relatively much simpler problem of rampant fertility.

The whole process of human reproduction is, in fact, very imperfectly understood. The successful unravelling of its mysteries would not merely solve problems of infertility and provide for both family planning and population control but would undoubtedly enable us to prevent many of the birth defects that now take such a tragic toll.

Nevertheless, the problems created by an uncontrolled population expansion are of such severity that our major initial emphasis must be on this aspect of research on human reproduction.

### Behavioral Sciences

The whole field of the behavioral sciences also needs intensive exploration from a biomedical point of view.

Questions concerning growth and development, the behavioral determinants of biological systems, individual behavioral pathology, and social pathology, all fall within the joint domain of the social and medical sciences.

The definition of health and the consequent domain of responsibilities of medical research have been considerably broadened over the past decades. They now include in addition to the biological factors which contribute to health, the need to understand the emotional, intellectual, economic and social factors which exert such a dominant influence on well-being.

Yet the scientific basis for understanding many of these factors may be described as being in the same relatively primitive state as was biological knowledge in the 1930's.

There is an obvious need to incorporate the behavioral sciences—and, indeed, the broad spectrum of the social sciences—into the medical establishment.

Such a move will have a broadening influence not only on research capability but on the educational experience to which developing physicians are exposed.

Heretofore, the major contribution to the support of the behavioral sciences has been limited to the National Institute of Mental Health.

The establishment of NIMH as a separate bureau in the Public Health Service will not diminish the need for it to maintain its present role in the support of the behavioral sciences.

However, the behavioral sciences also have increasing importance and relevance to the programs of other Institutes.

The National Institute of Child Health and Human Development provides avenues for developing many aspects of the behavioral field related to normal human growth and development.

It has now become possible to support research and training programs in the emotional and intellectual development of the normal child in parallel with studies on biological development.

An understanding of the learning process, cognitive processes, development of speech, and linguistics are significant areas of investigation.

Similarly, the research and training of scientists in the field of aging—and the elucidation of the attendant intellectual, emotional, and social problems—are essential.

The National Institute of General Medical Sciences is responsible for providing a wide-ranging, discipline-oriented base for research and training in the behavioral sciences in order to underpin the more limited problem areas of each of the categorical Institutes.

This Institute will stimulate the growth of behavioral science research and training the medical schools and facilitate its inclusion in the core curriculum of medical education.

The regional medical programs also serve to focus attention on problems which have heretofore received insufficient attention: the sociology and economics of medical care systems, problems of acceptance of medical information and services, needs of the physician as well as the patient, and the effects which affluence and education are having on the demand for medical services.

### BIOENGINEERING

The third area that merits more purposeful development is the broad field of bioengineering which may be briefly defined as the application of the principles and techniques of the physical—and especially the engineering—sciences to medicine and to the problems in biomedical research leading to more effective diagnosis and treatment of disease.

Dramatic examples of what has already been accomplished in this field are the development of an array of monitoring devices, automated laboratory devices, the so-called artificial kidney, the development of the heart-lung machine, the pacemaker, and artificial heart valves, and the work now in progress on the artificial heart.

There are also many less publicized but equally important contributions of bioengineering to clinical care and to both clinical and laboratory research.

However, the potentialities of this field have hardly begun to be exploited. A systematic and vigorous pursuit of the application of

engineering know-how—especially the recent advances in electronics, miniaturization, and the creation of new materials—can, I feel sure, bring about startling changes in diagnostic and therapeutic methods and in the organization of hospitals and hospital systems during the next 10 or 20 years.

In the fiscal year 1968 appropriations, this committee provided $250,000 for "planning, consultation, and contractual assistance" with a view to launching bioengineering development as "a distinct activity for which separate budgetary provision should be made."

With these funds we awarded a contract to the National Academy of Engineering for a study which will examine the future role of engineering concepts and technology in

Advancing the understanding of biological systems,

The development of instrumentation, diagnostic and therapeutic devices, artificial organs, and so forth, and

The evolution of hospitals and health service units.

Recommendations will also be made for converting the no-man's land that lies between engineering and biomedicine into a recognized hybrid activity and for developing prototype institutions that can foster research and manpower development in this new field.

A first report on the results of this study is expected within the next month. It is, however, already clear that a beginning on a systematic and integrated program must be made now and the budget request therefore includes $1.3 million for this purpose.

To defer the beginning of this activity—which is already long overdue—would be most unwise.

### RESEARCH INSTITUTES

Another aspect of the NIH programs that needs selective development is the creation of new institutional focuses for research on broad problems that are particularly promising but which require a combination of scientific talent and facilities not commonly found even in the best of our medical schools and associated hospitals.

The need for special research institutes for this type of activity is clearly defined in the report of the President's Commission on Heart Disease, Cancer and Stroke.

But they are not only needed for the three disease areas covered by that report but also for the dental sciences, for aging, for pharmacology and toxicology, and for bioengineering—to mention only the more important areas.

Such centers, which will provide a suitable setting for complex research activities and special science development, are essential if we are to move progressively to a more direct approach to the solution of service problems, now that a broad science base for a number of developmental activities has been established.

A recent reexamination of our plans for expanding federally initiated programs for collaborative research on specific health problems—to which I shall come back in a moment—has clearly revealed that many of these projects will be greatly assisted by more purposeful programing but that it is unlikely that this can be done in the conventional university or medical school department without either distorting the project or distorting the total research and educational program of the institution.

This is particularly true, for example, of the development of the artificial heart and, probably, in general of bioengineering projects; of the cardiovascular and stroke centers; of the proposed fertility studies; and possibly of some of the behavioral studies that need to be undertaken.

Provision will have to be made in future for establishing research centers specially equipped, staffed, and located for the most effective pursuit of some of these sharply defined and carefully directed studies.

They will also provide a new dimension in the training of a new type of scientist for the future. However, it must be emphasized that such activities cannot replace the broad base of scientific effort already established, because this provides the fertile soil on which developmental opportunities grow.

### INSTITUTIONAL PROBLEMS

A more general problem—which is becoming urgent as a result of the mounting economic pressures on our educational institutions—is the need to make more realistic provisions for maintaining the stability of the institutions in which the bulk of our medical research and research training must continue to be conducted.

Federal support for these activities now plays such a major role in institutional financing, staff deployment, and program planning that even relatively minor shifts in Federal programs or restrictions in the availability of funds can have a major impact on these institutions.

For example, we have found that the normal operation of our priority-scoring system, under the present availability of funds for competing research projects, threatens in some cases to wipe out all NIH support for a medical school department which has been heavily dependent on that support.

This, in turn, has an indirect but profound effect on the educational system. Clearly, a more stable system of support—or, at least, one less subject to rapid fluctuation—must be established if some of our medical schools are not to be seriously harmed.

### Medical Education

Indeed, the institutional problems of medical education should be a matter of urgent national concern and merit the most serious consideration.

The responsibility of the medical schools and their faculties has broadened considerably since the early 1950's.

Physician education has become more deeply rooted in fundamental science; there has been a rapidly expanding need to provide postdoctoral and specialty training; research has become more complex, more technologically demanding, more essential to the educational process, and much more expensive.

These changes have created a need for more diverse skills on the part of the faculty; have to some extent outmoded the traditional curriculum for physician education; have placed great strains on the organization of the medical schools; and have weakened the bonds between the faculty, the institution, and the students.

These strains and stresses are now being compounded by the progressive involvement of the medical schools in organized research proj-

ects aimed at the achievement of nationally desirable goals and by the greater demands society is now making for the right of every individual to adequate health services irrespective of his economic status or the remoteness of his place of residence from centers of medical excellence.

### Research and Service Programs

The growth of combined research and service programs in rehabilitation, mental health and mental retardation; expanded service programs for children; the development of comprehensive community health programs for economically disadvantaged groups; participation in the regional medical programs and in the partnership for health; involvement in operational research on the development of more effective delivery systems for health care; and the obligations imposed by medicare and medicaid are now overburdening academic institutions that were initially designed for the relatively simple task of providing a well-ordered and traditional education but which are now being called upon to deal with a broad array of social problems.

We have given serious consideration to these institutional problems which vitally affect the NIH programs and we are in process of developing some proposals for their solution in association with the Bureau of Health Manpower.

### Medicare and Medicaid

Senator Hill. Medicare and medicaid have added quite some burdens, haven't they?

Dr. Shannon. They have added a burden in two ways. The university centers, which have available the highest quality medical service in the Nation, are now accessible to a very large population which heretofore was not the case.

One of the disturbing phenomena that we see today—and this year for the first time—is the burden that medicaid imposes on the States through the matching program. There is a tendency at the State level to think in terms of something called the health dollar and to limit the funds made available to educational institutions in order to make up for the mandatory expenses of the medicaid programs under the formula. So that the tendency here is both to expand the demand for services that are required from the university medical centers and, at the same time, to limit the funds available to them.

### Review of Special Programs

I have already referred to an intensive review which we have conducted during the past month or so of the federally initiated research programs sponsored by NIH.

There are about 39 of these so-called organized research programs.

Our objective has been to review their present status, assess their potential growth, and to develop plans for their future developments.

These plans are not "blue-sky" proposals but conservative projections based, first of all, on what it appears feasible actually to achieve and, secondly, on the 5-year targets that were approved by the Department last spring.

If circumstances permit—that is, if financial constraints are relaxed—these reviews will provide a realistic basis for orderly program development in these areas during the next 4 or 5 years.

I should like to emphasize that these federally initiated programs are not being undertaken at the expense of the investigator-initiated research projects which have dominated NIH support up to the present time.

They do not represent a change in NIH policy but an addition to NIH activities which should serve to provide a more effective approach to selected problems of major national importance that justify—or, indeed, require—more organized collaboration and programed activity than is characteristic of research conducted by individual investigators.

These federally initiated programs will not displace support for investigator-initiated research which must continue to be the mainstream of biomedical research. The traditional research projects represent the consensus of the scientific community on what is important and what is feasible.

This self-generated activity—with its mix of fundamental and applied research—will not only ensure the vigorous pursuit of the widest range of opportunities for progress but must continue to provide the scientific underpinning for developmental projects and to point the direction for future targeted research.

The increased attention being given to these "organized" programs should also not be interpreted as representing any wavering of our firm conviction about the overriding importance of so-called basic research.

In fact, the "organized" programs of today have been made possible by the basic research of yesterday. Their present feasibility and probability of success is directly proportional to the soundness and completeness of the fundamental research on which they are based.

It follows, of course, that the feasibility of future "organized" or developmental programs will depend almost entirely on the scope and vigor of the fundamental research that we support in the intervening years.

It is certainly true in scientific research that you can't harvest what you don't first sow.

### HEART TRANSPLANT PROBLEMS

The difficulties that can be encountered as the result of gaps in fundamental research are now dramatically illustrated by the recent spate of heart-transplant operations.

While the purely surgical techniques for such operations are already well-developed, too little research has, as yet, been completed on tissue antigens, species differences in rejection phenomena, and organ differences in rejection in the same species.

A great deal more knowledge is necessary before any of these operations can become an accepted form of treatment.

In fact, the newly established Board on Medicine of the National Academy of Sciences issued a formal statement on February 28 describing these operations as "a scientific exploration of the unknown" and urging that "only a relatively small number of careful investigations involving cardiac transplantation * * * be done at this time."

Senator HILL. Of course, we don't have sufficient knowledge, is that right?

Dr. SHANNON. That is right.

At the same time, the American College of Cardiology expressed its concern over "the problems arising from the development of techniques for heart transplantation."

### ACCELERATION OF RESEARCH

We are at present reviewing NIH activities on problems related to heart transplantation and considering how the necessary research can be accelerated, including relevant training and the provision of essential services.

NIH should obviously take this task seriously and it will probably be necessary to redeploy some of our available funds to make a more concerted attack on these problems.

### MORALS AND ETHICS

We are also giving urgent attention to the moral and ethical issues raised not only by heart transplantation but by a number of clinical investigations involving human subjects.

The American Heart Association, through its Committee on Ethics, is also planning an intensive study of this aspect of the matter.

Senator HILL. A good deal more study has to be done?

Dr. SHANNON. I think so. I don't believe that the moral and ethical aspects will cause much of a problem. We have a very firm base for the assessment of these problems in our clinical investigation program as a result of conventions that were established, roughly 18 months ago, in compliance with a letter that went out over the signature of the Surgeon General.

In all of our clinical investigation programs, at the present time, there is an institutional committee that considers these specific issues.

### SENIOR ORGAN TRANSPLANTATION PROCEDURAL GUIDELINES

More recently, we sent a letter to some 20 clinics that we felt had the sophisticated surgery that made possible the transplantation of organs—the ones that are involved are the kidney, heart and liver primarily—in order to determine whether they had adequate guidelines to solve the many problems incidental to these procedures.

On balance, the replies indicate that they have, that their conventions had been modified to encompass the somewhat more complex new ventures and that it was not necessary to establish specific new criteria for use by these institutions at this time.

### PROSPECT FOR TRANSPLANTATION

Unfortunately, the science base for these operations is substantially less well-defined. However, in the light of the results now obtained in some of the centers that are transplanting kidneys, the ultimate prospects for organ transplantation is very bright.

By suitable matching of tissues, much as one matches blood for transfusion, it is now possible to get substantially above 50 percent "takes" in the case of such a complex organ as the kidney.

It seems very likely that this will improve. I think we can look forward to nonrejections in 90 percent of the cases. This, I believe, is within our grasp.

This is, perhaps, important more for the liver and kidney than for the heart. I think it is the belief of most of us that, initially, heart-assistance devices—and later, perhaps, replacement of the heart with a mechanical device—are more in keeping with the magnitude of the clinical problem.

I have in mind, of course, the extraordinarily high attack rate of myocardial infarction and the high death rate due to myocardial insufficiencies. We must aim for the prevention of these things through the solution of the problems of hypertension, arteriosclerosis and the like. It is difficult to conceive of the major part of myocardial insufficiency being handled by organ transplantation.

Whereas we look ultimately to the prevention of the primary disorders that produce myocardial insufficiency, I believe that the palliation of the condition involved is more apt to be through mechanical devices than through heart transplantation.

I would emphasize, however, that all this lies very much in the future.

### PROGRESS IN PLANS FOR JOHN E. FOGARTY INTERNATIONAL CENTER

I am happy to report that we are making good progress in developing plans for the John E. Fogarty International Center for Advanced Study in the Health Sciences for which the Congress provided funds last year.

We expect that a contract for architectual drawings will be awarded well before the end of this year.

Meanwhile, we are making arrangements to renovate and remodel "Stone House" which is the large and attractive residence of the former owners of part of the NIH campus.

It sits on the site selected for the Fogarty Center and it seems to us to be both practical and prudent to incorporate it into the overall design of the Center.

As renovation can probably be completed in about 3 or 4 months, it will be possible to bring some of the Fogarty Center activities into being much sooner than if everything had to wait for the completion of the new building.

We expect that the conference program and the scholars program can both be started early next year.

Senator HILL. Does the budget allow you to fund this?

Dr. SHANNON. Yes, sir. The architectural drawings and the beginning of the renovation are made possible by reprogramming of dollars for which we received permission from this committee and the House committee.

This will then go forward this year. We would hope to have the Center ready for functioning by the end of the summer, probably by the end of August.

This is a small operation, initially, but we are very anxious that it be initiated at this time rather than in the 4 or 5 years that is usually required for authorization and completion of a new Federal building.

We don't minimize the importance of the ultimate availability of a suitable conference center but we feel that it is possible to start activities by renovating Stone House.

Senator HILL. It is possible to start?

Dr. SHANNON. Yes, sir.

We would expect the conference program and the scholars program actually to be started early next year.

BUDGET REQUEST

Senator Hill, the $1,196,693,000 requested for fiscal year 1969 is distributed as follows among the five major activities of NIH:

The $275.6 million requested for direct operations include $87.5 million for the conduct of research by the NIH scientific staff and $126.5 million for collaborative projects.

The remaining $61.6 million is for other direct operations, program direction, administrative services, and management of the extramural program.

Of the $652 million requested for research grants, nearly $165 million is for the special research grant programs—including $53 million for general research support—and $342 million is for noncompeting research projects which we already have a commitment to support.

This leaves $145 million for competing grant applications of which it is estimated that close to $91 million will be needed for supplemental awards for existing grants and for the renewal of projects to which continued support has not been committed. About $54 million will thus be left for the support of new grant projects—this is $6 million less than the amount appropriated for this purpose for fiscal year 1968.

The requests for training grants and fellowships total $197.8 million—an increase of $4.8 million over the fiscal year 1968 appropriation.

For "Health research facilities construction grants," $8.4 million is requested. In addition, $12.2 million will be carried forward from the fiscal year 1968 appropriation in accordance with the Bureau of the Budget's directive for curtailing fiscal year 1968 expenditures.

The request for the regional medical programs is $62.9 million. This activity will also have a carryover from fiscal year 1968 of $30.9 million.

BUDGET REDUCTIONS

Senator HILL. You got quite a reduction there under Resolution 888 reducing the President's budget.

Dr. SHANNON. Yes, sir; $60 million for NIH.

I believe that your review of these requests will confirm my earlier statement that this is as lean a budget as it is possible for us to present to you without a major cutback in programs whose only purpose is to benefit the people of this country by strengthening the ability of the medical profession to diagnose, treat, and prevent disease and disability.

Senator HILL. The requests of practically all the Institutes were cut in the budget?

Dr. SHANNON. The answer to that is "yes", Senator Hill.

The comparable 1968 authorization, including health research facilities construction, was $1,164,376,000.

NIH's estimate to the Public Health Service, including construction, was $1,620,000.

The estimate sent by the Public Health Service to HEW was $1,380,562,000. HEW's estimate to the Bureau of the Budget was $1,352.978,000.

The budget before you is $1,196,693,000. That this is substantially below what the Department felt to be adequate for fiscal 1969.

### Hope for Brief Period of Fiscal Constraint

I might say on the other hand, Senator Hill, that I appreciate fully the reasoning that went into the budget figure that we are allowed to defend before this committee. Our distribution of these funds is such as to maintain the integrity of the on-going programs, both with respect to the training of young scientists and the support of scientists who are already engaged in NIH-supported work.

I can only express my hope and my anxiety—my hope is that this curtailment of financial support will be brief; my anxiety stems from the prospect of the disarray and disorganization of science that will result if, indeed, the period of fiscal constraints is not very brief.

### Effects of Budget Reductions

Senator Hill. In other words, it could break up your teams, could it not?

Dr. Shannon. Yes, sir.

I might say that in discussing the same problem with the House Appropriations Committee we outlined for them the 30 areas that I mentioned that might profit from an organized activity with a substantial increase in funds.

I think this committee might also wish to look at those areas.

Senator Hill. We will want to look at those areas.

Dr. Shannon. And see that the opportunities do, indeed, exist.

I am troubled by some of the statements of those striving for national elective office who give the appearances of believing that Federal research and development activities are perhaps an area where very substantial savings can be achieved.

### Biomedical Sciences and Reductions in Medical Costs

Without going into the problem of national priorities, I would point out that, in the case of the biomedical sciences, there is a direct relationship between the support of these sciences and the development of faculty to increase the production of physicians for the Nation, the support of these sciences and development of new medical schools; the support of these sciences and the level of excellence of medical care; and, indeed, the support of these sciences makes a direct contribution to the reduction in the cost of medical care.

I was fussing about this over the weekend because there are hearings elsewhere in the Senate, as you know, about the cost of medical care. I didn't have much in the way of data available at home but I did have a few facts and figures.

Senator Hill. All right, give them to us.

Dr. SHANNON. These are examples of reductions in costs to the American public not as a result of modifying the method of delivery of medical service but as a result of a sharp decline in the need for medical service that was brought about by research. Take one well-known example: In 1952, there were 2,000 new cases of retrolental-fibroplasia. You will recall that funds made available by this committee made it possible to demonstrate that this cause of blindness was due to high oxygen tension in the newborn.

Senator HILL. Too much oxygen?

Dr. SHANNON. Yes, sir. In 1958, as a direct result of this research, the number had dropped to 28. It is a modest estimate that 20,000 cases of blindness have been prevented over a 10-year period, 1958 to 1968. It has been calculated that the cost of care of one blind child, in terms of additional care, education and the like, comes to $100,000 during his lifetime.

So this relatively minor advance, quite apart from preventing blindness and all that means to the individual, represents a saving up to the present time of about $2 billion.

If one projects this for another decade, then one sees one is talking about a lot of money.

Senator HILL. It multiplies even more?

### RUBELLA EPIDEMICS

Dr. SHANNON. Yes, sir. Now let us look at that rubella epidemic that we had in the spring of 1964. It was estimated that there were 20,000 defective births in that year due to the epidemic. These defects include cataracts, glaucoma, cardiac defects, brain lesions, deafness, bone defects, and a wide variety of other defects. There were 20,000 such cases due to rubella.

Senator HILL. All pretty serious deformities?

Dr. SHANNON. Yes, sir.

I think it is quite safe to predict that prior to the next epidemic which, as best we can guess, will be in 1971 or 1972, we will have a highly effective vaccine that will prevent this toll of defective babies.

### SAVINGS FROM POLIO VACCINES

I mention those as two examples of the payoff of research that are not ordinarily thought of. People usually think in terms of polio vaccine, though polio, anually, left permanent disabilities in a substantially smaller number of patients. But the development of polio vaccine resulted in a significant saving in terms of rehabilitation and orthopedic surgery and the like.

### EMPHYSEMA AND OTHER AREAS

There are other areas where equally important advances have been made. Even greater human and economic benefits will result when we find solutions to the problems of arteriosclerosis and hypertension and emphysema. One figure I ran across over the weekend is that there are now 60,000 Americans under the age of 65 who are receiving disability pensions from social security for emphysema.

Senator HILL. On account of emphysema?

Dr. SHANNON. Yes, sir.

Senator HILL. How much progress have you made so far as to treatment or prevention?

Dr. SHANNON. We have made very little, sir. Although there are a number of promising lines of inquiry that warrant very vigorous prosecution, there are many unsolved problems on which we have no reading at all.

One must continue probing the unknown in an attempt to understand the underlying biology of the condition. At the present time nothing more than palliation is possible.

### CANCER

There are similar problems in cancer——

Senator HILL. While you speak of cancer, I had that on my mind, have we made mighty little progress insofar as cure of cancer is concerned?

Dr. SHANNON. It depends, Senator Hill, on whom you talk to. If you talk to the industrial physician, he will say that we have made tremendous advances.

Senator HILL. How does he figure that?

Dr. SHANNON. Because so many things in our modern industrial technology have such a striking potential for producing cancer. If the relationship of cause and effect had not been defined, the attack rate of cancer of industrial origin would be surprisingly large.

Medicine now has revolutionized many areas of industrial activity, particularly those involving certain chemicals, dye stuffs and certain manufacturing methods.

### CAUSATION

On the other hand, in terms of the causation of cancer generally, we have not made so much progress.

There are today good working hypotheses that are being meaningfully approached in attempting to define the causation of cancer that would have been quite impossible 10 years ago.

But solid information as to specific causation of most forms of cancer is not yet available.

Senator HILL. You don't have it today?

### ARTERIOSCLEROSIS

Dr. SHANNON. No, sir. I would say that cancer today, as a biological mystery, is in a position perhaps comparable to the state of our knowledge about the development of arteriosclerosis.

We know a great deal about the biochemical basis of that. We know a great deal about the processes that, in the final analysis, produce the plaque that plugs the blood vessels but we know very little about how to control this disease which, in the male, starts in quite young adulthood—age 30 or 35.

The stakes here are enormous, as you well know. I think that the exploitation of the opportunties today probably requires more of the type of activity that is possible within the framework of a research institute than the work that can be undertaken by an individual scientist in a university department.

This is one of the reasons, you may recall, for the DeBakey commission strongly advising the establishment of cardiovascular research institutes and their counterparts in the field of cancer.

It seems likely that group activity, taking advantage of our most brilliant minds, is perhaps essential to the ultimate solution of these problems.

REDUCTION IN FUNDS

Senator HILL. You got quite a cut on that, didn't you?

Dr. SHANNON. As contrasted to our proposal, yes, Senator.

Senator HILL. Compared to what you felt was the need.

Your proposal was based on your best judgment as to need. Isn't that true?

Dr. SHANNON. I think our proposal was based on good scientific evidence and a modest suggestion of what could be done.

I think as you look at this budget you will find that the department largely agrees with our projections, but the hard nut of available funds had to be cracked and then we didn't come out so well.

Senator HILL. You could not stop the war in Vietnam, could you?

Dr. SHANNON. No, sir.

Senator HILL. I was interested in what you had to say about retrolentalfibroplasia. I remember so well when that matter came up.

DRAMATIC RESULTS IN MEDICAL RESEARCH

What other dramatic result can you give us?

Dr. SHANNON. I think that some of the things that are really dramatic sort of creep up on us, Senator Hill. We give you annual reports which say that we are not sure yet, but I think one of the really dramatic advances is, beyond any doubt, the demonstration that is now possible to cure several cancers through the use of chemicals.

Senator HILL. Through chemicals?

Dr. SHANNON. Yes, sir. choriocarcinoma in women and the leukemias of childhood.

Senator HILL. That leukemia is only getting remissions, isn't it?

Dr. SHANNON. I don't think so.

Senator HILL. Is there a cure there?

Dr. SHANNON. There are enough children now well beyond 5 years without remission——

Senator HILL. That you can call it a cure rather than remission?

Dr. SHANNON. I would think so; yes. Another thing that is really striking is that we have just recently licensed an immunizing agent for the RH factor and all the consequences of this ——

Senator HILL. I read about that in the press. That is very interesting. Give us a little statement on that.

Dr. SHANNON. I will be very glad to. Again, we come to this year by year. I expect that some of the work that Dr. Fredrickson has done in cataloging of diseases of fat transport mechanisms could well be the first real entry into the problem of arteriosclerosis.

Senator HILL. You think so?

Dr. SHANNON. I say that. Somebody who testifies before this committee 4 or 5 years from now will have to make the judgment whether, indeed, this was the case, but this is the way it looks to me.

I think that the ability to take a devastating neurological disease called kuru in an experimental animal and now transmit it to a chimpanzee could well be the first major break in our understanding of

viruses, more particularly slow-acting viruses, and their relation to serious diseases.

SUPPLEMENTAL INFORMATION

I think that I could range over almost any Institute and come up with comparable type of things.

I would be very glad to do that if you would like a submission of that sort.

Senator HILL. Could you supply us with a statement similar to your statement here along that line?

Dr. SHANNON. Yes, sir.

Senator HILL. It might be very helpful.

Dr. SHANNON. I would emphasize that hope springs eternal in the human breast. Our hopes based on many such apparent breaks will turn out not to have been warranted. Being a scientist in such a complex area as the biomedical sciences is a depressing experience. But a substantial number of these so-called breakthroughs do, indeed, add major new dimensions to our knowledge. While they themselves may not solve a problem, they open up new avenues of approach that, at a later time, will lead to a solution.

Senator HILL. You have given us a good estimate this morning but give us a supplemental statement along these lines.

Dr. SHANNON. I will do so.

SMOKING

Senator HILL. You agree that a pipe is not as dangerous as a cigarette?

Dr. SHANNON. I told you I would surprise you, Senator.

Dr. STEWART. Congratulations.

Senator HILL. As I recall when you were here last Friday, you did have a cigarette.

Dr. SHANNON. Last Friday, I said I would bring you something that would surprise you, sir.

Senator HILL. I am surprised. It is the first time I have seen you with a pipe.

Off the record.

(Discussion off the record.)

Senator HILL. You have brought us some most interesting and informative testimony, Doctor. Is there anything you would like to add?

Dr. SHANNON. No, sir.

Senator HILL. You supply us that statement.

Dr. SHANNON. Yes, sir.

Senator HILL. Fine.

(The information follows:)

NEW TECHNIQUES

American ingenuity and skill in building and operating machines now is extending the healing skills of our doctors and surgeons so that better treatment methods can be devised and brought to all our population.

With the aid of computers, systems analysis is being applied to the problems of managing and operating artificial kidney centers and to the development of simpler, safer, more effective and less expensive artificial kidney treatment. Going even further, the systems analysis approach may point the way to better treatment and even prevention of chronic kidney disease, so that artificial kidneys and kidney transplants will not be needed.

Even in these days of successful heart transplants, the so-called artificial hearts, pumps which provide mechanical assistance to failing hearts, represent an important advance in health care. The major need for such devices will be for treatment of the acute heart attack. Every year about 750,000 Americans suffer such attacks and by conservative estimates, more than 350,000 are killed by them. Even without an artificial heart, many of these victims could be saved by some of our modern electronic equipment and drugs. These are presently in use in a number of medical centers, but we expect that they will become available to all the population through the Regional Medical Programs made possible by the Heart, Cancer and Stroke Amendments of 1965. Meanwhile, special centers are being set up for intensive care and equally intensive study of acute heart attack patients. The knowledge that will come from these centers will help both in better treatment for patients everywhere and in more rapid development of mechanical devices that can become complete replacements for hearts damaged beyond repair.

A new machine of quite a different kind is an instrument which separates the nucleus and other parts of the living cell from each other. This instrument also separates a virus from the cell in which it lives and grows, and separates the molecules of chemicals within a cell. The separation is based on differences in density of the different particles within the cell. Development of the instrument was possible through utilization of the talents of physicists, engineers and mathematicians of the Atomic Energy Commission's Oak Ridge National Laboratory and the medical scientists of the National Cancer Institute. Called the zonal ultracentrifuge, it is considered the most significant technical advance for virus research since the finding of tissue culture methods for growing polio viruses outside the human body, which led to development of the polio vaccines. Because cancer and many other diseases are caused by malfunction within the living cell, this new instrument is opening previously closed paths to knowledge of disease causes and cures.

Two patients in the last stage of leukemia, one of them an adult and one a little child, have been helped dramatically by a cell separating machine. This was developed through joint efforts of the National Cancer Institute and IBM. It was devised to separate the white blood cells and blood platelets from the blood. Leukemia patients need white blood cells because the drugs that check the leukemia destroy much of the bone marrow that produces infection-fighting white blood cells. These patients become so vulnerable to infection that germs which would not bother most people might be fatal. However, it takes the white cells of 30 to 40 units of blood every day to protect a single patient. This puts a tremendous drain on the hospital blood banks. With the new cell separator, blood is drawn from the donor, white cells are separated out, and the rest of the blood is returned to the donor in a single continuous process. The donor's healthy bone marrow makes more white blood cells to protect him, and the patient gets the particular cells he needs without causing undue drain on the hospital blood bank.

We are making progress toward better and more efficient care of patients in our hospitals through automation of laboratory procedures. For many patients, a whole battery of tests may be ordered to help the doctor pinpoint his diagnosis and, therefore, the treatment he gives. Technicians to perform the many and often complicated tests are, however, in short supply. So electronic devices have been developed to take over and actually perform many of these difficult, time-consuming tests. Automation in hospitals is also making it possible for doctors and nurses to devote more time to actual care of their patients by freeing them of the growing burden of paperwork involved in writing orders, making out charts, and so on.

## Vaccines

Besides the vaccines against rubella and mumps and a kind of vaccination against Rh disease, there are oher encouraging advances in this field. For the first time in 55 years, reported cases of measles (rubeola) in the United States in 1967, dropped below 100 per 100,000 population. In 1967, the case rate per 100,000 population was 37.4 as compared to 104.2 the previous year.

This, of course, is directly attributable to the availability of vaccines and points up the effectiveness of the nationwide measles vaccine program. Although reports of reactions from the inactivated vaccine have been relatively low, some studies (including those supported by NIAID at the University of Colorado) indicate that those receiving the killed vaccine sometimes develop "atypical measles" or a severe local reaction if they later receive the live virus vaccine or are exposed to the natural disease. (The killed vaccine is generally not given to healthy

children but rather to those undergoing treatment with immunosuppressive drugs.)

A preliminary but important assist in the study of infectious hepatitis came with recent reports of successful transmission of the disease from man to marmoset. With a marmoset colony now established at a Maryland laboratory under contract to NIAID, studies are proceeding using the blood specimens of heart surgery patients. Because of the number of blood transfusions they receive, such persons often are particularly likely to develop hepatitis.

Enthusiastic reports continue from the military services on the effectiveness of the oral Adenovirus-4 vaccine developed by NIAID. Nearly half a million U.S. Army, Navy, and Marine combat trainees have received the live enteric-coated pill which does not dissolve and begin its antibody-stimulating activity until it reaches the intestines. Administered at the first sign of an outbreak, the vaccine within two weeks virtually halted the epidemic-spread of adenovirus-associated respiratory disease in a military recruit population. Hospitalizations for serious respiratory infections were reduced by more than 60 percent at some of the training stations.

One of the obstacles in development of a vaccine against the 100 or more rhinoviruses implicated in the common cold has been the problem of determining exactly which viruses cause the majority of illnesses. Important leads in this aspect of rhinovirus vaccine research have been provided by scientists at the University of Washington who report a very broad, heretofore unsuspected antigenic relationship between many of these rhinoviruses. They postulate that there is some "group" antigen in rhinoviruses and some stimulation of cross-immunity within each group. If this proves true, it could open the way to development of a vaccine—using only 4 or 5 groups of viruses—which would be effective against all of the rhinoviruses.

With increased knowledge of Aleutian Disease of mink has come hope for further understanding of possible similarities in human kidney disease. Aleutian Disease had been thought to be of viral origin until an NIAID grantee at the University of Connecticut produced evidence suggesting that the infecting agent may be smaller than any known virus. Now grantees at Washington State University have described the development of kidney glomerular lesions in mink suffering Aleutian Disease, lesions closely resembling some of those seen in certain experimental and spontaneous diseases of animals and humans. In eclampsia and pre-eclampsia, it has been felt that intravascular coagulation and the subsequent depositing of fibrin—an elastic protein which forms the essential portion of a blood clot—leads to glomerular destruction. In mink with Aleutian Disease, the Washington State scientists found that changes indicated coagulation had occurred within the blood vessels of the glomeruli (thin membranes and capillary walls of the kidney) as the condition progressed. They suspect that the deposition of fibrin or incompletely polymerized fibrin as a result of virus-antibody combinations is the mechanism setting off glomerular damage.

With the knowledge being amassed on antiviral substances, one NIAID grantee at Stanford University Medical School has forecast that science is on the threshold of an era that may see chemotherapeutic and other nonimmunologic methods for control of human viral infections become as commonplace as are the present day use of antibiotics in treating bacterial infections. The most promising antiviral agent is interferon.

At Stanford University, a heavy interferon was produced by injecting statolon (a derivative of *Penicillium stoloniferum*) into chickens. Later a lighter type was seen which was indistinguishable from virus-induced interferon.

### Disorders of Vision

The diagnosis and treatment of glaucoma advanced considerably during the year, bringing scientists closer to an understanding of the mechanism of this disease than ever before. Particularly valuable in staying the advances of glaucoma were the research studies evaluating the effectiveness of new and older drugs used in maintaining proper intraocular pressure by such scientists as Dr. Bernard Becker at the Washington University School of Medicine in St. Louis. Dr. Becker and a team of specialists found a new drug, iosorbide, to be a useful agent in acute primary and secondary glaucoma, and as a preoperative medication for various types of eye surgery. The agent has a number of advantages over other agents: it can be administered orally in a doctor's office, and in cases of acute glaucoma it brings down the intraocular pressure rapidly. Too, it can be used without complications with diabetics.

A simple test to determine when high oxygen therapy reaches a danger point to the eyes was developed by Dr. Arnall Patz and his associates at the Wilmer Eye Institute, Johns Hopkins University and Hospital, Baltimore. Such therapy is often necessary in order to save the lives of premature infants afflicted by a respiratory distress syndrome known as hyaline membrane disease—a disorder which strikes some 40,000 premature babies annually in this country. By looking through a simple hand instrument, the ophthalmoscope, into the back of the eye, physicians can now determine when excessive oxygen is being delivered. Dr. Patz found that the retinal blood vessels show severe constriction when excess oxygen levels occur. Previously, the only method of determining oxygen toxicity was to measure the arterial blood oxygen content. Only a few hospitals are equipped to do this for the technique requires a highly skilled pediatric team, special training in analyzing the blood content, and expensive instruments.

TRIBUTE TO SENATOR HILL

Dr. SHANNON. I can only say, Senator Hill, that I am really depressed at your leaving. I have sat across the table from you here over the years and as I have seen these programs develop, with all the frustration that one has in bureaucratic managements, it has always been a pleasure to sit here and share some of our problems with you and to see how many of them have been solved.

Senator HILL. It certainly has been a pleasure, sir, to have you here and to work with you and have your cooperation and your help and your support.

It has been most helpful, I tell you.

Dr. SHANNON. Thank you.

## DIVISION OF BIOLOGICS STANDARDS

**STATEMENT OF DR. RODERICK MURRAY, DIRECTOR**
**ACCOMPANIED BY:**
**DR. JAMES A. SHANNON, DIRECTOR, NATIONAL INSTITUTES OF HEALTH**
**GEORGE A. BRUST, EXECUTIVE OFFICER**
**MRS. ELIZABETH GRUBBS, BUDGET OFFICER**
**JAMES A. HICKEY, ACTING FINANCIAL MANAGEMENT OFFICER, NATIONAL INSTITUTES OF HEALTH**
**DR. WILLIAM H. STEWART, SURGEON GENERAL**
**CHARLES MILLER, CHIEF FINANCE OFFICER**
**JAMES B. CARDWELL, DEPUTY ASSISTANT SECRETARY, BUDGET**

APPROPRIATION ESTIMATE

"BIOLOGICS STANDARDS

"To carry out sections 351 and 352 of the Act pertaining to regulation and preparation of biological products, and conduct of research related thereto, [$8,649,000] *$8,499,000*."

## AMOUNTS AVAILABLE FOR OBLIGATION

| | 1968 | 1969 |
|---|---|---|
| Appropriation | $8,649,000 | $8,499,000 |
| Cutback from the 1968 President's budget required by H J. Res. 888 | −327,000 | |
| Total currently authorized for obligation | 8,322,000 | 8,499,000 |
| Plus: Proposed release of reserves for increased pay costs | 197,000 | |
| Total available for obligation | 8,519,000 | 8,499,000 |
| Disposition of cutback: | | |
| To be used for pay costs in this account | | 197,000 |
| To be returned to the Treasury | | 130,000 |
| Total cutback | | 327,000 |

## OBLIGATIONS BY ACTIVITY

| | 1968 estimate | | 1969 estimate | | Increase or decrease | |
|---|---|---|---|---|---|---|
| | Positions | Amount | Positions | Amount | Positions | Amount |
| Biologics Standards (total obligations) | 324 | $8,519,000 | 329 | $8,499,000 | +5 | −$20,000 |

## OBLIGATIONS BY OBJECT

| | 1968 estimate | 1969 estimate | Increase or decrease |
|---|---|---|---|
| Total number of permanent positions | 324 | 329 | +5 |
| Full-time equivalent of all other positions | 5 | 5 | |
| Average number of all employees | 283 | 287 | +4 |
| Personnel compensation: | | | |
| Permanent positions | $2,353,000 | $2,432,000 | +$79,000 |
| Positions other than permanent | 30,000 | 30,000 | |
| Other personnel compensation | 49,000 | 49,000 | |
| Total personnel compensation | 2,432,000 | 2,511,000 | +79,000 |
| Personnel benefits | 248,000 | 253,000 | +5,000 |
| Travel and transporttion of persons | 106,000 | 108,000 | +2,000 |
| Transportation of things | 10,000 | 10,000 | |
| Rent, communications, and utilities | 51,000 | 51,000 | |
| Printing and reproduction | 10,000 | 10,000 | |
| Other services | 320,000 | 325,000 | +5,000 |
| Project contracts | 2,275,000 | 2,275,000 | |
| Payment to "National Institutes of Health management fund" | 1,845,000 | 1,880,000 | +35,000 |
| Supplies and materials | 885,000 | 908,000 | +23,000 |
| Equipment | 340,000 | 171,000 | −169,000 |
| Subtotal | 8,522,000 | 8,502,000 | −20,000 |
| Quarters and subsistence charges | −3,000 | −3,000 | |
| Total obligations by object | 8,519,000 | 8,499,000 | −20,000 |

## SUMMARY OF CHANGES

| | |
|---|---|
| 1968 enacted appropriation | $8,649,000 |
| Cutback from the 1968 President's budget required by House Joint Resolution 888 | −327,000 |
| Proposed release of reserves for increased pay costs | +197,000 |
| 1968 total estimated obligations | 8,519,000 |
| 1969 estimated obligations | 8,499,000 |
| Total change | −20,000 |

| | Base | | Changes from base | |
|---|---|---|---|---|
| | Positions | Amount | Positions | Amount |
| INCREASES | | | | |
| A. Built-in: | | | | |
| 1. Annualization of 1968 pay raise costs | | | | $34,000 |
| 2. Extra day of pay in 1969 | | | | 11,000 |
| B. Program: | | | | |
| 1. Bacterial products | 21 | $272,000 | 5 | 75,000 |
| Payment to "National Institutes of Health management fund" for centrally furnished services | | 1,845,000 | | 35,000 |
| DECREASES | | | | |
| A. Built-in: | | | | |
| 1. Nonrecurring items of equipment | | | | −175,000 |
| Total net changes requested | | | 5 | −20,000 |

EXPLANATION OF CHANGES

*Direct operations.*—The program increase of $75,000 and 5 positions will be used to accelerate research in the area of *mycoplasma.*

BIOLOGICS STANDARDS

| | 1968 estimate | | 1969 estimate | | Increase or decrease | |
|---|---|---|---|---|---|---|
| | Positions | Amount | Positions | Amount | Positions | Amount |
| Personnel compensation and benefits | 324 | $2,677,000 | 329 | $2,761,000 | +5 | +$84,000 |
| Other expenses | | 5,842,000 | | 5,738,000 | | −104,000 |
| Total | 324 | 8,519,000 | 329 | 8,499,000 | +5 | −20,000 |

*1968 program plans*

The Division of Biologics Standards is using the funds available in 1968 to assure the public that the variety of immunizing agents and diagnostic and therapeutic biological products such as vaccines, serums, human blood, its derivatives and similar products are potent, safe and pure for use in human beings. By this is meant that the products are indeed capable of eliciting the bodily reactions that they are purported to do; that they will exercise their prophylactic, diagnostic, or therapeutic effect without inducing undue toxic reactions in the individual to whom they are administered; and that they are free of any unwanted substances.

Current medical practice, both public and private, involves the use of many more vaccines and biologics for preventive measures, particularly in large scale public health programs, than ever before. All indications are that this will continue and expand in the years to come. Thus, (1) the use of these products is more common today than ever before; (2) more people are involved; and (3) the licensing and control of these products is ever growing in importance.

Licensing and control of new and improved products are closely related to scientific and technical developments. New knowledge results in changes in methods of manufacture and new forms of products which require modification or amendment of standards. The Division's staff is involved with developing standards for biologics products, licensing of products and the establishment which produces them; inspection of such licensed establishments to assure the maintenance of high quality in manufacture of products; examination of manufacturer's test results and performance of control tests prior to release; provision of reference standard material for tests; examination of labels and inserts; investigation of infractions of law and regulations and assisting in prosecutions; and promulgation of regulations for new products and amendments of regulations to reflect advances in scientific knowledge and technology. These activities are based on a dual program of control and research.

At the present time, 218 establishments are licensed for the manufacture of a variety of products. Several of these have subsidiaries. In addition there are 276 blood bank donor centers. There are 1,340 product licenses effective covering 297 licensed products. In terms of workload this means that more than 500 inspec-

tions will be made during 1968 and will require approximately 700 man work days. Forty members of the scientific staff will participate in these annual and special inspections to determine that the establishments are complying with standards designed to insure the continued safety, purity and potency of products. Facilities and production methods will be observed and reviewed, records inspected, personnel interviewed, and samples secured from the manufacturers' storage. Samples and test reports of each batch or lot of the products the manufacturer proposes to distribute will be submitted to the Division. Based on past experience, these lots will number between 3,500 and 4,500 and will require approximately 35,000 to 36,000 control tests. In addition, the protocols containing the results of tests performed by the manufacturer will be reviewed for each lot submitted for release.

When necessary, special investigations are conducted to cope with specific situations. In contrast to inspections, investigations concerning possible violations of the Public Health Service Act must be carried out. These call for the expenditure of long and indefinite periods of time in order to obtain all the needed information. Investigations must therefore be carried out by people who have this duty as their main function. At this time, current investigations number approximately fifteen.

As has been pointed out in the past, the Division has few problems of enforcement with the larger producing manufacturers because of the realization that in matters concerning safety and potency of biological products, the public interest is also the interest of the manufacturer. The suspension of a license is a severe penalty and is something an establishment would have great difficulty recovering from economically.

During the course of the year, the Division anticipates filling requests for about 10,000 samples of standard and reference preparations. These preparations will be used to calibrate test procedures and will be used in the evaluation of products. In order to maintain an adequate supply of reference and standard materials it was necessary to prepare 16 antitoxins, 3 serums, 3 vaccines, 2 toxins and 4 skin test antigens during the past year. A total of 478 tests were required to complete satisfactory standardizations of these materials. These tests include such procedures as flocculation reactions, animal protection tests, animal titrations, neutralizations and assorted *in vivo* (animal) and *in vitro* (test tube) tests on specific specialized materials.

The Division's contract research program, which complements its in-house research, covers a wide spectrum. Problems of viral oncogenesis (tumors caused by viruses) constitute the major focus of the program. This program involves testing of viral and other vaccines for oncogentic potentiality in animals, studies designed to reveal the presence of covert or otherwise undetectable agents in cell culture and in other production systems used in the manufacture of human viral vaccines, studies on normal human karyotypes to provide information on human diploid cell culture systems, and other projects. Studies of the safety of mineral oil and emulsifiers, and of oil-adjuvant vaccines, are being performed on a number of contracts, and additional contract effort is devoted to the related subject of the toxicology and oncogenic potentiality of various chemically defined substances used as inactivants, preservatives and stabilizers in vaccines. Additional contracts have or are being negotiated on studies encompassing mycoplasmas, effects of plastic constituents on blood, attenuated measles vaccine, poison ivy, yellow fever, poison oak, latent virus and many more.

While direct research is also being conducted on most facets covered by research contracts, basically, the Division's research is product-oriented and therefore concerned with all biological products subject to license; some of these are new and some are older products which require updating. Only in this way is the Division able to develop the most meaningful and useful standards for the products produced under license.

The research relates to all aspects of manufacture, distribution, and use and effects of biological products, on the biological phenomena involved in immunization, in allergies and desensitization, and in the fractionation, aging, and degradation of blood and blood products. Research is in progress on a large variety of bacterial and fungal products, viral and rickettsial vaccines, allergens, blood and blood derivatives, antitoxins, and antivenins. The Division is also concerned with research on the containers in which products are stored or dispensed. It is engaged in research on adjuvants, which are added to vaccines to enhance their protective effect, on stabilizers, and on chemical and physical methods of inactivating infectious agents.

Division scientists have been conducting laboratory and clinical studies with an attenuated mumps virus vaccine which recently become commercially available. The primary goal was in test development and in evaluating the safety and efficacy of the experimental vaccine for man. These studies confirmed and extended the data obtained by the manufacturer. Consequently, this year, standards have been established governing the manufacture and release for general use of attenuated mumps vaccine.

This is an important step forward for the public as this "childhood" disease can be very serious for adults, specially males, since often it results in sterility.

The attenuated rubella virus strain, reported last year, has received world wide distribution for experimental investigation. Work with this virus is continuing to encourage U.S. research workers and the international scientific community to feel that rubella control is a realistic goal of the near future.

An experimental live rubella virus vaccine produced by the Division has been subject to additional clinical trials by the Division's scientists as well as other groups here and abroad. More than 500 persons have thus far been successfully immunized with the experimental material under conditions of clinical investigation. None has manifested any signs of rash or other clinical reaction, thus indicating that the virus is attenuated.

A most promising endeavor by the Division's scientists is a study on the Rh factor in blood which causes sensitization of certain women. Working with manufacturers on new test methods, the Division hopes to be able to license $RH_o(D)$ Immune Globulin this year. This form of gamma globulin will be used in the prevention of "Rh disease" (erythroblastosis fetalis).

Division personnel have completed their moves into the new facilties and the shake-down period, although not without problems, is approaching an end. Renovations in building 29 are presently being accomplished and it is expected that before the year is through the space involved will be operational.

*Program plans for 1969*

It is envisioned that the Division's programs will continue as outlined for 1968 and will adapt themselves to the needs posed by further scientific advances and manufacturing problems.

In 1969, the Division is requesting a program increase of five positions and $75,000 to concentrate on the area of *mycoplasma*. (*Mycoplasma* is an organism which is intermediate between bacteria and viruses in size). Division scientists have been working with *mycoplasma* on a limited basis. The increase would be used to accelerate this effort. The known and suspected roles of *mycoplasmas* in human disease makes it necessary to assure that vaccines be free of these organisms. *Mycoplasma* organisms grow readily in the cell culture systems used for producing many new virus vaccines. Their exclusion from the vaccines can be achieved only by use of elaborate test procedures. Measles and poliovirus vaccines are tested routinely. These tests are also being extended to experimental vaccines now in course of evaluation. Development of new test procedures and the testing of vaccines as they are produced will require a greater expenditure of time and effort on the part of the Division.

Included in this budget request are $11,000 for an additional day's pay in 1969 and $34,000 for annualization of pay raises, as well as $35,000 increase in the NIH management fund for centrally provided services. These increases, in addition to the program increase of $75,000 are offset by $175,000 in non-recurring funds for equipment. This results in a net decrease of $20,000.

NEW POSITIONS REQUESTED FISCAL YEAR 1969

| | Grade | Annual salary |
|---|---|---|
| Biologics Standards: | | |
| Scientist | GS–13 | $13,507 |
| Scientist | GS–11 | 9,657 |
| Scientist | GS–9 | 8,054 |
| Research technician | GS–9 | 8,054 |
| Research technician | GS,7 | 6,734 |
| Total new positions, all activities (5) | | 46,006 |

BIOGRAPHICAL SKETCH

Name: Roderick Murray, M.D.
Position: Director, Division of Biologics Standards, National Institutes of Health.
Birthplace and date: Christchurch, New Zealand, August 12, 1909.
Education: B.S., Univ. of Witwatersrand, South Africa, 1930; M.Sc., Univ. of South Africa, 1931; M.D., Harvard Medical School, 1941.
Experience:
1956–Present: Director, Division of Biologics Standards.
1949–1956: Asst. Chief, Laboratory of Biologics Control, NIH.
1947–1949: Laboratory of Biologics Control, NIH.
1947: Commissioned Officer, USPHS.
1946–1947: Research Fellow, Thorndike Memorial Laboratory, Boston City Hospital.
1942–1946: U.S. Army Medical Corps (Major).
1942: Asst. Residency, Second Medical Service, Boston City Hospital (interrupted by military service).
1941–1942: Medical Internship, Second Medical Service, Boston City Hospital, Boston, Mass.
1931–1937: Biochemist, South African Institute for Medical Research, Johannesburg.
Association memberships: American Medical Assoc.; American Public Health Assoc. (Fellow); American Assoc. of Immunologists; American Academy of Microbiology (Fellow).
Special awards, citations, or publications: Cullen Medal, Faculty of Science, Univ. of Witwatersrand, 1930; Alpha Omega Alpha; Distinguished Service Medal USPHS, 1965.
Thirty-nine publications.

TASKS

Senator HILL. Dr. Murray, you may proceed, sir.

Dr. MURRAY. Mr. Chairman, it is again my privilege to appear before you on behalf of the Division of Biologics Standards.

The mission of the Division is the exercise of controls on the safety, purity, and potency of biological products through a system of licensing of manufacturing establishments and of the products, as well as the conduct of research related to these objectives in order that decisions made and actions taken can be based on sound information.

STANDARDS FOR BIOLOGICAL PRODUCTS

Basically, it is the responsibility of the Division to make recommendations for standards for all biological products such as vaccines, serums, human blood and its derivatives, and like products.

These include written standards, eventually promulgated as regulations, some of which apply to individual products and some to products in general; and physical standards, that is, biological preparations whose properties and qualities have been extensively characterized.

The latter are issued to manufacturers and other research laboratories concerned with biologics standardization for evaluation with their products, particularly with respect to potency, or strength.

The acquisition of the information needed to develop written standards and the laboratory investigations leading to the development and selection of suitable physical standards are extensive in character and often time consuming.

This is particularly true of standards for the tissue-culture-prepared virus vaccines such as poliovirus, measles, and mumps, which have been developed in recent years.

When a new vaccine against a particular disease appears achievable, it devolves upon the Division to develop standards so that they will be ready at approximately the same time that the product is brought to the final stages of manufacture.

This requires considerable research involving most of the component laboratories of the Division, as well as the testing of samples of both experimental and final products.

It is necessary during this period to maintain close contact with the manufacturer and other scientists involved so that problems relating to standards can be ironed out during the developmental phases.

In addition, any clinical investigations conducted by the manufacturers come under review of the Division.

When a manufacturer has decided to market a product which he has developed, he submits a license application to the Division together with samples of the product and results of all tests.

Division scientists then review the application and perform tests to ascertain the accuracy of the manufactuer's test results.

If the tests fulfill the requirements and the application is in order, the product license is recommended for approval.

### Inspection of Production Facilities

In the case of a manufacturer already licensed for other biological products, his production facilities may be inspected as deemed necessary according to the nature of the pending product.

In the case of a new manufacturer, production facilities are inspected and the personnel assessed prior to licensing the manufacturing establishment, as well as the product he proposes to market.

The establishment is inspected annually thereafter to verify that proper procedures are being followed in manufacturing and testing procedures.

Samples and the results of tests performed on each batch or lot of all biological products proposed for marketing must be submitted to the Division by the manufacturer prior to distribution.

The Division checks the test results and runs similar tests to ensure the quality of the products. Only then is a release for marketing issued to the manufacturer.

### Continued Control Over Product in Use

Once a product has come into use, its safety and potency must be continuously monitored. The knowledge and skill required to do this also provides a sound basis for consideration of problems associated with newer products as they are developed.

### Globulin for Prevention of Rh Disease

I might interpolate here that there was a report of the licensing of one of the most recent products during the past week. This is a globulin for the prevention of Rh disease.

Senator Hill. To which Dr. Shannon referred; which we saw in the press?

Dr. Murray. That is right. This will be an opportunity to prevent a great deal of illness and cost.

Senator HILL. That has caused a lot of trouble in the past, has it not?

Dr. MURRAY. That is right.

Senator HILL. And they didn't know what to do about it, did they?

Dr. MURRAY. No, except to use elaborate and extensive procedures of transfusion.

### RUBELLA

Two years ago, Division scientists succeeded in attenuating the rubella virus. Using this weakened virus they developed an experimental vaccine against rubella or German measles.

Infections of this disease during early pregnancy frequently result in spontaneous abortions, stillbirths, or birth of infants with grave defects such as blindness, deafness, heart disease, and brain damage.

Senator HILL. Pretty serious defects, aren't they?

Dr. MURRAY. They are.

Vaccines prepared from this attenuated virus have now been administered to over 500 persons.

I believe, since this was written, the number has now increased to over a thousand.

None of these individuals experienced vaccine-associated reactions; over 90 percent developed protective immunity.

Continued observation of the first groups of children vaccinated 2 years ago indicates that the immunity conferred by the attenuated virus will be of long duration. Thus far, the vaccine appears safe as well as effective.

### AVAILABILITY DATE OF VACCINE

Senator HILL. How long do you think it will be before we can put it on the market, so to speak?

Dr. MURRAY. There is such a tremendous amount of work now being done in the field not only with the vaccines available from this strain, but from cognate strains and using different production systems; there is one large study being carried on in Taiwan under NIAID auspices. When the results of these studies are known, I think that a vaccine will not be far away. We anticipate that it should be available sometime during the next calendar year.

Senator HILL. That would be quite an advance, would it not?

Dr. MURRAY. I believe it will. This will give us the possibility of immunizing women prior to pregnancy and protecting the unborn infants, future unborn infants, against deformities.

Senator HILL. All of which are pretty serious?

Dr. MURRAY. And expensive for the economy, I imagine.

Dr. SHANNON. Another advance, Senator Hill, that has a very direct bearing on the problems of pregnant women, is that the test for susceptibility has been greatly simplified. That is now a simple matter.

Maybe Dr. Murray might wish to comment on that.

### DEVELOPMENT OF VACCINE

Dr. MURRAY. During the past year, Division investigators and collaborating groups have found answers to several questions important to the development of the vaccine.

These studies have been concerned with (1) determining the optimum degree of attenuation for a virus strain destined for use in vaccine production, (2) evaluating the characteristics of experimental rubella vaccines produced in various types of tissue cultures, and (3) ensuring the maximum practical application of the new rapid blood test, hemagglutination-inhibition test, developed by Division scientists for the detection of rubella immunity and determination of the protective antibody response in vaccines.

Dr. Shannon's remark here is appropriate. This is a very simple laboratory test which can be done without any elaborate equipment and can make a determination in a matter of several hours as to whether a person already contains the antibodies of rubella.

With that kowledge then, they would know that they are protected. And also, it would indicate those in need of the vaccine when it is available.

During the coming months, the Division will be involved with groups conducting progressively larger rubella vaccine field trials and will continue to keep in close contact with rubella vaccine research.

It would appear that an effective vaccine is a definite possibility in the near future, and that in large measure the standards will be based on research carried out by the Division.

FUNDS FOR RESEARCH ON MYCOPLASMA

An area of current concern and interest to both the Division's and the manufacturers' investigators is that of a group of microorganisms called mycoplasma. Some of these organisms have been incriminated as causes of disease in man.

The research currently being conducted on mycoplasmas is of considerable importance since it has been demonstrated that these organisms grow readily in the cell cultures used for producing many virus vaccines.

To accelerate research in this area, an increase of $75,000 is requested by the Division in 1969.

Senator HILL. How much did you ask originally from the Department?

BUDGET REQUEST

Dr. MURRAY. I havn't come to the total figure yet. I think I will express the total request first before I answer that question, if you don't mind.

Senator HILL. All right. Go ahead.

Dr. MURRAY. In conclusion, the request of the Division of Biologics Standards for 1969 is $8,499,000 compared with $8,519,000 available in 1968.

The net decrease of $20,000 results from the program increase of $75,000 for mycoplasma research and mandatory increases of $80,000, offset by a decrease of $175,000 for nonrecurring equipment costs in 1968.

Senator HILL. You won't have to have that equipment?

Dr. MURRAY. We would like to have the equipment. There are many things that we can do with what we have and we would hope that the availability of this would come around later.

RESEARCH FUNDS FOR MYCOPLASMA

To answer your previous question, the estimate was $8,942,760.

I shall be happy to respond to any questions you might have.

Senator HILL. You did not get too serious a cut then, did you?

Dr. MURRAY. I think when we balance off the decrease in the nonrecurring it does not seem like a large cut.

Senator HILL. But you have an important job to do?

Dr. MURRAY. I believe we have.

VARIED EXPERIENCE OF DR. MURRAY

Senator HILL. I note you were born in New Zealand, sir.

Dr. MURRAY. Yes, I was.

Senator HILL. Far away from South Africa.

Dr. MURRAY. That was some time ago. My father's family was in the gold-mining business and traveled around from one area of the world to another at that time.

Senator HILL. How did you get transferred from gold mining to medicine?

Dr. MURRAY. I grew up part of my life in Johannesburg, South Africa. I took my degree in the university there and worked in the local medical research institute and developed an interest in medicine and research.

Dr. SHANNON. Scotch parenthood, born in New Zealand, brought up in South Africa and now working in the United States.

Senator HILL. I thought about you in connection with what Dr. Shannon had to say and also in connection with Dr. Christiaan Barnard. You have had quite a bit of experience; haven't you?

Dr. MURRAY. I have been in a number of places, yes.

Senator HILL. I think we are fortunate to have you, sir.

Dr. MURRAY. Thank you, sir.

Senator HILL. We certainly appreciate your statement and hope you will stay with us. You are a little younger than Dr. Shannon.

Dr. MURRAY. As you grow over the years, the difference becomes less percentagewise.

Senator HILL. It is awfully good to have you here, sir.

Dr. MURRAY. Thank you.

Senator HILL. We certainly appreciate your testimony very, very much.

Dr. MURRAY. Thank you, sir.

NATIONAL CANCER INSTITUTE

STATEMENT OF DR. KENNETH M. ENDICOTT, DIRECTOR
ACCOMPANIED BY:
DR. JAMES A. SHANNON, DIRECTOR, NATIONAL INSTITUTES OF HEALTH
ROBERT E. LEARMOUTH, EXECUTIVE OFFICER, NATIONAL CANCER INSTITUTE
DR. JESSE L. STEINFELD, ASSOCIATE DIRECTOR FOR PROGRAM, NATIONAL CANCER INSTITUTE
EARLE L. BROWNING, BUDGET OFFICER, NATIONAL CANCER INSTITUTE
JAMES A. HICKEY, ACTING FINANCIAL MANAGEMENT OFFICER, NATIONAL INSTITUTES OF HEALTH
DR. WILLIAM H. STEWART, SURGEON GENERAL
CHARLES MILLER, CHIEF FINANCE OFFICER
JAMES B. CARDWELL, DEPUTY ASSISTANT SECRETARY, BUDGET

APPROPRIATION ESTIMATE

"NATIONAL CANCER INSTITUTE

"To enable the Surgeon General, upon the recommendations of the National Advisory Cancer Council, to make grants-in-aid for research and training projects relating to cancer; and to otherwise carry out the provisions of title IV, part A, of the Act; [$183,356,000] *$187,707,000*."

AMOUNTS AVAILABLE FOR OBLIGATION

| | 1968 | 1969 |
|---|---|---|
| Appropriation | $183,356,000 | $187,707,000 |
| Cutback from the 1968 President's budget required by H.J.R. 888 | −2,676,000 | |
| Total currently authorized for obligation | 180,680,000 | 187,707,000 |
| Plus proposed release of reserves for increased pay costs | 1,034,000 | |
| Total available for obligation | 181,714,000 | 187,707,000 |
| Disposition of cutback: | | |
| To be used for pay costs in this account | | 1,034,000 |
| To be returned to the Treasury | | 1,642,000 |
| Total cutback | | 2,676,000 |

OBLIGATIONS BY ACTIVITY

| | 1968 estimate | | 1969 estimate | | Increase or decrease | |
|---|---|---|---|---|---|---|
| | Positions | Amount | Positions | Amount | Positions | Amount |
| Grants: | | | | | | |
| Research | | $81,656,000 | | $84,752,000 | | +$3,096,000 |
| General research support grants | | (6,899,000) | | (6,838,000) | | (−61,000) |
| Scientific evaluation grants | | (151,000) | | (151,000) | | |
| Specialized research centers | | (12,590,000) | | (13,310,000) | | (+720,000) |
| Leukemia research support centers | | (1,500,000) | | (1,500,000) | | |
| Fellowships | | 4,326,000 | | 4,422,000 | | +96,000 |
| Training | | 11,350,000 | | 11,641,000 | | +291,000 |
| Direct operations: | | | | | | |
| Laboratory and clinical research | 498 | 16,032,000 | 512 | 16,533,000 | +14 | +501,000 |
| Collaborative research and development | 724 | 63,077,000 | 749 | 65,111,000 | +25 | +2,034,000 |
| Biometry, epidemiology, and field studies | 112 | 1,415,000 | 112 | 1,435,000 | | +20,000 |
| Review and approval of grants | 111 | 2,542,000 | 113 | 2,520,000 | +2 | −22,000 |
| Program direction | 56 | 1,316,000 | 58 | 1,293,000 | +2 | −23,000 |
| Total obligations | 1,501 | 181,714,000 | 1,544 | 187,707,000 | +43 | +5,993,000 |

OBLIGATIONS BY OBJECT

| | 1968 estimate | 1969 estimate | Increase or decrease |
|---|---|---|---|
| **PUBLIC HEALTH SERVICE** | | | |
| Total number of permanent positions | 1,419 | 1,462 | +43 |
| Full-time equivalent of all other positions | 30 | 30 | |
| Average number of all employees | 1,432 | 1,460 | +28 |
| Personnel compensation: | | | |
| Permanent positions | $13,277,000 | $13,901,000 | +$624,000 |
| Positions other than permanent | 162,000 | 163,000 | +1,000 |
| Other personnel compensation | 114,000 | 114,000 | |
| Total personnel compensation | 13,553,000 | 14,178,000 | +625,000 |
| Personnel benefits | 1,589,000 | 1,640,000 | +51,000 |
| Travel and transportation of persons | 626,000 | 726,000 | +100,000 |
| Transportation of things | 106,000 | 106,000 | |
| Rent, communications, and utilities | 422,000 | 422,000 | |
| Printing and reproduction | 404,000 | 404,000 | |
| Other services | 1,287,000 | 1,487,000 | +200,000 |
| Project contracts | 50,777,000 | 51,843,000 | +1,066,000 |
| Payment to "National Institutes of Health management fund" | 9,607,000 | 9,708,000 | +101,000 |
| Supplies and materials | 2,991,000 | 3,350,000 | +359,000 |
| Equipment | 2,000,000 | 2,000,000 | |
| Grants, subsidies, and contributions | 97,332,000 | 100,815,000 | +3,483,000 |
| Subtotal | 180,694,000 | 186,679,000 | +5,985,000 |
| Deduct quarters and subsistence charges | −10,000 | −10,000 | |
| Total, Public Health Service | 180,684,000 | 186,669,000 | +5,985,000 |
| **ALLOCATION TO VETERANS' ADMINISTRATION** | | | |
| Total number of permanent positions | 82 | 82 | |
| Full-time equivalent of all other positions | 10 | 10 | |
| Average number of all employees | 86 | 86 | |
| Personnel compensation: | | | |
| Permanent positions | $596,000 | $602,000 | +$6,000 |
| Positions other than permanent | 155,000 | 156,000 | +1,000 |
| Other personnel compensation | 1,000 | 1,000 | |
| Total personnel compensation | 752,000 | 759,000 | +7,000 |
| Personnel benefits | 54,000 | 55,000 | +1,000 |
| Travel and transportation of persons | 71,000 | 71,000 | |
| Transportation of things | 1,000 | 1,000 | |
| Rent, communication, and utilities | 1,000 | 1,000 | |
| Other services | 30,000 | 30,000 | |
| Supplies and materials | 54,000 | 54,000 | |
| Equipment | 67,000 | 67,000 | |
| Total, Veterans' Administration | 1,030,000 | 1,038,000 | +8,000 |
| Total obligations by object | 181,714,000 | 187,707,000 | +5,993,000 |

SUMMARY OF CHANGES

| | |
|---|---|
| 1968 enacted appropriation | $183,356,000 |
| Cutback required by H.J. Res. 888 | −2,676,000 |
| Proposed release of reserves for increased pay costs | 1,034,000 |
| 1968 estimated obligations | 181,714,000 |
| 1969 estimated obligations | 187,707,000 |
| Total change | +5,993,000 |

| Increases | Base | | Change from base | |
|---|---|---|---|---|
| | Positions | Amount | Positions | Amount |
| A. Built-in: | | | | |
| 1. 1 extra day of pay in 1969 | | | | +$19,000 |
| 2. Annualization of 1968 pay raise costs | | | | +220,000 |
| Subtotal, built-in increases | | | | +239,000 |
| B. Program: | | | | |
| 1. Research grants | | $81,656,000 | | +$3,096,000 |
| 2. Fellowships | | 4,326,000 | | +96,000 |
| 3. Training | | 11,350,000 | | +291,000 |
| 4. Laboratory and clinical research | 498 | 9,063,000 | 14 | +200,000 |
| 5. Collaborative research and development | 724 | 62,002,000 | 25 | +1,900,000 |
| 6. Review and approval of grants | 111 | 1,493,000 | 2 | +25,000 |
| 7. Program direction | 56 | 969,000 | 2 | +45,000 |
| Subtotal, program increases | | | 43 | +5,653,000 |
| C. Payment to "National Institutes of Health management fund" for centrally furnished services: | | | | |
| 1. Laboratory and clinical research | | $6,969,000 | | +$224,000 |
| 2. Collaborative research and development | | 1,075,000 | | +18,000 |
| 3. Biometry, epidemiology, and field studies | | 167,000 | | +2,000 |
| 4. Review and approval of grants | | 1,049,000 | | −65,000 |
| 5. Program direction | | 347,000 | | −78,000 |
| Subtotal, management fund increases | | | | +101,000 |
| Total net changes requested | | | +43 | +5,993,000 |

EXPLANATION OF CHANGES

*Research grants.*—The program increase of $3,096,000 will provide an additional $2,437,000 for regular program grants and an increase of $720,000 for specialized research centers, offset by a decrease of $61,000 in general research support grants.

*Fellowships.*—The program increase of $96,000 will provide $30,000 for postdoctoral fellowships, $30,000 for special fellowships, and $36,000 for research career development awards.

*Training.*—The program increase of $291,000 will provide $98,000 for the graduate program and $193,000 for the cancer clinical training program.

*Laboratory and clinical research.*—The program increase of $200,000 is requested for support of 14 new positions which will allow increased research in the areas of biology, endocrinology, immunology, metabolism, and surgery.

*Collaborative research and development.*—The program increase of $1,900,000 is requested for support of 25 new positions and expanded contract programs for the NCI task forces, mainly those for breast cancer and lung cancer. This is the first year that funds have been budgeted for the Lung Cancer Task Force.

*Review and approval of grants.*—The program increase of $25,000 is requested for support of 2 new positions which are needed in relation to the expanded field of immunology.

*Program direction.*—The program increase of $45,000 is requested for support of 2 new positions in order to increase operations research and systems communication aspects of the program planning activity.

NATIONAL CANCER INSTITUTE

| | 1968 estimate | | 1969 estimate | | Increase or decrease | |
|---|---|---|---|---|---|---|
| | Positions | Amount | Positions | Amount | Positions | Amount |
| Personnel compensation and benefits | 1,501 | $15,142,000 | 1,544 | $15,818,000 | +43 | +$676,000 |
| Other expenses | | 166,572,000 | | 171,889,000 | | +5,317,000 |
| Total | 1,501 | 181,714,000 | 1,544 | 187,707,000 | +43 | +5,993,000 |

GENERAL STATEMENT

The National Cancer Institute conducts, fosters and assists research and training directed toward preventing, diagnosing, treating and controlling cancer in man. These objectives are pursued directly through universities, nonprofit research organizations and commercial concerns supported with grants and contracts and include both laboratory and clinical studies.

The overall 1969 increase requested for the National Cancer Institute totals $5,993,000. This amount includes $5,653,000 for program increases; $239,000 for mandatory increases of annulization of the 1968 pay raise and one extra day of pay in 1969; and $101,000 for payment to the NIH Management Fund for centrally furnished services.

There is a program increase of $3,096,000 in Research grants. This will allow small increases throughout the grant program including research in cancer causation, tumor growth, host-tumor relationship, epidemiology, diagnosis, therapy as well as basic research. The increase will also allow the establishment of an additional cancer research center located in a geographical area not now serviced by any existing facility.

There is a program increase in Fellowship grants of $96,000 which will allow for modest cost-of-living increases. Emphasis will continue to be given to providing coverage in the shortage areas of radiation therapy, surgery, hematology, and clinical pharmacology.

There is a program increase in Training grants of $291,000 which will provide for the continuation of ongoing programs of graduate and cancer clinical training as well as allow for cost-of-living increases.

The direct operations portion of the budget allows for modest program increases of $200,000 under Laboratory and clinical research; $25,000 under Review and approval of grants; and $45,000 under Program direction. The largest increase within direct operations is in the area of Collaborative research and development. This includes a program increase of $1,900,000 for the NCI task forces, mainly Breast Cancer and Lung Cancer. The Lung Cancer Task Force funds will be used for new research efforts, to identify and reduce the hazardous components in tobacco and also to investigate other industrial-atmospheric-occupational factors and finally, to improve methods of detection, diagnosis, and treatment of lung cancer.

RESEARCH GRANTS

| | 1968 estimate | 1969 estimate | Increase or decrease |
|---|---|---|---|
| Research projects | $60,516,000 | $62,953,000 | +$2,437,000 |
| Special programs | 21,140,000 | 21,799,000 | +659,000 |
| Total research grants | 81,656,000 | 84,752,000 | +3,096,000 |

*Introduction*

The National Cancer Institute, through its research grant program, stimulates and supports research activities in the broad areas of causation, nature, diagnosis, treatment, prevention and control of cancer. Research projects are conducted by investigators or groups of investigators at colleges, universities, hospitals, research institutions, and various other non-profit institutions. These programs cover a broad spectrum of activitiy ranging from those projects having single objectives to those which are broadly-based and cover multi-disciplinary areas, some involving the coordination and direction of the efforts of many investigators.

*Program plans in 1968 and 1969*

Emphasis is being placed on basic and applied research and covers such areas as radiation, chemical carcinogenesis, immunology, drug development, virology, and epidemiology. There will be continued study of a variety of cancers in laboratory animals and in human patients. Investigations will also aim at the identification of cancer producing agents in the total environment. Demographic studies will continue with the aim of isolating these environmental factors in relation to specific types of cancer.

Additional studies will be conducted in the techniques of therapy, such as the effects of drugs and radiation in controlling the growth and spread of

cancerous cells in living organisms. Since cancer is primarily a cell disease it is more imperative that increased emphasis be placed on carcinogenesis, cell biology, and clinical research studies. Support will continue in the clinical investigation of new anticancer drugs in approximately 125 institutions in the country. The investigators at these institutions are organized in seven cooperating groups, and their efforts are closely coordinated with the NCI program of procurement and development of anticancer drugs. In addition NCI will continue to explore other therapeutic modalities such as surgery, radiation, and immunology. Furthermore, the Institute will continue to support investigations involving the evaluation and development of the complex techniques needed to protect the leukemia patient from infection, a major cause of death in leukemia patients. Techniques now being studied include the use of sterile plastic tents or laminar-flow rooms which provide a germ-free environment for the patient and the essential supporting dietary nursing and other services. Also, investigations at approximately 30 leukemia research centers will be continued and will include the procurement, preparation, preservation, and administration of platelet transfusions to children with leukemia, and the evaluation of such transfusions in the prevention and treatment of hemorrhage, another major cause of death in leukemia patients.

The NCI currently supports 25 Specialized Research Centers which are performing intensive, highly specialized clinical research or laboratory research relating to prevention, diagnosis and treatment of cancer in man. These centers are organized on a single or multi-disciplinary basis which enables investigators in key disciplines to assist each other in developing and testing new principles and methods essential to the effective diagnosis and treatment of cancer. The emphasis of these centers is continually changing as new developments take place in cancer research and therapy. Early investigations related primarily to chemotherapeutic trials, but since that time have expanded to include host-defense mechanisms, the effect of cytotoxic drugs on immune responses, and the attempts to define more precisely the mechanism of the action of other anticancer agents. The role which man's environment plays, as related to his susceptibility to malignant disease from non-viral carcinogenic agents, will continue to be studied with particular emphasis on prevention. Studies of radiation biology, radiation, physics, and nuclear medicine are expanding. Emphasis will continue to be given to determining the optimum methods of employing chemotherapeutic drugs and other forms of therapy and to the use of radiation as an adjuvant to surgery and chemotherapy. Grants are also used to aid institutions in the development of long-range plans for cancer research, training, and clinical services, the development of specialized equipment and resources, the evaluation of the status and progress of cancer activities, and the establishment of new centers.

The $45,477,000 in 1969 designated for support of non-competing continuation projects contains an increase of $2,437,000 over the 1968 level of support. The following areas of program interest will continue to receive priority: (1) the factors relating to man's susceptibility to neoplastic disease (2) research related to experimental radiobiology and radiation therapy and their appropriate tools and techniques (3) the roles played in causation of malignancies by viruses (4) development and procurement of anticancer drugs and (5) studies in the provision of germ-free environment for the patient and the requisite dietary and nursing services.

The specialized research centers program will continue to support studies in radiation therapy, toxicology, pharmacology, and epidemiology, at approximately the same level as in 1968. The increase of $720,000 will allow for initial costs of one new center oriented toward radiation. Attempts will be made to locate the center in a geographical area not now serviced by any existing radiation facility.

The leukemia research support centers are expected to continue at the same level in 1969 as 1968. Emphasis will still be placed upon accumulating evidence regarding platelet replacement therapy and its use as an effective device in connection with the use of control drugs.

RESEARCH GRANTS PROGRAM ANALYSIS

| Fields | 1968 estimate | 1969 estimate | Increase or decrease |
|---|---|---|---|
| Cancer causation | $13,556,000 | $14,101,000 | +$545,000 |
| Tumor growth | 12,769,000 | 13,283,000 | +514,000 |
| Host-tumor relationship | 2,965,000 | 3,085,000 | +120,000 |
| Epidemiology | 1,210,000 | 1,259,000 | +49,000 |
| Diagnosis | 1,089,000 | 1,133,000 | +44,000 |
| Therapy | 17,429,000 | 18,131,000 | +702,000 |
| Basic research and other [1] | 11,498,000 | 11,961,000 | +463,000 |
| Subtotal regular program | 60,516,000 | 62,953,000 | +2,437,000 |
| General research support grants | 6,899,000 | 6,838,000 | −61,000 |
| Scientific evaluation grants | 151,000 | 151,000 | |
| Specialized research centers | 12,590,000 | 13,310,000 | +720,000 |
| Leukemia research support centers | 1,500,000 | 1,500,000 | |
| Total research grants | 81,656,000 | 84,752,000 | +3,096,000 |

[1] Includes Sloan-Kettering single instrument grant.

DISTRIBUTION OF RESEARCH GRANTS

| | 1968 estimate | | 1969 estimate | | Increase or decrease | |
|---|---|---|---|---|---|---|
| | Number | Amount | Number | Amount | Number | Amount |
| Noncompeting continuations | 896 | $43,040,000 | 880 | $45,477,000 | −16 | +$2,437,000 |
| Competing projects | 322 | 14,822,000 | 325 | 15,187,000 | +3 | +365,000 |
| Supplementals | (265) | 2,654,000 | (229) | 2,289,000 | (−36) | −365,000 |
| Subtotal regular program | 1,218 | 60,516,000 | 1,205 | 62,953,000 | −13 | +2,437,000 |
| General research support | | 6,899,000 | | 6,838,000 | | −61,000 |
| Scientific evaluation | | 151,000 | | 151,000 | | |
| Specialized research centers | | 12,590,000 | | 13,310,000 | | +720,000 |
| Leukemia research support centers | | 1,500,000 | | 1,500,000 | | |
| Total research grants | | 81,656,000 | | 84,752,000 | | +3,096,000 |

FELLOWSHIPS

| | 1968 estimate | 1969 estimate | Increase or decrease |
|---|---|---|---|
| Total fellowships | $4,326,000 | $4,422,000 | +$96,000 |

*Introduction*

Several kinds of awards designed to meet particular objectives are granted under this program. The program provides research training to individuals whose career development extends from the immediate postdoctoral period through the advanced stages of scientific attainment. Postdoctoral awards are made to qualified individuals with doctoral degrees and up to three years of relevant research experience. Special fellowships are for those who have had at least three years of postdoctoral research or professional experience, or who have completed at least three years of residency training in a clinical specialty. Special fellowships may also be awarded to senior investigators who wish to undertake additional training.

This budget activity also supports two other types of awards made to institutions for the purpose of fostering the development of young scientists with outstanding research potential for careers of independent research in disciplines related to cancer research. The research career development awards support young and promising investigators who require 5 to 8 years additional experience in order to improve their research skills and to develop a capability for independent investigation. Research career awards were made to established investigators of high quality for additional periods of their research careers. A prime goal of these programs is to produce researchers who can also train others to conduct research.

*Program plans in 1968 and 1969*

In 1968 the number of awards in both the Postdoctoral and Special categories will increase substantially due to the rapidly expanding area of biochemistry, especially medicinal and organic chemistry as well as biophysical chemistry. Continued emphasis will also be given encouraging interest and increasing training in the critical shortage areas of radiation therapy, surgery, hematology, and clinical pharmacology.

In 1969 the Institute plans to continue support of the fellowships programs at approximately the same level as 1968. As in 1968, emphasis will continue to be given to providing coverage of the shortage areas of radiation therapy, surgery, hematology and clinical pharmacology. The 1968 increase of $96,000, coupled with an overall net decrease of three awards, will allow for modest cost-of-living increases.

DISTRIBUTION OF FELLOWSHIPS

| | 1968 estimate | | 1969 estimate | | Increase or decrease | |
|---|---|---|---|---|---|---|
| | Number | Amount | Number | Amount | Number | Amount |
| Continuations: | | | | | | |
| Noncompeting | 118 | $2,157,000 | 147 | $2,657,000 | +29 | +$500,000 |
| Competing | 56 | 717,000 | 66 | 845,000 | +10 | +128,000 |
| Supplementals | | | | | | |
| New awards | 155 | 1,452,000 | 113 | 920,000 | −42 | −532,000 |
| Total fellowships | 329 | 4,326,000 | 326 | 4,422,000 | −3 | +96,000 |

FELLOWSHIPS (BY TYPE OF PROGRAM)

| | 1968 estimate | | 1969 estimate | | Increase or decrease | |
|---|---|---|---|---|---|---|
| | Number | Amount | Number | Amount | Number | Amount |
| Postdoctoral | 115 | $921,000 | 111 | $951,000 | −4 | +$30,000 |
| Special | 89 | 1,075,000 | 88 | 1,105,000 | −1 | +30,000 |
| Research career: | | | | | | |
| Career | 13 | 347,000 | 13 | 347,000 | | |
| Development | 112 | 1,983,000 | 114 | 2,019,000 | +2 | +36,000 |
| Total fellowships | 329 | 4,326,000 | 326 | 4,422,000 | −3 | +96,000 |

TRAINING GRANTS

| | 1968 estimate | 1969 estimate | Increase or decrease |
|---|---|---|---|
| Total training grants | $11,350,000 | $11,641,000 | +$291,000 |

*Introduction*

The National Cancer Institute provides grants to institutions for graduate research training for the purpose of insuring a continuous, ample reserve of qualified research personnel, and to relieve the critical shortages of professional manpower in specific areas concerned with research, teaching, and service. These grants may provide stipends for those in training in the various fields related to cancer research and underwrite expenses for equipment, supplies, and training staff. Through the clinical cancer training grants program, the National Cancer Institute aims to: (1) upgrade the quality of cancer intruction offered to graduate and undergraduate medical and dental students, and to interns, residents, clinical fellows, practitioners, and scientists; (2) broaden the scope and content of current cancer teaching; and (3) undertake innovations in methodology for teaching the clinical and public health aspects of comprehensive cancer management. These grants are provided to qualified institutions to expand and advance training in the prevention, diagnosis, treatment, rehabilitation, and public health aspects of cancer.

*Program plans in 1968 and 1969*

During the current year, 193 programs will be supported. Continued emphasis will be given to training in radiation therapy and related basic disciplines.

Emphasis will also be placed on establishing additional programs of clinical research training and conventional graduate programs in disciplines where cancer researchers are in short supply. Programing efforts will be intensified in: (1) radiotherapy, (2) clinical pharmacology, (3) chemical carcinogenesis, and (4) training related to regional medical programs.

Because of increased cost in such areas as personnel, equipment, and stipends, the increase of $291,000 in training grants for 1969 will provide for the continuation of ongoing programs, funding of selected high priority renewal grants on a constricted level, and the initiation of 3 new grants.

DISTRIBUTION OF TRAINING GRANTS

| | 1968 estimate | | 1969 estimate | | Increase or decrease | |
|---|---|---|---|---|---|---|
| | Number | Amount | Number | Amount | Number | Amount |
| Continuations: | | | | | | |
| Noncompeting | 165 | $9,440,000 | 144 | $8,643,000 | −21 | −$797,000 |
| Competing | 16 | 1,065,000 | 43 | 2,755,000 | +27 | +1,690,000 |
| Supplementals | (4) | 139,000 | (2) | 50,000 | (−2) | −89,000 |
| New programs | 12 | 706,000 | 3 | 193,000 | −9 | −513,000 |
| Total training grants | 193 | 11,350,000 | 190 | 11,641,000 | −3 | +291,000 |

TRAINING GRANTS (BY PROGRAM)

| | 1968 estimate | | 1969 estimate | | Increase or decrease | |
|---|---|---|---|---|---|---|
| | Number | Amount | Number | Amount | Number | Amount |
| Graduate | 94 | $5,880,000 | 93 | $5,978,000 | −1 | +$98,000 |
| Cancer clinical training | 99 | 5,470,000 | 97 | 5,663,000 | −2 | +193,000 |
| Total training grants | 193 | 11,350,000 | 190 | 11,641,000 | −3 | +291,000 |

LABORATORY AND CLINICAL RESEARCH

| | 1968 estimate | | 1969 estimate | | Increase or decrease | |
|---|---|---|---|---|---|---|
| | Positions | Amount | Positions | Amount | Positions | Amount |
| Personnel compensation and benefits | 498 | $5,301,000 | 512 | $5,560,000 | +14 | +$259,000 |
| Other expenses | | 10,731,000 | | 10,973,000 | | +242,000 |
| Total | 498 | 16,032,000 | 512 | 16,533,000 | +14 | +501,000 |

*Introduction*

The research within this activity is designed to provide a basic understanding of cancer—how and why a cancer develops and grows, its effect on the host and the hosts effect on it, genetic influences, body defense mechanisms and how cancers differ from each other. The research embraces both laboratory and clinical research including surgical studies in animals and man. Biochemists, physiologists, biologists, and pathologists bring their special talents to bear on these complex problems. Out of such research in our laboratories and similar research in universities and cancer institutes has emerged the knowledge which has provided the basis for more applied programs in therapy and causation which are now moving so rapidly.

*Program Plans in 1968 and 1969*

The role of immunity in both cause and control of cancer receives increasing attention. Evidence of immunity to tumors caused by viruses has been demonstrated in animals and is being sought in man. The identification of tumor-producing viruses, or immunologic specificity of tumors in man, presumably would have applicability in therapy. Specific antibodies which combine with specific chemicals of known small molecular structure have recently been discovered. Knowledge of such chemical unions is sought because of possibilities of synthesizing specific antibodies against specific tumors in order to eliminate the cancer.

Cancer stems from a failure of the body to properly regulate cell growth. Cell regulatory systems are studied both at cellular and tissue levels. The finding of extra-nuclear DNA, heretofore thought to be only in the nucleus, has opened up entirely new approaches to the study of cell regulation which are pursued in NCI laboratories. Applicability of research on cell regulation to clinical cancer is found, for example, in hormone dependent tumors, such as some breast cancers, where the induction and control of tumor growth is significantly modified by steroid and protein hormones, even though such tumors may stem from other causes.

New information on kinetics of growth of tumor cell populations has generated new concepts on utilizing existing chemotherapeutic drugs in new dose schedules to enhance therapeutic benefit. These concepts have been tested and confirmed in actual use in treatment of a cancer known as mycosis fungoides. Successful application of these principles to the treatment of other cancers is expected.

No major shifts in areas of research emphasis are expected in 1969, although within these areas one finds constant change. There will be an enhanced effort in the field of tumor immunology and research on cell control systems, and new efforts will be initiated in the area of organ transplantation and research in developmental biology.

Today's progress in successful transplantation of whole organs in man encourages further exploration into feasibility of utilizing such transplant procedures in cancer surgery. Research designed to test transplant feasibilities has been initiated in primates and will be more fully studied in these laboratory animals prior to any practical utilization in the human.

Techniques found most useful to date in studying inductive systems in embryonic development are being applied to similar induction systems in the adult organism, both normally and in neoplastic transformation. The projected budget includes a modest increase in support of these efforts. Efforts directed toward bringing appropriately trained scientists into this area will be exerted according to the success of ongoing research and its promise for gain.

The program increase of $200,000 and 14 positions for 1969 will permit increased effort in areas noted above and continuation of other ongoing research efforts in the programs of biology, endocrinology, immunology, metabolism, and surgery.

An increase of $69,000 is requested for annualization of 1968 pay raise and $8,000 for an extra day of pay in 1969. There is also an increase of $224,000 for centrally furnished services from the "National Institutes of Health Management Fund."

COLLABORATIVE RESEARCH AND DEVELOPMENT

| | 1968 estimate | | 1969 estimate | | Increase or decrease | |
|---|---|---|---|---|---|---|
| | Positions | Amount | Positions | Amount | Positions | Amount |
| Personnel compensation and benefits | 724 | $6,959,000 | 749 | $7,290,000 | +25 | +$331,000 |
| Other expenses | | 56,118,000 | | 57,821,000 | | +1,703,000 |
| Total | 724 | 63,077,000 | 749 | 65,111,000 | +25 | +2,034,000 |

*Introduction*

The programs under Collaborative Research and Development are national efforts utilizing the contract research mechanism as well as investigations carried on directly in institute laboratories, to concentrate on major problems relevant to cancer. The research projects within the programs under this activity are interrelated, and changes in emphasis or major developments may cause a number of changes in many projects as their contributions of progress toward program goals are evaluated.

The National Cancer Institute established the Etiology and Cancer Therapy areas under this activity to provide strong central leadership and responsibility for carefully planned research activities. The etiology programs are focused on causes of cancer, the patterns of cancer occurrence, and their prevention. The therapy programs are concerned with finding the method of treating cancer through drugs and radiation. The addition of the line item, "Cancer Task Forces" is new to the budget in 1969 and brings together into one area the NCI task forces, notably, the Breast Cancer Task Force and the newly established Lung

Cancer Task Force. Programs generated from task force activities will tend to cut across organizational lines and depend on a variety of ongoing activities within the Institute.

The following table indicates level of support by these major program areas:

| | 1968 estimate | | 1969 estimate | | Increase or decrease | |
|---|---|---|---|---|---|---|
| | Positions | Amount | Positions | Amount | Positions | Amount |
| Etiology | 268 | $30,632,000 | 268 | $30,675,000 | ------ | +$43,000 |
| Cancer therapy | 390 | 27,069,000 | 390 | 27,136,000 | ------ | +67,000 |
| Task forces | 12 | 2,805,000 | 37 | 4,707,000 | +25 | +1,902,000 |
| Supporting services | 54 | 1,496,000 | 54 | 1,500,000 | ------ | +4,000 |
| National Institutes of Health management fund | ------ | 1,075,000 | ------ | 1,093,000 | ------ | +18,000 |
| Total collaborative research and development | 724 | 63,077,000 | 749 | 65,111,000 | +25 | +2,034,000 |

ETIOLOGY

| | 1968 estimate | | 1969 estimate | | Increase or decrease | |
|---|---|---|---|---|---|---|
| | Positions | Amount | Positions | Amount | Positions | Amount |
| Total | 268 | $30,632,000 | 268 | $30,675,000 | ------ | +$43,000 |
| Office of the scientific director | 26 | 806,000 | 26 | 807,000 | ------ | +1,000 |
| Solid tumor-virus contracts | 89 | 1,590,000 | 89 | 1,609,000 | ------ | +19,000 |
| Contracts | ------ | 3,384,000 | ------ | 3,385,000 | ------ | +1,000 |
| Carcinogenesis | 103 | 1,583,000 | 103 | 1,598,000 | ------ | +15,000 |
| Contracts | ------ | 6,195,000 | ------ | 6,196,000 | ------ | +1,000 |
| Demography contracts | ------ | 1,850,000 | ------ | 1,851,000 | ------ | +1,000 |
| Special virus leukemia | 50 | 727,000 | 50 | 732,000 | ------ | +5,000 |
| Contracts | ------ | 14,497,000 | ------ | 14,497,000 | ------ | ------ |

*Introduction*

The Etiology area is charged with responsibility for the major share of the Institute's programmed research on cancer causation and prevention, including the major portion of the Special Virus Leukemia program. Its investigations extend from the studies of cancer induction in defined human and aimal populations to studies under laboratory conditions of the fundamental aspects of the mechanisms by which viral and chemical agents produce cancers by altering the metabolism in living systems. Scientists are responsible not only for their individual research, but also for provision of strong central leadership in the conceptualization, design, and implementation of an imaginative and integrated attack upon these problems, in collaboration with other investigators in this country and abroad.

Central to the Etiology area's approach is the concept of an interaction of multiple causative factors contributed by man as a host and by his environment. the Demography programs (further described under "Biometry, epidemiology and field studies") in addition to providing a continuous monitoring of cancer incidence, prevalence, and mortality rates and trends, are designed to analyze defined populations having unusual risks to specific cancers or known exposure to high risk environments, to reveal statistically significant cause-and-effect associations and dissociations leading to the discovery of etiologic factors and agents. The experimentally oriented units of the Etiology area select and combine, under carefully controlled conditions, those host and environmental factors which appear to be significant in cancer etiology. From this point, they proceed to verify or deny such significance by success or failure in producing cancer in animals. It may then be seen that the synthetic approach on one hand and the analytic approach on the other are purposely united in the Etiology area to complement one another.

*Program Plans in 1968 and 1969*

*Carcinogenesis*

The Carcinogenesis Studies area is concerned with cancer causation by chemical agents with respect to advancing understanding of mechanisms of

cancer induction, improving techniques for detecting and identifying those factors in man's environment causing or contributing to cancer, and identifying cancer-causing agents. Research efforts are in large measure based upon leads provided by epidemiological studies and clinical observations in the areas of occupational and environmental cancer.

The organization continues to direct a broad program of collaborative research which places greatest emphasis upon the elucidation of those environmental agents which may constitute a carcinogenic hazard for large segments of the human population. Research contracts initiated and implemented by the Carcinogenesis area are providing essential information on potentially carcinogenic materials, and support studies on the role of multiple physical, chemical, and biological factors in cancer induction. Data obtained in the program are making significant contributions to an understanding of the roles of pesticides, tobacco, smoke components, fungal toxins, and other agents of known or suspected carcinogenic activity which are of intense interest to commerce and the general public.

In-house and cooperative studies that endeavor to clarify the interaction of carcinogenic agents with living systems at the host, tissue, cellular, and molecular levels are progressing well. These studies, which include investigation of immune mechanisms, seek to define the chemical interactions essential for the transformation of normal to malignant cells. The data obtained are providing a building body of information on additional insights into the manner by which chemical agents changes cells during cancer induction.

The discovery and development of rapid and reliable bioassay procedures for the determination and measurement of carcinogenic potential continues to be a major goal of the organization, and progress continues in the development of new, important tools for the meaningful bioassay of chemicals and other materials suspected for carcinogenic activity, though at a pace insufficient to match the rate of introduction of new chemical agents into use by society.

In 1969 these programs will be continued at approximately the same level. There will be a modest increase in the program of bioassay research on substances judged likely to constitute cancer-causing hazards to public health. This will be accomplished through reduction of research aimed at understanding the mechanisms by which cancer-causing chemicals act.

*Solid Tumor-Virus and Special Virus Leukemia*

Activities within the Viral Oncology area are staffed with specialists in the scientific disciplines specifically needed to conduct comprehensive basic research on all aspects of virus-cancer relationships, and to manage the related program of developmental and applied research that is essential to the achievement of the goals of the National Cancer Institute with respect to viral oncology.

The Viral Oncology program is composed principally of two research and development program areas—the Special Virus Leukemia Program (SVLP) and the Solid Tumor-Virus Program (STVP). Two other program areas—Program Resources and Logistics and Biohazards Control and Containment—provide relevant support to the SVLP and STVP.

The Special Virus Leukemia Program is conceptually based on the assumption that viruses are causally associated with leukemia and lymphoma in man. This assumption is based largely upon experience with many laboratory and domestic animals in which causal associations have been established. The purpose in establishing this program has been to accelerate the progress of research directed to clarifying he viral role in human cancer causation, using leukemia as the major model system. Ultimately, if viral agents can be identified and shown to be causative, it may be possible to develop and produce effective vaccines and other modes of treatment to prevent or cure leukemia and other virus-induced cancers. Cancers have been prevented in experimental animals by these means.

It is now apparent that virus-like particles of at least two different types can be detected in—and in some cases isolated from—tissues of leukemia and lymphoma patients around the world. These are a herpes-type virus (HTV) similar to those causing "cold sores" and a C-type which resembles in shape viruses causing animal murine leukemias. The herpes-type virus has been the one virus most persistently detected. Data collected through the program during the past three years now permit conclusion that the HTV is not uniquely associated with Burkitt lymphoma, but may, like poliomyelitis viruses, be ubiquitous, though perhaps causing disease in only relatively few cases. At least 42 of the more than 60 tissue cultures established from cells of patients with leukemia and lymphoma contain the HTV. In addition, this virus has been found, prior to culture, in

tissues of leukemia patients, in representatives of animal species, in people with non-cancerous diseases, and in "normal" healthy individuals. The wide-spread distribution of this virus, therefore, suggests that, if it is related to leukemia or lymphoma, a "normal" non-diseased carrier may be a source of infection for highly susceptible individuals. The very recent finding, by scientists within this program, that a herpes-type virus is causatively related to infectious mononucleosis gives strong added credence to the assumption that these viruses may be associated with the causation of leukemia and lymphona in man. The successful production and purification of several different isolates of the herpes-type virus have made it possible to conduct necessary studies to determine which of nine different serological tests most effectively detects and quantifies the HTV antigens or antibody in human materials. Comparative tests are planned during 1968 which may then make it possible to screen large numbers of human sera and tissue for the presence and amount of antibody or antigens which will indicate which subjects have been infected with HTV. It is still unknown how many different major antigens are associated with the herpes-type viruses isolated from over 60 leukemia and lymphoma patients. A full-scale definitive serological survey, therefore, must await this determination.

The Solid Tumor-Virus Program area of the SVLP has been established and instituted this year to study the action of DNA viruses in the induction of 'solid' tumors, sarcomas and carcinomas, a much larger group of cancers than the leukemias and lymphomas. Important developments from animal studies are giving additional understanding of the induction of solid tumors with this type of virus (DNA) and some direct studies in man can now be instituted. The purpose in establishing this program area has been to accelerate and coordinate the progress of research directed toward the understanding of the role of the DNA viruses in human cancer causation and to complement the studies on the leukemia-causing RNA viruses now underway in the SVLP.

A special report has been prepared for the Hearings to provide a comprehensive description of the total Virus Cancer program and detailed progress to date.

In other programs concerned with Viral Oncology, scientists will continue studies on the detection and replication of the C-type particles from human leukemia and lymphoma. Success has not yet been achieved in obtaining large amounts of C-type virus, although many techniques that work in animal systems have been tried. Collaborative studies conducted by clinical and laboratory investigators during the past year have now made it possible to collect very large fractions of blood suspected of containing the particles. Within 1968, this material will be used in comparative studies of the human C-type virus, the mouse and chicken leukemia viruses, and the herpes-type virus. An important new technique for detecting and measuring C-type mouse leukemia viruses was also developed during the past year. It is now possible, in tissue cultures, to detect the presence of "soluble antigens", inner components of infected cells resulting from inoculation of even minute quantities of virus. Using this method, scientists have isolated and propagated in tissue culture over 100 new strains of viruses related to the mouse leukemia family. Many of those tested have been found non-leukemogenic but capable of acting as "helpers" in the induction of tumors by an otherwise defective mouse sarcoma virus. These studies provide some insight into possibilities as to why we have not yet been successful in growing quantities of virus from human tissues and provide additional approaches for moving ahead with studies directly related to man.

The Viral Oncology area will continue at the same approximate level in 1969. A modest step forward in both the Special Virus Leukemia Program and the Solid Tumor-Virus Program will be accomplished through reduction of current activities providing certain resources, especially tissue procurement efforts. In the SVLP, this will be directed at (a) determining cancer-causing activity (in animals) of viruses already isolated from human cancer, and (b) relating this activity and other characteristics of the candidate viruses to establish firm evidence that these agents cause cancer in man. In the Solid Tumor-Virus Program the only additional activities will be concerned with the initiation of studies of the incidence of leukemia-sarcoma viruses in man and domestic animals, including attempts to clarify the significance of the "helper" viruses.

CANCER THERAPY

| | 1968 estimate | | 1969 estimate | | Increase or decrease | |
|---|---|---|---|---|---|---|
| | Positions | Amount | Positions | Amount | Positions | Amount |
| Total | 390 | $27,069,000 | 390 | $27,136,000 | ..... | +$67,000 |
| Office of the Scientific Director | 78 | 1,467,000 | 78 | 1,480,000 | ..... | +13,000 |
| Clinical trials | 77 | 915,000 | 77 | 927,000 | ..... | +12,000 |
| Experimental therapeutics | 43 | 581,000 | 43 | 589,000 | ..... | +8,000 |
| Cancer Chemotherapy National Service Center | 57 | 718,000 | 57 | 727,000 | ..... | +9,000 |
| Therapy contracts | ..... | 19,620,000 | ..... | 19,627,000 | ..... | +7,000 |
| Baltimore Cancer Reserach Center | 38 | 719,000 | 38 | 727,000 | ..... | +8,000 |
| Allocation to VA | 82 | 1,030,000 | 82 | 1,038,000 | ..... | +8,000 |
| Special virus-leukemia: | | | | | | |
| Direct operations | 15 | 419,000 | 15 | 421,000 | ..... | +2,000 |
| Contracts | ..... | 1,600,000 | ..... | 1,600,000 | ..... | ..... |

*Introduction*

The objectives of the Cancer Therapy program are to find drugs that will cure cancer and to make it possible for physicians to use them safely for the control of all malignant diseases. The National Cancer Institute's coordinated program has achieved these purposes for several rapidly growing cancers. The methods and principles successful for those few diseases present opportunities for exploitation in the common cancers of man. The program is a coordinated one in that it assumes responsibility for the search for new drugs, their study in animals and patients, research on how the drugs work, and the supply of materials and services to extend the useful drugs to the whole country. In order to accomplish this, the program involves direct research in laboratories and clinics, and the wide use of both contracts and grants in obtaining the assistance of universities and industry.

Because of the rapid increase in knowledge about the drug control of cancer, it has been possible to sharpen considerably the objectives of the Cancer Therapy program. It is now clear that these are two biologically different problems represented in the chemical control of the fast growing, as opposed to the slow growing tumors. The reasons for these differences in biology and in drug responsiveness are emerging from an intensive study of cell kinetics, that is, the rates at which different tumor cells divide, the fraction of cells that are dividing, and the ways in which drugs act upon dividing and non-dividing (resting) cells. The drug development program has been completely revised in the past year in order to enable rapid pursuit of new compounds as they can be shown to relate to these newly discovered principles. This redirection will be accomplished by extensive program shifts and will be funded through reduction or deletion of existing programs.

*Program Plans in 1968 and 1969*

The study of the relation of drug responsiveness of tumors to their cell kinetics has become the scientific base of the Cancer Therapy program. In a practical sense, the more rapidly growing a tumor, the more frequently must the drug be given. The difficulty of application of this simple concept to the clinic arises from the following:

1. The rate of cell division may not be reflected by the rate at which the tumor enlarges, so that measurements of cell division must be individualized at least for each tumor type, and perhaps for each patient within a given tumor type;

2. The ideal dose schedule for a tumor dividing at a particular rate may have to be modified because of the toxicity of that schedule for normal cells such as the bone marrow;

3. The ideal drug schedule may also require modification, because of the clinical pharmacology of the drug (the way in which the patient disposes of the drug);

4. Drug control of slow growing tumors requires much longer *duration* of drug administration than the fast growing tumors.

The replanning of the Cancer Therapy program in 1968 expanded studies on cell kinetics, and revised studies in toxicology and pharmacology in animals in order to find out as much as possible about the influence of different dose sched-

ules upon tumor cells and the normal animal. The latter studies are carried on primarily by the Experimental Therapeutics area through its intramural and contracts program. The acquisition of new drugs for study and their screening for anti-tumor activity have been re-examined with an eye toward their specific abilities to kill fast growing or slow growing tumors. Extensive efforts are underway to match the chemical structures of known active drugs with their influences on cell kinetics of the two types, and to have synthesized modified structures that will be more selectively toxic—that is, kill tumor cells rather than normal cells. Major responsibilities for efforts in these areas have been assigned to the Cancer Chemotherapy National Service Center.

The primary screen for selecting the most promising drugs has been re-examined for its relation to the new scientific base. It is clear that it selects drugs effective in fast growing tumors. Search is underway to identify animal tumors that will select drugs for slow growing tumors, or at least indicate the best way to use the known drugs to obtain effects on the slow growing tumors. Since drug schedule emerges as the key to gaining better drug control of non-responding tumors, marked shifts have been made in the directions of toxicology and pharmacology studies. Finally, the implications of these studies for clinical trials have been under re-examination. Since the best use of drugs involves a high degree of individualization in matching dose schedule to tumor growth rate, clinical trials are changing in 2 ways:

1. Techniques are under development to measure the growth rates of tumors so that the ideal dose schedule can be chosen;
2. The high degree of individualization of treatment now possible will require the help of a few highly specialized centers for this type of patient care with less dependence upon large cooperative groups.

There has been continued research and deevlopment of better supportive care for patients. This enables larger doses of drugs to be given with greater safety. Platelet replacement has become an accepted part of chemotherapy clinical investigation and the use of frozen platelets is increasing. Better protection against infection is being achieved through improvement in "Life Island" isolation and through perfection of the cell separator to harvest white cells to fight infection.

The therapy portion of the SVLP program provides funding for the partial support of such Cancer Therapy activities as improved supportive care, pharmacology and toxicology studies and the purchase of blood and clinical anti-leukemic drugs.

It is planned that partial renovations and partial equipping will be completed for the pharmacology laboratories at the Baltimore Public Health Service Hospital in 1968. The laboratories will commence operations on a limited scale and in conjunction with the on-going clinical activites will form an integrated program of research on the therapy and management of cancer patients.

Finally, there has been considerable activity among the various task forces, which more and more have become the focus through which new proven research facts can be made available to the specialist treating these cancers.

In the preclinical drug development areas for 1969, the primary screen will be modified since both animal systems now used are selecting drugs for fast growing tumors. One of these two systems (The Walker 256 rat tumor) will be dropped, and replaced by a projected system predictive for slow growing tumors. There will be extensive expansion of dose schedule studies in animals both for therapeutic effect and for toxicity. Pharmacologic disposition studies will be expanded, since this relates blood levels in the various species, including man, to the effects noted with different dose schedules.

Within existing resources changes are being made in the clinical trials portions of drug development. It is planned to strengthen a few already existing centers that will become the major means of carrying out the highly individualized studies now required in tumor growth rates, dose schedules, pharmacology and supportive care. This will be accomplished as follows:

1. Strengthening of the direct clinical operation at the Clinical Center, Bethesda and the U.S. Public Health Service Hospital in Baltimore. In addition, greater use will be made of the joint effort with the Veterans Administration, especially at the V.A. Hospital in Washington, D.C.
2. Contracts will be negotiated with 3 centers already working closely with NCI on the problems of intensive clinical trials: namely, M. D. Anderson Tumor Clinic, Childrens Hospital in Philadelphia and Childrens Hospital, Los Angeles.
3. The key question in clinical chemotherapy is to relate rates of cell growth to drug susceptibility. This requires the intensive study of relatively

few patients who must receive extensive supportive care. It is planned to extend the capabilities of the 3 directly operated units (see 1 above) and those of the 3 contractors (see 2 above), so that they will not only be centers capable of giving the most modern management of widespread cancer, but possess the resources required for intensive investigation related to cell kinetics. This will include provision of cell separators for white cells and frozen platelets. It also envisions the transfer of protected environment studies from the "Life Island" concept to the use of laminar flow.

4. The major efforts in the clinic will be to use the new knowledge on drug schedules and cell kinetics, to see if the fast growing tumors can now be cured, and the slow growing tumors controlled to the degree now possible for the fast growing tumors.

CANCER TASK FORCES

| | 1968 estimate | | 1969 estimate | | Increase or decrease | |
|---|---|---|---|---|---|---|
| | Positions | Amount | Positions | Amount | Positions | Amount |
| Total | 12 | $2,805,000 | 37 | $4,707,000 | +25 | +$1,902,000 |
| Breast cancer and other task forces | 12 | 2,805,000 | 15 | 3,307,000 | +3 | +502,000 |
| Lung Cancer Task Force | | | 22 | 1,400,000 | +22 | +1,400,000 |

*Introduction*

The line item, "Cancer Task Forces", appears for the first time in this submission. The purpose of this item is to bring together into one area of the budget additional costs of operating various Cancer Task Forces under NCI allocations. Some of the recently constituted Task Forces have been called on to consider multiple aspects of specified disease problems, e.g. etiology, diagnosis and therapy. Programs generated from their activities thus will tend to cut across organization lines and depend on a variety of ongoing activities within the Institute.

The first of these task forces, the Breast Cancer Task Force, was established in April of 1966 with funds earmarked by Congress in the NCI appropriation. This task force considers the problems of causation of Breast Cancer as well as those of improved methods of diagnosis and therapy. The task force represents a variety of disciplines involved in research on this disease, including endocrinology, chemotherapy, surgery, radiology, virology, and epidemiology. The task force serves as the operating and coordinating mechanism for an intensified program of clinical and nonclinical research.

The Cancer Institute has established several other task forces or study groups. Generally, there are no specific funds allocated for their use. They exist and work through the established organizational set-up, evaluating the present state of knowledge and planning future research efforts without regards to cost figures. They identify major problem areas, formulate general research objectives, and as the state of the art permits, plan and recommend specific programs and projects for implementation.

The Lung Cancer Task Force has recently been established in accordance with the direction of the President. Preliminary planning efforts have centered on the possibilities of establishing programs in the areas of: Etiology and Prevention and Clinical Management as well as an Educational Program. These major areas can, in turn, be considered in terms of a number of lines of research attack which include development of a less hazardous cigarette, identification and modification of industrial-atmospheric-occupational hazards and improved methods of detection, diagnosis and treatment of lung cancer. Also, the research program will be supplemented by a program which in collaboration with the National Clearinghouse on Smoking and Health will produce and disseminate educational materials with the objective of providing the various population groups with the most current information on the problem of lung cancer.

*Program Plans in 1968 and 1969*

*Breast cancer and other task forces*

The Breast Cancer Task Force during 1968 continued to make progress in the concerted effort to understand the causes of breast cancer and to determine methods of improved treatment. Analysis of cooperative clinical studies indi-

cates that chemotherapy given as an adjuvant to surgical therapy has measurably improved the condition of breast cancer patients. Also, certain viruses have been identified as causing mammary tumors in laboratory animals. Increased efforts have been undertaken to relate these findings to determine the role of viruses in causation of human breast cancer.

Other NCI task forces and study groups relating to Acute Leukemia, Clinical Trials, Solid Tumors, Choriocarcinoma, Chronic Leukemias and Multiple Myeloma, Lymphoma, Colon-Rectum, Prostate-Bladder, and Brain Tumors continued in 1968 to study specific areas of the cancer problem.

In 1969, a net increase of $502,000 and 3 positions is requested to extend the clinical studies of breast cancer now conducted by the several cooperative groups in the efforts to improve early detection and chemotherapy of breast cancer. The active exploration of the role of hormonal factors in the development of breast cancer and studies relating to the prevention of the disease will continue.

*Lung cancer task force*

During 1968, the NCI staff assisted the recently formed Lung Cancer Task Force in laying out a variety of general research approaches to the disease. Plans thus far indicate that research efforts will be in two major areas: Etiology and Prevention and Clinical Management of the Disease. It is anticipated that completion of detailed plans in 1968 will permit formulation and implementation of special programs in 1969.

An increase of $1,400,000 and 22 positions is requested to support the Lung Cancer Task Force for 1969. This is the first year that funds have been budgeted for this item. During 1969, specific plans for selected research programs will be ready for implementation. One high priority program is the establishment of the assay systems which will form the basis for the eventual development of a less hazardous cigarette. Of the total amount requested for the support of this and other programs, $1,100,000 will be used for contract research.

SUPPORTING SERVICES

Supporting Services is primarily a service oriented unit of the National Cancer Institute which provides the whole Institute with selected administrative and office services. Also included in this item is the editorial review and publication of the Journal of the National Cancer Institute.

In 1969, the amount of funds requested will enable the National Cancer Institute to continue this type of support to the Intstitute as well as the continued support of the NCI Journal. Also, in 1969, a portion of the total funds will be used to cover costs of moving into the new cancer building.

The Collaborative Research and Development area includes a request of $116,000 for annualization of the 1968 pay raise in 1969. There is also an increase of $18,000 for centrally furnished services from the "National Institutes of Health Management Fund."

BIOMETRY, EPIDEMIOLOGY, AND FIELD STUDIES

| | 1968 estimate | | 1969 estimate | | Increase or decrease | |
|---|---|---|---|---|---|---|
| | Positions | Amount | Positions | Amount | Positions | Amount |
| Personnel compensation and benefits | 112 | $1,063,000 | 112 | $1,081,000 | ---- | +$18,000 |
| Other expenses | ---- | 352,000 | ---- | 354,000 | ---- | +2,000 |
| Total | 112 | 1,415,000 | 112 | 1,435,000 | ---- | +20,000 |

*Introduction*

Characterization of the occurrence and behavior of cancers by specific sites in human populations, both in the United States and abroad; the effects of migration on these cancer patterns; and the search for environmental and other factors associated with different types of cancers continue to be of major concern to the organizational groups funded under this budget activity.

A description of how the National Cancer Institute's Demography programs relate to other activities with which they are associated organizationally may be found in the introduction to the Etiology area under "Collaborative Research and Development."

*Program Plans in 1968 and 1969*

During this year, the Epidemiology Branch plans to continue studies on the concurrence between congenital defects and cancers. A visual review of 22,000 death certificates in the National Registry of Childhood Cancer Deaths has revealed possible associations between specific congenital defects and childhood neoplasms among siblings. Substantiation of these associations would provide useful insights into the factors responsible for childhood malignancy. Animal disease data will continue to be observed. For example, recent examination of veterinary cancer data indicates that the larger breeds of dogs have 200 times the risk of bone sarcoma compared with small breeds and that boxers exhibit an increased risk of lymphoma. Animal studies may well have significance in the selection of animals for laboratory research but, more important, will provide the opportunity to observe comparative disease models which may speed the identification of factors responsible for cancer in man.

The Biometry Branch (Statistics and Applied Mathematics Group), through the interaction of mass data and evolving mathematical models, provides the competence for planning, evaluating, and reporting the results of experimental cancer therapy in man, and for evaluating the worth of diagnostic techniques. The Third National Cancer Survey, following a pretest in Birmingham, Alabama, in the spring of 1968, will be conducted in 1969–1971 in 10 metropolitan areas and two states to provide up-to-date information on cancer incidence, prevalence, and some indexes of the economic and societal impact of cancer. The current program of end-results evalulation, mathematical development, and demographic studies will be continued with emphasis in the latter program on studies of cancer patterns in migrant populations to help separate external environment causes of cancer from internal environmental (genetic) causes—and so provide possible bases for cancer prevention.

The Epidemiologic Pathology Unit plans to continue its close collaboration with other components of the Etiology area. The bringing together of data and concepts from pathology, biometry, and epidemiology in an integrated fashion permits detections of additional associations of factors with cancers and affords added insights into causation and prevention. Specific effort will be directed to human and animal lymphomas and leukemias.

The above functions will continue at the same level in 1969.To be able to continue the Third National Cancer Survey, planned consultative epidemiologic and biometric assistance to the Regional Medical Program and certain other activities will be limited. Activities of the Cancer Survey project during 1969 will include processing and analyzing results of the pretest; redesigning and developing forms; eliciting cooperation in all field areas; establishing contracts; writing instruction manuals for supervisors, interviewers and coders; conducting training programs; and developing a data processing system, including the writing and testing of certain computer programs for editing and tabulating data.

An increase of $13.000 is requested for annualization of the 1968 pay raise and $5.000 for an extra day of pay in 1969. There is also an increase of $2,000 for centrally furnished services from the "National Institutes of Health Management Fund."

REVIEW AND APPROVAL OF GRANTS

| | 1968 estimate | | 1969 estimate | | Increase or decrease | |
|---|---|---|---|---|---|---|
| | Positions | Amount | Positions | Amount | Positions | Amount |
| Personnel compensation and benefits | 111 | $1,103,000 | 113 | $1,141,000 | +2 | +$38,000 |
| Other expenses | | 1,439,000 | | 1,379,000 | | −60,000 |
| Total | 111 | 2,542,000 | 113 | 2,520,000 | +2 | −22,000 |

This activity under the Associate Director for Extramural Activities supports the administrative staff for all contract activities of the National Cancer Institute and both the scientific and administrative staff responsible for the review of all cancer grants. The staff obtains the necessary information regarding all grant applications and in cooperation with study groups makes recommendations for the consideration of the National Advisory Cancer Council which recommends approval or disapproval of grant applications.

The program increase of $25,000 and 2 positions will provide one scientist and one secretary in support of the expanding field of immunology which is concerned with the bacteriological science and chemical treatment in resisting development of a given disease.

An increase of $14,000 is requested for annualization of the 1968 pay raise and $4,000 for the extra day of pay in 1969. There is a decrease of $65,000 for centrally furnished services from the "National Institutes of Health Management Fund."

PROGRAM DIRECTION

| | 1968 estimate | | 1969 estimate | | Increase or decrease | |
|---|---|---|---|---|---|---|
| | Positions | Amount | Positions | Amount | Positions | Amount |
| Personnel compensation and benefits | 56 | $716,000 | 58 | $746,000 | +2 | +$30,000 |
| Other expenses | | 600,000 | | 547,000 | | −53,000 |
| Total | 56 | 1,316,000 | 58 | 1,293,000 | +2 | −23,000 |

This activity provides for the overall administration and direction of the programs of the Institute. The Director and his staff give professional leadership and technical guidance to the varied activities of the Institute.

The program increase of $45,000 and 2 positions will increase the operations research and systems communication aspects of the program planning activity for application in such selected areas as increased automation and computer technological utilization in laboratory operation.

An increase of $8,000 is requested for annualization of the 1968 pay raise and $2,000 for the extra day of pay in 1969. This is offset by a decrease of $78,000 for centrally furnished services from the "National Institutes of Health Management Fund."

NEW POSITIONS REQUESTED, FISCAL YEAR 1969

| | Grade | Annual salary |
|---|---|---|
| Laboratory and clinical research: | | |
| Surgeon (9) | Full | $104,252 |
| Chemist | GS–13 | 13,507 |
| Biologist | GS–9 | 8,054 |
| Do | GS–7 | 6,734 |
| Chemist (2) | GS–7 | 13,468 |
| Total (14) | | 146,015 |
| Collaborative research and development: | | |
| Medical Officer | GS–15 | 18,404 |
| Scientist (2) | GS–15 | 36,808 |
| Do | GS–14 | 31,682 |
| Statistician | GS–14 | 15,841 |
| Chemist | GS–13 | 13,507 |
| Scientist (3) | GS–13 | 40,521 |
| Scientist (2) | GS–11 | 19,314 |
| Statistician | GS–11 | 9,657 |
| Contract specialist | GS–11 | 9,657 |
| Technician (6) | GS–7 | 40,404 |
| Secretary | GS–6 | 6,137 |
| Do | GS–5 | 5,565 |
| Statistical clerk | GS–5 | 5,565 |
| Clerk | GS–5 | 5,565 |
| Clerk-stenographer | GS–4 | 4,995 |
| Total (25) | | 263,622 |
| Review and approval of grants: | | |
| Scientist | GS–15 | 18,404 |
| Secretary | GS–5 | 5,565 |
| Total (2) | | 23,969 |
| Program direction: | | |
| Public health program specialist | GS–15 | 18,404 |
| Do | GS–14 | 15,841 |
| Total (2) | | 34,245 |
| Total new positions, all activities (43) | | 467,851 |

BIOGRAPHICAL SKETCH

Name: Kenneth Milo Endicott, M.D.
Position: Assistant Surgeon General, Public Health Service, Director, National Cancer Institute.
Birthplace and date: Canon City, Colorado, June 6, 1916.
Education: A.B., University of Colorado, Boulder, 1936; M.D., University of Colorado, Denver, 1939.
Experience:
Director, National Cancer Institute, National Institutes of Health, U.S. Public Health Service, Department of Health, Education, and Welfare, July 1960—
Appointed Assistant Surgeon General, U.S. Public Health Service, January 1960.
Associate Director, National Institutes of Health, 1958–1960.
Chief, Cancer Chemotherapy National Service Center, National Cancer Institute, 1955–1958.
Scientific Director, Division of Research Grants, National Institutes of Health, 1951–1955.
Chief, Section on Metabolic and Degenerative Diseases, Division of Pathology, National Institutes of Health, 1942–1951.
Medical Center for Federal Prisoners, Springfield, Missouri, 1942.
Maritime Quarantine Station, San Francisco, California, 1941–1942.
U.S. Public Health Service Relief and Quarantine Station, Portland, Oregon, 1940.
Commissioned in U.S. Public Health Service, 1939.
Association memberships: Diplomate, American Board of Pathology, American Medical Association, Fellow. American Association for the Advancement of Science. American Association of Pathologists and Bacteriologists. Society for Experimental Biology. International Association of Medical Museums. Society for Experimental Pathology. Washington Academy of Sciences. Alpha Omega Alpha. Phi Rho Sigma. Theta Xi.
Special awards, citations, or publications: Distinguished Service Medal of the Public Health Service Commissioned Corps, awarded 1964: "For his outstanding and distinguished leadership in Medical Research Administration and National Cancer Research Programs."

RESEARCH AND RELATED ACTIVITIES

Senator HILL. Dr. Endicott.
Did you get here in time to hear those questions about cancer?
Dr. ENDICOTT. Yes; I did.
Senator HILL. You may proceed in your own way, sir.
Dr. ENDICOTT. Mr. Chairman, research and related activities in program areas of the National Cancer Institute that offer substantial promise of progress in prevention and treatment will be augmented to the greatest extent possible in the coming fiscal year.
Senator HILL. By "greatest extent possible," you mean with the money you are going to get?

CAUSE AND EFFECT RELATIONSHIP BETWEEN SMOKING AND LUNG CANCER

Dr. ENDICOTT. With the resources. And pursuing Dr. Shannon's comments for a moment, I think it is very important to emphasize to the committee that there appears to be a real opportunity to turn the mortality trend, which has been steadily upward, downward.
This relates primarily to the fact that we have established, I think beyond all reasonable doubt, the cause and effect relationship between the heavy smoking of cigarettes and the incidence of lung cancer.
Senator HILL. You do not smoke anymore, do you?
Dr. ENDICOTT. Occasionally, sir.
Senator HILL. What can you do to develop will power?

Dr. ENDICOTT. I have often wondered, sir. The magnitude of this problem though——

Senator HILL. You haven't gotten your pipe, have you?

Dr. ENDICOTT. Yes; I have one.

Senator HILL. Did you get that from Dr. Shannon or from Dr. Stewart?

Dr. ENDICOTT. I got mine from Bill.

### DEATH FROM LUNG CANCER

The incidence of lung cancer has been going up very rapidly.

Senator HILL. What is that, sir?

Dr. ENDICOTT. It will be in the range of 55,000 deaths this year. Only 2 or 3 years ago it was on the order of 50,000. So, you see it is still going up quite rapidly.

This is a preventable cancer, Senator.

Senator HILL. What form of cancer are you speaking of?

Dr. ENDICOTT. Lung cancer. It is now the single largest cause of death in the cancer field.

Senator HILL. You are talking about cigarette cancer?

Dr. ENDICOTT. Right. It is not all cigarette cancer, but most of it.

### CAMPAIGN AGAINST SMOKING HAZARDS

Senator HILL. Will you tell that to these two gentlemen on your right?

Dr. ENDICOTT. Yes; we have had discussions of this before.

Senator HILL. All right.

Dr. ENDICOTT. One approach, of course, is an educational approach which has been pursued in this country and other countries with some effect, but a rather disappointing and often temporary effect.

A big campaign of education may result in a momentary drop in the purchase of cigarettes but only a temporary drop.

Senator HILL. You can't turn on television that you don't see an advertisement for cigarettes. And, remember, those wavelengths don't belong to any individual, they belong to all the people.

Dr. ENDICOTT. We have reached the conclusion that we must pursue an alternative. This is a research and development program aimed at reducing the hazard of the cigarette.

My technical advisers advise me that this is feasible from a technical standpoint.

We are in the process of launching a program in this direction at the present time.

### INDICATION OF TOBACCO INDUSTRY COOPERATION

I was at the outset quite concerned as to whether the tobacco industry would be willing to work with us. There is every indication over the past several months that the tobacco companies will work with us in this problem.

### BIOASSAY

I think our role is primarily that of providing a bioassay.

Senator HILL. Providing what?

Dr. ENDICOTT. Providing a method of assaying the hazards of cigarette smoking. Actually the bulk of research, modification of the

tobacco or modification of the filter, and so on, will be carried out by the tobacco companies in a competitive way.

So that I think we can make quite an inroad on this problem with relatively minor investment by the Cancer Institute.

## PROGRESS IN CURING CANCER

### Uterine Cancer

Important progress already made against several forms of human cancer has been encouraging. Early detection and prompt treatment have reduced deaths from uterine cancer 40 percent in the last 25 years.

Senator Hill. Is that your Paps smear technique?

Dr. Endicott. Very largely; Paps smear and early surgery.

Long-term remissions, amounting virtually to cure, have been produced in 40 percent of early Hodgkin's disease patients treated with X-ray.

### Leukemia

Survival of children with acute leukemia has been increased from weeks or months to years with drug treatment.

I agree with Dr. Shannon that we are almost certainly curing some cases of acute leukemia.

Senator Hill. We don't know for sure yet: do we?

Dr. Endicott. Well, the disease kills so rapidly that when it disappears and doesn't come back without any treatment for a period of 5 years, the presumption here of cure, I think, is much stronger than in the more slowly growing forms of cancer like breast cancer, for example, when recurrences as late as 15 or 20 years after surgery are not uncommon.

But in acute leukemia I think the disease kills so quickly that in any remission lasting over 5 years without maintenance therapy, one's index of suspicion must be very high that this represents a cure.

Dr. Stewart. When I was in pediatric practice if you had a case of acute leukemia you felt fairly safe to tell the parents that the child had six to eight weeks to live.

## INCREASING CANCER DEATH RATE

Dr. Endicott. But despite steady improvement in the cure rate, the cancer death rate continues to creep up year by year.

There will be a total of 600,000 new cases this year and 315,000 deaths. There will be 61,000 new cases of lung cancer and 55,000 deaths, mostly of men.

Senator Hill. Men smoke cigarettes more than women?

Dr. Endicott. Yes; they do. More men smoke more cigarettes.

Breast cancer will take the lives of 28,000 women. Cancer of the colon and rectum will kill 45,000 of both sexes.

## LUNG AND BREAST CANCER TASK FORCES

We need to make deep inroads into specific cancer problems by well planned approaches. Two new task forces—the Lung Cancer Task Force established at the direction of the President, and the Breast

Cancer Task Force established by the National Cancer Institute—will be allocated funds to develop their programs.

Senator HILL. Do you have sufficient funds in this?

Dr. ENDICOTT. We have enough funds to make a beginning, sir. The budget has $1,400,000 to initiate work of the Lung Cancer Task Force. In addition, there is an increase of $502,000 for breast cancer and other task forces for a total of $3,307,000 in fiscal year 1969.

Lung cancer is responsible for more deaths than any other form of cancer. The cure rate is still only about 5 percent. Smoking is recognized, of course, as the principal cause of lung cancer. Research into the development of a less hazardous cigarette has therefore been given high priority by the Lung Cancer Task Force.

Occupational and atmospheric exposures are also being investigated as causes of lung cancer. This requires many sophisticated resources, including fully defined analytic testing and screening systems and skilled people to establish and operate them.

As another approach, it may be possible to modify the biologic makeup of the individual in a fashion that would reduce his susceptibility to lung cancer. This is a highly speculative possibility but one that should not be overlooked.

If all this work should be started today and should succeed, many people would still fall victim to lung cancer before the situation could be very much improved.

To cope with the lung cancer situation in which we are living, we need much better methods of detecting and diagnosing the disease, and much more effective methods of treating it.

I might say parenthetically that if for some reason, that is usually just an incidental discovery in the course of a chest X-ray, the tumor is detected when it is still localized, if you analyze the cure rate in that group it may be as high as 25 to 30 percent as contrasted to zero if it is metastasized.

### IMPROVED OUTLOOK FOR PATIENT

Improved outlook for the patient under treatment has always been a major goal of the National Cancer Institute. That goal has been approached best in institutions where teams of specialists combine their resources and skills for accurate diagnosis and effective therapy.

Some 20 institutions of this kind that have been receiving grant support are situated mainly in the northeastern region of the country.

It is proposed to make a grant of sufficient funds in fiscal year 1969 to establish another in an area not now served by such a facility.

Senator HILL. Do you have those funds in this budget?

Dr. ENDICOTT. Yes, sir. There is an increase of $720,000 for this purpose.

### EDUCATIONAL INSTITUTES INTERESTS IN DEVELOPING CANCER CENTER

I might comment briefly, after more than a decade in the cancer field, during which one encounters considerable lack of interest in developing strong cancer programs in educational institutions, for the first time this year I am beginning to have a fairly steady stream of university officials coming to my office to discuss establishing cancer centers and some of them are rather well along with their plans.

So I think if one looks a decade or two ahead that we will have an entirely different picture in terms of our capabilities to mount effective programs.

Senator HILL. That is encouraging, isn't it?

Dr. ENDICOTT. It is, indeed.

### CONCEPT OF CANCER CENTERS

It is our hope, in fact, that in time a sufficient number of cancer centers equipped and staffed to conduct research and training, and make the best medical and hospital care available to cancer patients in the areas they serve, will be established wherever needed.

Some may be incorporated into the regional medical programs now under development under Federal legislative authorization.

In any case, the ideal center will be essentially a functional unit having a relationship to a medical educational institution, a specific goal of attacking cancer problems in man, and a multidisciplinary and interdisciplinary approach to research and treatment.

The center concept is an inevitable development in the plan of total attack on the cancer problem envisioned when the National Cancer Institute Act was adopted 31 years ago.

Senator HILL. That was the first institute organized, was it not?

Dr. ENDICOTT. Yes, sir.

### ULTIMATE OBJECTIVE—TOTAL CONTROL OF CANCER

It is a logical step toward the ultimate objective we seek: total control of cancer.

It is the concept of thorough integration of research, education and medical practice for the most sophisticated approach to the management of disease that modern medical science can devise.

It will give patients the benefit of diagnosis and treatment employing the individual or combined skills of specialists in every related field.

It will constantly improve the education and training of the medical students and young doctors who become a part of a center's operating complex.

And it will stimulate continued fundamental research and hasten the application of new knowledge and techniques to the management of human cancer.

There is no doubt that the ultimate solution to the mystery of cancer will be found through fundamental research on the cancerous process and the tumor-host relationship.

These studies underlie all the progress that has been made against cancer, and will be continued and expanded through both the intramural and extramural programs of the Institute.

### Request for Research Grants

A program increase in research grants not only will allow the establishment of an additional cancer research center as previously mentioned, but will also support continued research in cancer causation, tumor growth, host-tumor relationship, epidemiology, diagnosis and thereapy.

Grants will also be provided for the continuation of ongoing programs of graduate and clinical training.

### total budget request

Mr. Chairman, the request for the National Cancer Institute for 1969 is $187,707,000, compared to the 1968 operating level of $181,714,000.

The 1969 budget contains increases of $5,993,000, including: $3,096,000 for research grants; $96,000 for research fellowships; $291,000 for training grants; and $2,510,000 for direct operations.

I shall be happy to respond to any questions you may have.

### Effect of Budget Reduction Imposed by Department

Senator Hill. You had a $20 million reduction in your request from the Department; is that right?

Dr. Endicott. Yes, sir. We got quite a cut; yes, sir.

Senator Hill. What is that going to affect mostly?

Dr. Endicott. It is going to reduce the amount that we can put into virus work, chemotherapy, and the cancer centers and into training. That is where the principal cuts were.

Senator Hill. It will affect all your important programs, won't it?

Dr. Endicott. Yes, sir.

Senator Hill. That is quite a reduction.

Is there anything else you would like to add?

### Optimism Despite Budget Cuts

Dr. Endicott. I would like to leave a little note of optimism in spite of the cuts. I have never seen it look so good in the field of cancer research as it does today.

I think the developments in the field of viruses and molecular biology are really very exciting.

Some of the very best molecular biologists in the country, Nobel laureates and so on, who would not have been seen dead with a cancer researcher 10 years ago, are beginning to move into this field with some quite ambitious proposals for fundamental research.

Senator Hill. In other words, you have people more interested?

Dr. Endicott. The reason is, sir, that it is ripe, the time is ripe, scientifically the time is ripe.

Senator Hill. To gather the fruit, to get the results?

Dr. Endicott. Yes.

Senator Hill. That is encouraging. Up to now we have had a lot of discouragement in this field of cancer, isn't that right?

Dr. Endicott. Yes, sir.

Senator Hill. Is there anything else you would like to add?

Dr. Endicott. No, sir.

Senator HILL. We want to thank you for your statement. We certainly appreciate it. I am certainly gratified to hear the encouragement that you bring.

Dr. ENDICOTT. Thank you, Mr. Chairman.

SUBCOMMITTEE RECESS

Senator HILL. It is now 20 minutes to 1. We will now stand in recess until tomorrow morning at 10 o'clock.

(Whereupon, at 12:40 p.m. Monday, April 29, the subcommittee recessed, to reconvene at 10 a.m., Tuesday, April 30.)

# DEPARTMENTS OF LABOR, AND HEALTH, EDUCATION, AND WELFARE, AND RELATED AGENCIES APPROPRIATIONS FOR FISCAL YEAR 1969

TUESDAY, APRIL 30, 1968

U.S. SENATE,
SUBCOMMITTEE OF THE COMMITTEE ON APPROPRIATIONS,
*Washington, D.C.*

The subcommittee met at 10:15 a.m., in room 1224, New Senate Office Building, Hon. Lister Hill (chairman) presiding.

Present: Senator Hill.

## DEPARTMENT OF HEALTH, EDUCATION, AND WELFARE

### PUBLIC HEALTH SERVICE

### NATIONAL INSTITUTES OF HEALTH

### NATIONAL HEART INSTITUTE

**STATEMENT OF DR. DONALD S. FREDRICKSON, DIRECTOR**
**ACCOMPANIED BY:**

**DR. JAMES A. SHANNON, DIRECTOR, NATIONAL INSTITUTES OF HEALTH**
**DR. THEODOR COOPER, ASSOCIATE DIRECTOR, ARTIFICIAL HEART-MYOCARDIAL INFARCTION PROGRAM, NATIONAL HEART INSTITUTE**
**R. H. HENSCHEL, EXECUTIVE OFFICER, NATIONAL HEART INSTITUTE**
**JOHN H. REEDER, BUDGET OFFICER, NATIONAL HEART INSTITUTE**
**JAMES A. HICKEY, ACTING FINANCIAL MANAGEMENT OFFICER, NATIONAL INSTITUTES OF HEALTH**
**DR. WILLIAM H. STEWART, SURGEON GENERAL**
**CHARLES MILLER, CHIEF FINANCE OFFICER**
**JAMES B. CARDWELL, DEPUTY ASSISTANT SECRETARY, BUDGET**

APPROPRIATION ESTIMATE

"NATIONAL HEART INSTITUTE

"For expenses, not otherwise provided for, necessary to carry out the purposes of the National Heart Act, [$167,954,000] *$169,735,000*."

## AMOUNTS AVAILABLE FOR OBLIGATION

| | 1968 | 1969 |
|---|---|---|
| Appropriation | $167,954,000 | $169,735,000 |
| Transfer to "Office of the Surgeon General, salaries and expenses" | −163,000 | |
| Cutback from the 1968 President's budget required by H.J. Res. 888 | −2,594,000 | |
| Total currently authorized for obligation | 165,197,000 | 169,735,000 |
| Plus proposed release of reserves for increased pay costs | 551,000 | |
| Total, available for obligation | 165,748,000 | 169,735,000 |
| Disposition of cutback: | | |
| To be used for pay costs in this account | | 551,000 |
| To be transferred to "Hospitals and medical care" for pay and postal costs | | 1,893,000 |
| To be returned to the Treasury | | 150,000 |
| Total cutback | | 1,594,000 |

## OBLIGATIONS BY ACTIVITY

| | 1968 estimate | | 1969 estimate | | Increase or decrease | |
|---|---|---|---|---|---|---|
| | Positions | Amount | Positions | Amount | Positions | Amount |
| Grants: | | | | | | |
| Research | | $105,100,000 | | $105,729,000 | | +$629,000 |
| General research support grants | | (9,809,000) | | (9,425,000) | | (−384,000) |
| Scientific evaluation and planning | | (163,000) | | (163,000) | | |
| Categorical clinical research centers | | (4,500,000) | | (4,500,000) | | |
| Heart cooperative drug study | | (3,820,000) | | (3,820,000) | | |
| Specialized research centers | | (800,000) | | (1,050,000) | | (+250,000) |
| Fellowships | | 7,439,000 | | 7,604,000 | | +165,000 |
| Training | | 17,696,000 | | 18,150,000 | | +454,000 |
| Direct operations: | | | | | | |
| Laboratory and clinical research | 409 | 13,113,000 | 423 | 13,671,000 | +14 | +558,000 |
| Collaborative research and development | 42 | 17,138,000 | 42 | 19,142,000 | 0 | +2,004,000 |
| Biometry, epidemiology, and field studies | 83 | 1,747,000 | 83 | 1,765,000 | 0 | +18,000 |
| Training activities | 12 | 222,000 | 12 | 224,000 | 0 | +2,000 |
| Review and approval of grants | 105 | 2,495,000 | 110 | 2,611,000 | +5 | +116,000 |
| Program direction | 31 | 798,000 | 31 | 839,000 | 0 | +41,000 |
| Total obligations | 682 | 165,748,000 | 701 | 169,735,000 | +19 | +3,987,000 |

## OBLIGATIONS BY OBJECT

| | | 1968 estimate | 1969 estimate | Increase or decrease |
|---|---|---|---|---|
| | Total number of permanent positions | 682 | 701 | +19 |
| | Full-time equivalent of other positions | 38 | 39 | +1 |
| | Average number of all employees | 669 | 699 | +30 |
| 11 | Personnel compensation: | | | |
| | Permanent positions | $5,875,000 | $6,087,000 | +$212,000 |
| | Positions other than permanent | 235,000 | 245,000 | +10,000 |
| | Other personnel compensation | 63,000 | 63,000 | |
| | Total personnel compensation | 6,173,000 | 6,395,000 | +222,000 |
| 12 | Personnel benefits | 739,000 | 753,000 | +14,000 |
| 21 | Travel and transportation of persons | 288,000 | 300,000 | +12,000 |
| 22 | Transportation of things | 84,000 | 90,000 | +6,000 |
| 23 | Rent, communications, and utilities | 221,000 | 222,000 | +1,000 |
| 24 | Printing and reproduction | 20,000 | 22,000 | +2,000 |
| 25 | Other services | 1,340,000 | 1,583,000 | +243,000 |
| | Project contracts | 17,180,000 | 19,180,000 | +2,000,000 |
| | Payment to "National Institutes of Health management fund" | 7,071,000 | 7,169,000 | +98,000 |
| 26 | Supplies and materials | 1,677,000 | 1,767,000 | +90,000 |
| 31 | Equipment | 736,000 | 787,000 | +51,000 |
| 41 | Grants, subsidies, and contributions | 130,235,000 | 131,483,000 | +1,248,000 |
| | Subtotal | 165,764,000 | 169,751,000 | +3,987,000 |
| | Deduct quarters and subsistence charges | −16,000 | −16,000 | |
| | Total obligations by object | 165,748,000 | 169,735,000 | +3,987,000 |

SUMMARY OF CHANGES

| | |
|---|---|
| 1968 enacted appropriation | $167,954,000 |
| Transfer to "Office of the Surgeon General, Salaries and expenses" | −173,000 |
| Cutback from the 1968 President's budget required by H.J. Res. 883 | −2,594,000 |
| Proposed release of reserves for increased pay costs | 551,000 |
| 1968 estimated obligations | 165,748,000 |
| 1969 estimated obligations | 169,735,000 |
| Total change | +3,987,000 |

| | Base | | Change from base— | |
|---|---|---|---|---|
| | Positions | Amount | Positions | Amount |
| Increases: | | | | |
| A. Built-in: | | | | |
| 1. 1 extra day of pay in 1969 | | | | $20,000 |
| 2. Annualization of 1968 pay increase | | | | 92,000 |
| Total built-in increases | | | | 112,000 |
| Program: | | | | |
| 1. Research grants | | $105,100,000 | | 629,000 |
| 2. Fellowships | | 7,439,000 | | 165,000 |
| 3. Training grants | | 17,696,000 | | 454,000 |
| 4. Laboratory and clinical research | 409 | 7,747,000 | 14 | 475,000 |
| 5. Collaborative research and development | 42 | 17,064,000 | | 2,000,000 |
| 6. Review and approval of grants | 105 | 1,271,000 | 5 | 35,000 |
| 7. Program direction | 31 | 543,000 | | 19,000 |
| Total program increases | | | 19 | 3,777,000 |
| C. Payment to "National Institutes of Health management fund" for centrally furnished services: | | | | |
| Laboratory and clinical research | | 5,366,000 | | 18,000 |
| Collaborative research and development | | 74,000 | | −2,000 |
| Biometry, epidemiology, and field studies | | 127,000 | | 2,000 |
| Direct training | | 25,000 | | |
| Review and approval of grants | | 1,224,000 | | 63,000 |
| Program direction | | 255,000 | | 17,000 |
| Total management fund | | | | 98,000 |
| Total net changes requested | | | | +3,987,000 |

## Explanation of Changes

*Research grants.*—The net increase of $629,000 will provide $263,000 for the noncompeting continuation of existing regular research grants, $500,000 for the competing continuation of existing regular program project grants, and $250,000 for specialized cardiovascular research and training centers. These increases are partially offset by a decrease of $384,000 for general research support grants.

*Fellowships.*—The increase of $165,000 will provide for stipend increases.

*Training grants.*—The increase of $454,000 will provide for additional stipend allowances in the graduate cardiovascular training area.

*Laboratory and clinical research.*—The program increase of $475,000 and 19 positions will allow for the continuation and normal expansion of ongoing programs and for accelerated expansion in the study of biochemical aspects of disease from the cellular level.

*Collaborative research and development.*—The program increase of $2,000,000 will be used to further research and development in the artificial heart myocardial infarction program.

*Review and approval of grants.*—The program increase of $35,000 and 5 positions is for analytical and reporting functions.

*Program direction.*—The program increase of $19,000 is needed for program planning within the Institute and for ad hoc review groups.

EXPLANATION OF TRANSFERS

| | 1968, estimate | 1969, estimate | Purpose |
|---|---|---|---|
| Transfer to: | | | |
| Office of the Surgeon General, salaries and expenses. | —$163,000 | | For centralized services concerned with grants policy and procedure functions; and for buildings and facilities services. |
| Proposed transfer to: | | | |
| Hospitals and medical care | —1,893,000 | | To provide for increased pay costs in 1968. |

JUSTIFICATION—NATIONAL HEART INSTITUTE

| | 1968 estimate | | 1969 estimate | | Increase or decrease | |
|---|---|---|---|---|---|---|
| | Positions | Amount | Positions | Amount | Positions | Amount |
| Personnel compensation and benefits | 682 | $6,912,000 | 701 | $7,148,000 | +19 | +$236,000 |
| Other expenses | | 158,836,000 | | 162,587,000 | | +3,751,000 |
| Total | 682 | 165,748,000 | 701 | 169,735,000 | +19 | +3,987,000 |

## General Statement

In its search for the cure, alleviation, and prevention of cardiovascular diseases, the National Heart Institute conducts and supports research programs of great scope and diversity. Its research projects range from epidemiological studies on large population groups to studies on individual cells and cellular components and on the biochemical reactions occurring within them.

The diversity of this research is dictated by the complexity of the problems posed by the cardiovascular diseases. For the most part, their causes are not known with certainty; but in many instances, a constellation of complex factors—genetic, environmental, and physiological—may operate in their development and in their protean clinical manifestations. For example, atherosclerosis appears to be related not only to metabolic imbalance, but also to blood-clotting mechanisms and the dynamics of flow in vessels; and susceptibility to the disease may be influenced by such factors as age, sex, diet, physical activity, and psychic stress. Congenital heart disease may arise from genetic factors or from a variety of noxious prenatal factors affecting the fetus at critical stages of its development.

For reasons such as these, it has been both necessary and desirable to deploy our research manpower and resources along a wide variety of research approaches.

However, the broad base of fundamental and clinical knowledge accumulated through these research programs has also made it possible to mount a number of programs of research and development aimed directly at the solution of specific health problems posed by the cardiovascular diseases. The development of heart-assist devices to provide temporary or permanent support to a failing circulation; the clinical evaluation of lipid-lowering drugs to reduce recurrent heart attacks and to prolong the lives of heart attack victims; the development of instrumentation and automated techniques for the mass production of blood components for a wide variety of clinical uses—all of these are goals of special research and development programs already under way. And all, if successful, should have profound and far-reaching effects on the health and welfare of our people.

## Research Projects

There follows a brief description of grant-supported research in each of the major cardiovascular-disease categories. Plans for 1968 and 1969 are primarily a continuation of current research in these areas, as indicated in the research grants program analysis table at the end of the research grant justification.

*Atherosclerosis* is, by far, the most prevalent of all cardiovascular disorders. If it could be entirely eliminated in the American population, or even if only some of its complications (such as heart attacks, strokes, and congestive heart failure) could be prevented, hundreds of thousands of lives might be spared or prolonged.

During the past decade, there has been nearly a tenfold increase in the number of research projects in this field; and currently, in terms of research funds expended, atherosclerosis is the largest single disease category in the Heart Institute program.

A large segment of this research deals with mechanisms whereby fats are absorbed, transported, synthesized, and broken down within the body. Derangements in one or more of these processes are thought to underlie the elevated blood levels of cholesterol and other fats that predispose to atherosclerosis. Other important research is concerned with the effects of diet on blood-lipid levels and the evaluation of lipid-lowering diets and drugs as potential means of preventing atherosclerosis, retarding its development, or perhaps reversing the course of the disease.

Another large segment of atherosclerosis research is concerned with the body's clotting and clot-dissolving mechanisms, because clotting complications account for most heart attacks, strokes, and other lethal or crippling manifestations of the disease. This research includes basic studies on coagulation mechanisms; on elevated blood lipids and other factors that may predispose the victim of atherosclerosis to clotting complications; and on anticoagulant and clot-dissolving agents that may provide effective therapeutic measures against heart attacks, strokes, and other thromboembolic complications of atherosclerosis.

The remainder of the research in this field involves many different disciplines and lines of attack. They vary from studies on the influence of different diets on the atherosclerotic lesion in experimental animals to the development of new instruments for measuring arterial blood flow, and the study of the personality characteristics and "risk factors" in patients who have been victims of one or another complication of the disease.

*Hypertension* is one of the most commonly encountered forms of cardiovascular disease. An estimated 17,000,000 Americans between the ages of 18 and 79 have high blood pressure, and about 10,500,000 have heart disease as a consequence of hypertension. Hypertension accelerates the development of atherosclerosis and is a major cause of strokes, heart failure, and kidney failure.

As much as 15 percent of all cases of hypertension are secondary to kidney disease or other pathologic processes that are potentially curable if promptly diagnosed and corrected. Improved techniques for the diagnosis of disorders that can cause secondary hypertension for selecting patients who may benefit from surgery are thus important goals.

Most victims of hypertension, however, suffer from "primary" or "essential" hypertension, a disease of unknown origin. Ignorance of the cause of essential hypertension has not, however, prevented the development of a steadily growing number of effective drugs for reducing blood pressure in hypertensive patients. Although they do not cure the disease, a variety of drugs have been developed for controlling hypertension of all degrees of severity. The resulting decline in mortality has been striking; but none of these drugs is perfect, and some have unpleasant and sometimes serious side effects. Thus the quest for new or improved therapeutic agents continues.

Other important areas of study include research on fluid and electrolyte metabolism; the possible role of endocrine disturbances in hypertension; hereditary or environmental factors affecting the development or causes of the disease; and nerve and hormone mechanisms involved in blood-pressure control.

NHI also supports research concerned with kidney transplants and artificial kidneys for the management of kidney failure, a common complication of hypertension. These efforts are effectively supplemented by similar activities of NIAMD.

*Cerebrovascular diseases* account for about 200,000 deaths a year—a toll exceeded only by heart disease and cancer. There are no reliable statistics on the number of persons partially or completely disabled by cerebrovascular disease, but it may exceed a million. Although mortality is concentrated in older people, the mid-life toll is also high: in 1965 some 39,600 cerebrovascular deaths occurred in Americans aged 25 to 64.

The NHI Framingham Study has demonstrated that the most common cause of storke is blood clots forming in the arteries supplying the brain. Initial mortality from acute cerebral thrombosis was approximately 15 percent in this series, and fully half of the survivors were left with permanent disability. Mortality from cerebral hemorrhage, another common cause of stroke, is considerably higher than this.

A stroke is usually the consequence of other circulatory diseases. Hypertension, for example, both predisposes patients to a stroke and aggravates its clinical effects. Atherosclerosis can weaken affected blood vessels supplying the brain, predispose them to rupture, and create conditions favorable to the formation of blood clots.

Within recent years there have been many significant advances in the clinical attack on the stroke problem: objective techniques for measurement of blood flow to the brain have been developed; new x-ray techniques provide safe and effective means of detecting obstructive disease affecting the brain's major feedlines in the chest and neck, an important and potentially curable cause of cerebral insufficiency. There has been a sharper definition, and hence a basis for more appropriate therapy, of a variety of stroke syndomes.

Over half of NHI research grants concerned with stroke involve perfecting reconstructive techniques in vascular surgery and developing better anesthetic agents and methods. Most of the remainder are concerned with improved methods of diagnosis and medical management of cerebrovascular disease.

The Heart Institute works closely with the National Institute of Neurological Diseases and Blindness in the assessment and development of relevant scientific programs and resources. The research programs of the two Institutes are often complementary: for example, NINDB is supporting a cooperative study of strokes due to brain hemorrhage, while the Heart Institute is conducting a similar study of strokes associated with diseased neck vessels supplying the brain.

To date, the preponderant effort has been in the treatment and palliation of the cerebrovascular diseases. However, other research, concerned with prevention, is attempting to define factors in the person or his environment that increase susceptibility to stroke and seeking improved methods of diagnosis, so that stroke-prone individuals can be identified early and measures initiated that may avert or postpone the onset of crippling or lethal consequences of cerebrovascular disease.

*Congenital heart disease* caused the deaths of more than 7,300 infants under two years of age during 1964. One-third of all congenital-heart-disease patients die in the first month, and most of these in the first week of life. Although surgical treatment has continued to improve, it is still extremely risky in infants less than six months of age.

The NHI research program places primary emphasis on the improvement of methods for the diagnosis and evaluation of congenital heart defects and on the perfection of surgical methods for correcting them. As a result of this research most of the commoner types of congenital heart disease, and many of the rarer forms, can be completely corrected or else palliated by surgery.

The NHI program is complemented by the programs of two other Institutes. The Neurological Institute has a large organized program of perinatal research to define the prevalence and to seek the causes of various types of congenital disorders. Then, the National Institute of Child Health and Human Development supports research in embryology and teratology, the experimental production of congenital anomalies.

*Rheumatic fever and rheumatic heart disease* have declined steadily as causes of death and disability during the past several decades, but both continue to occur in significant numbers of our people to constitute an important health problem.

The evidence associating rheumatic fever with a preceding streptococcal infection is overwhelming, but the underlying mechanisms are largely obscure. Research results are most consistent with an inappropriate immunologic reaction triggered in the patient by the products of certain hemolytic streptococci. The fact that rheumatic fever develops in less than 1 percent of people who become infected with these streptococci suggests that some factor or factors in the affected person himself are important in the development of the disease. Until highly susceptible individuals can be identified in advance and effectively protected by antibiotics or other means, rheumatic fever and rheumatic heart disease will continue to occur.

A consistently reliable laboratory test for the diagnosis of cardiac involvement in rheumatic-fever victims is badly needed, as are effective techniques for preventing or reducing the severity of damage when the heart is attacked by the disease. More research is also needed on the natural and post-therapeutic history of these disorders, not merely for decisions about the relative value of various valve replacements (artificial valves or valve transplants) and surgical procedures, but also for the crucial decisions in determining the best time for surgery and the type of patient most likely to benefit.

Mortality from *cardiopulmonary diseases*, chiefly chronic bronchitis and emphysema, increased more than fourfold between 1953 and 1963. Moreover, the estimates of prevalence are alarming: not less than 10 percent of middle-aged and elderly Americans are afflicted. As a disabling disease, emphysema is second only to heart disease, disability allowances now exceed $80,000,000 each year.

The exact causes of emphysema are largely unknown, but a number of factors, such as cigaret smoking, air pollution, allergy, and respiratory infections, are strongly suspected of playing important roles in its development. While recognition of these factors has led to reasonable programs to prevent severe disability, and while they may indicate promising research leads, we do not yet understand either the causes of emphysema or its mode of development. For example, we do not know whether it is primarily a degenerative process resulting from interference with the circulation in the lungs; a consequence of chronic infection—e.g., chronic bronchitis—or of repeated intermittent infection.

The complexities posed by these diseases require a diversity of research approaches. The Heart Institute currently supports a large body of research concerned with lung structure and lung function; the nerve, hormonal, chemical, and mechanical factors affecting respiration; gas transport and gas exchange; the destruction, repair, and regeneration of lung tissues; and the causes, clinical physiology, diagnosis and treatment of pulmonary disease.

This research has led to the development of a wide variety of pulmonary function tests that aid in the early detection of pulmonary disease and in the evaluation of therapeutic measures. Of great potential importance in the early detection of emphysema is the recent development of procedures employing rapid single-breath tests of lung function that are applicable to the mass screening of large populations.

Basic studies in respiratory physiology, by helping to clarify the role of the central nervous system, chemoreceptors, and other factors on respiratory drive, may provide clues to the development of improved drugs and other therapeutic measures to relieve the breathlessness of emphysema. Other studies, centering on the various secretions of the lung, might lead to the development of more effective mucolyte agents and expectorants for clearing clogged airway passages.

Studies on the destruction, repair, and regeneration of lung tissue may provide information on how emphysema does its damage and may provide clues to effective measures for retarding or halting the course of the disease.

Other grants support studies directed toward devising improved mechanical oxygenators for use in cardiac and pulmonary surgery; new machines and techniques for long-term respiratory assistance in patients with acute or chronic respiratory failure; and means of avoiding respiratory failure in conjunction with anesthesia for surgical operations.

The National Institute of Allergy and Infectious Diseases is also concerned with emphysema, particularly in the role of allergic reactions, repeated acute respiratory infections, and chronic infections that may underlie the development of the disease or adversely affect its clinical cause.

*Heart failure* is generally classified into acute and chronic forms. The acute form includes shock, some types of fainting, and some forms of sudden death—often due to profound disturbances of heart rhythm. The chronic form of circulatory failure is generally known as congestive heart failure and denotes prolonged impairment of the ability of the heart to maintain an adequate blood flow to the tissue.

Most of the research support in this disease category is for studies on the underlying causes of heart failure. The answer may be found in intensive studies on the ultrastructure and arrangement of the heart muscle fibers and contractile proteins—or it may lie somewhere in the complex biochemical mechanisms by which the heart generates chemical energy and harnesses that energy to drive the contractile process—or both.

Another important segment of research deals with the treatment of congestive heart failure. The time-honored drug, digitalis, has been supplemented by a number of additional powerful cardiac stimulants and blood-vessel constrictors that provide much-needed support to a failing circulation. A variety of powerful diuretic agents is available to combat the excessive fluid retention (edema) that often accompanies congestive failure, especially the pulmonary edema that can pose a serious threat to the patient's life. The development of effective drugs for the prevention or suppression of heart arrhythmias and electrical means of treating cardiac arrest (heart standstill) constitute other research advances of great clinical importance.

A large body of research is concerned with the basic physiology of the heart and blood vessels, particularly mechanisms regulating normal heart performance, biochemical and mechanical factors affecting contractility, and the interplay of these factors in health and during the development of heart failure.

Recent dramatic events in heart transplantation have underscored the need for additional knowledge if this apparently promising approach to heart failure is to become clinically feasible. Two major obstacles to progress in this field are (1) rejection of the transplant by the immunological mechanisms of the recipient and (2) the lack of suitable means for organ preservation.

The current level of NHI research support in organ transplantation is about $5,000,000. Of this, over $1,300,000 is for support of 64 projects directly concerned with heart transplantation; the remainder is concerned with problems of kidney, lung, and liver transplants and with immunological studies basic to organ transplantation in general. This program wil be strengthened and expanded as available funds permit.

Summaries of some of the results of research support in 1967 pertaining to these research areas appear in the research highlights that accompany the statement of the Director, National Heart Institute. The 1969 budget request for regular research grant programs includes an increase of $763,000. Of this, $263,000 is requested for noncompeting continuation requirements and $500,000 for competing projects.

### Special Programs

*General Research Support Grants:* The decrease of $384,000 represents the Institute's proportionate share of the proposed budget for this program.

*Categorical Clinical Research Centers:* The same level of support, $4,500,000, is continued from 1968 to 1969 for the research resources of in-depth, multidisciplinary investigations in many of the research areas outlined in the presentation above for regular research grant programs.

*Cooperative Study of Drugs and Coronary Heart Disease.*—This program has as its primary objective the determination of whether certain drugs that reduce the concentration of blood lipids, or fats, are capable of improving survival among patients with coronary heart disease. The second objective is to determine whether the degree to which these drugs lower serum lipids is correlated with their effect on mortality and heart-attack rates. By studying just as intensively the individuals in the study who do not receive lipid-lowering agents, the investigators will obtain valuable further information concerning the outlook for men who have survived an initial myocardial infarction. Finally, the study aims at accumulating additional knowledge and experience in the technology of cooperative clinical trials in cardiovascular disease.

In human terms, if the effectiveness of these drugs is in fact related to their ability to lower blood fats, it can be calculated that such drugs might be able to reduce the number of recurrent heart attacks by 30 percent. This would have obvious and important consequences for the three million or more Americans with definite coronary heart disease and the additional two million suspected of having it. Furthermore, demonstration of the principle that drugs which lower blood lipids can improve survival would stimulate the development of still more satisfactory lipid-lowering drugs for the treatment and prevention of coronary heart disease.

During the summer and fall of 1965 protocols for this far-reaching study were perfected, operational details were refined, and the Congress provided funds in 1966 and 1967 to fill out the total of 55 clinics anticipated in the study plans. During 1968 and 1969 that plan calls for these clinics to recruit approximately 8,400 patients to be followed for a 5-year period. Additional material pertaining to this study is contained in the Progress Report on Programmed Activities which accompanies the statement of the Director, National Heart Institute.

*Specialized Cardiovascular Research and Training Centers.*—The Heart Institute is undertaking to establish and support a limited number of such highly selected centers of excellence in which large and stable investments are deliberately made in groups of investigators capable of imaginative and creative research.

Each center will be an organizational unit, established within a university or similar institution, for carrying out research and training related to a broad range of cardiovascular disease problems. Ideally, it will be organized under a single outstanding director and staffed by a core group of scientists representing not only the various clinical disciplines but also the physical, engineering, and social sciences, each contributing his special expertise where needed in the solu-

tion of complex problems. The members of the core group would work in sufficiently close proximity to facilitate the free exchange of information, ideas, and constructive criticism. This, in turn, would facilitate the early identification and follow-up of promising new leads or more concerted research attacks on particularly difficult or troublesome problems.

Although all centers will carry out research programs of considerable breadth and depth, NHI recognizes that areas of special emphasis will vary from institution to institution. However, NHI feels that all centers should be heavily involved in reserach relevant to the solution of clinical problems posed by the cardiovascular diseases. All should carry out vigorous training programs designed to attract high quality trainees in a variety of disciplines and to arm them with the finest research and clinical skills that modern science can provide.

The Heart Institute believes that the center concept will permit simplification and provide greater efficiency in the administration and use of grant funds. Specialized equipment, facilities, and other resources can be provided with greater economy. Moreover, the sustained high level of productivity and excellence expected of each center will justify support of greater stability and continuity.

The center grant will allow for inclusion of funds for research inpatient and outpatient care, for alteration and renovation of space as dictated by the needs of the program, for salaries of all categories of personnel, and for the purchase of equipment and supplies. Funds for construction will be a prerequisite for establishment of most centers. These will be obtained through the NIH Division of Research Facilities and Resources on a matching funds basis. The request for such funds will be reviewed concomitantly with the request for operational support from the Heart Institute.

In time, given continued availability of planning grant funds, enough institutions should develop the capabilities needed to qualify for center status so that a broad geographical distribution can be achieved. But excellence must be the primary consideration, for NHI hopes that the centers to be established will have a profound and beneficial effect on medical research and patient care, not only in the regions where they are located, but throughout this country and the world.

From 1966–1968 the Heart Institute has budgeted $800,000 each year for the planning of such centers. This amount is increased to $1,050,000 in 1969. The National Heart Institute proposes to develop up to twelve of these centers by 1973.

RESEARCH GRANTS PROGRAM ANALYSIS (IN THOUSANDS OF DOLLARS)

| | 1968 estimate | 1969 estimate | Increase or decrease |
|---|---|---|---|
| Atherosclerosis | $16,858 | $17,007 | +$149 |
| Hypertension | 13,073 | 13,189 | +116 |
| Cerebrovascular disease | 1,978 | 1,996 | +18 |
| Congenital heart disease | 6,881 | 6,942 | +61 |
| Rheumatic fever and heart disease | 2,924 | 2,950 | +26 |
| Cardiopulmonary disease | 6,193 | 6,248 | +55 |
| Heart failure and shock | 15,997 | 16,139 | +142 |
| Coronary artery disease | 6,279 | 6,334 | +55 |
| Thromboembolic and hemorrhagic disease | 8,687. | 8,764 | +77 |
| Other cardiovascular diseases | 7,138 | 7,202 | +64 |
| Subtotal | 86,008 | 86,771 | +763 |
| General research support grants | 9,809 | 9,425 | −384 |
| Scientific evaluation | 163 | 163 | ---------- |
| Categorical clinical research centers | 4,500 | 4,500 | ---------- |
| Heart cooperative drug study | 3,820 | 3,820 | ---------- |
| Specialized research centers | 800 | 1,050 | +250 |
| Total, research grants | 105,100 | 105,729 | +629 |

DISTRIBUTION OF RESEARCH GRANTS

| | 1968 estimate | | 1969 estimate | | Increase or decrease | |
|---|---|---|---|---|---|---|
| | Number | Amount | Number | Amount | Number | Amount |
| Noncompeting continuations | 1,425 | $60,855,000 | 1,248 | $61,118,000 | −177 | +$263,000 |
| Competing projects | 475 | 21,353,000 | 420 | 21,853,000 | −55 | +500,000 |
| Supplementals | (250) | 3,800,000 | (250) | 3,800,000 | | |
| Subtotal, regular program | 1,900 | 86,008,000 | 1,668 | 86,771,000 | −232 | +763,000 |
| General research support grants | | 9,809,000 | | 9,425,000 | | −384,000 |
| Scientific evaluation and planning | | 163,000 | | 163,000 | | |
| Categorical clinical research centers | | 4,500,000 | | 4,500,000 | | |
| Heart cooperative drug study | | 3,820,000 | | 3,820,000 | | |
| Specialized research centers | | 800,000 | | 1,050,000 | | +250,000 |
| Total, research grants | | 105,100,000 | | 105,729,000 | | +629,000 |

FELLOWSHIPS

| | 1968 estimate | 1969 estimate | Increase or decrease |
|---|---|---|---|
| Total fellowships | $7,439,000 | $7,604,000 | +$165,000 |

INTRODUCTION

The primary objective of the fellowship programs is to increase the number of scientists qualified to carry on independent cardiovascular research.

PROGRAM PLANS IN 1968 AND 1969

The above objective is carried out through four means: (1) the postdoctoral program encourages young physicians to obtain research training and experience that will enable them to utilize their medical knowledge more effectively in research on cardiovascular disease; (2) the special research fellowship for the more advanced scientist to be exposed to improved methods and to attain new skills by means of unusual training experience in research laboratories other than his own; (3) the research career development award program supports the younger investigator of demonstrated ability; (4) the reserach career award program will continue to provide stable support for the senior investigator.

The $165,000 increase will allow for increments to stipend awards.

DISTRIBUTION OF FELLOWSHIPS

| | 1968 estimate | | 1969 estimate | | Increase or decrease | |
|---|---|---|---|---|---|---|
| | Number | Amount | Number | Amount | Number | Amount |
| Continuations: | | | | | | |
| Noncompeting | 252 | $4,954,000 | 249 | $5,271,000 | −3 | +$317,000 |
| Competing | 35 | 719,000 | 42 | 819,000 | +7 | +100,000 |
| Supplementals | (20) | 35,000 | (20) | 35,000 | 0 | 0 |
| New | 141 | 1,731,000 | 122 | 1,479,000 | −19 | −252,000 |
| Total, fellowships | 428 | 7,439,000 | 413 | 7,604,000 | −15 | +165,000 |

FELLOWSHIPS (BY TYPE OF PROGRAM)

| | | | | | | |
|---|---|---|---|---|---|---|
| Postdoctoral | 120 | $1,090,000 | 102 | $926,000 | −8 | −$164,000 |
| Special | 97 | 1,096,000 | 97 | 1,164,000 | 0 | +68,000 |
| Research career: | | | | | | |
| Career | 35 | 1,014,000 | 33 | 1,000,000 | −2 | −14,000 |
| Development awards | 176 | 4,239,000 | 181 | 4,514,000 | −5 | +275,000 |
| Total, fellowships | 428 | 7,439,000 | 413 | 7,604,000 | −15 | +165,000 |

TRAINING GRANTS

| | 1968 estimate | 1969 estimate | Increase or decrease |
|---|---|---|---|
| Total training grants | $17,696,000 | $18,150,000 | +$454,000 |

## Introduction

The training grant programs of the National Heart Institute are designed to: (1) attract individuals to a career in the cardiovascular field; and (2) to provide the best possible training for potential cardiovascular investigators, cardiologists. nephrologists, pulmonologists, and cardiovascular surgeons and radiologists. In order to achieve these goals, the Institute makes available undergraduate training grants, graduate training grants, and graduate clinical training grants.

## Undergraduate Training Grants

Undergraduate training grants are currently made to a total of 110 schools of medicine, schools of osteopathy, and schools of public health. These grants are utilized to strengthen the cardiovascular-teaching potential at the undergraduate level. By strengthening cardiovascular teaching and by introducing students at an early stage to the cardiovascular field, a higher percentage of top students are provided with the foundation for a cardiovascular career.

## Graduate Training Grants

Graduate training grants are available to institutions that can provide excellent training for individuals already holding the Ph. D., M.D., D.O., or D.V.M. degree. The graduate research training grants are designed to produce investigators who will subsequently contribute significantly to the mission of the National Heart Institute. The graduate clinical training grants are utilized to prepare physicians as cardiologists, nephrologists, pulmonologists, cardiovascular surgeons and radiologists. Such training differs from an advanced residency in that the trainee is placed in a graduate environment which not only advances his knowledge and techniques but also introduces him to research. Thus he becomes not only a skilled clinician but a specialist who will be able to evaluate research data critically, to translate the results of research for patient care, and to keep abreast of his field.

DISTRIBUTION OF TRAINING GRANTS

| | 1968 estimate | | 1969 estimate | | Increase or decrease | |
|---|---|---|---|---|---|---|
| | Number | Amount | Number | Amount | Number | Amount |
| Continuations: | | | | | | |
| Noncompeting | 347 | $15,849,000 | 320 | $15,338,000 | −27 | −$511,000 |
| Competing | 24 | 1,000,000 | 40 | 2,200,000 | +16 | +1,200,000 |
| Supplementals | (14) | 200,000 | (14) | 200,000 | (0) | 0 |
| New | 14 | 647,000 | 8 | 412,000 | −6 | −235,000 |
| Total, training grants | 385 | 17,696,000 | 368 | 18,150,000 | −17 | +454,000 |

TRAINING GRANTS (BY TYPE OF PROGRAM)

| | | | | | | |
|---|---|---|---|---|---|---|
| Undergraduate | 110 | $2,670,000 | 111 | $2,685,000 | +1 | +$15,000 |
| Graduate | 275 | 15,026,000 | 257 | 15,465,000 | −18 | +439,000 |
| Total, training grants | 385 | 17,696,000 | 368 | 18,150,000 | −17 | +454,000 |

LABORATORY AND CLINICAL RESEARCH

| | 1968 estimate | | 1969 estimate | | Increase or decrease | |
|---|---|---|---|---|---|---|
| | Positions | Amount | Positions | Amount | Positions | Amount |
| Personnel compensation and benefit | 409 | $4,215,000 | 423 | $4,373,000 | +14 | +$158,000 |
| Other expenses | | 8,898,000 | | 9,298,000 | | +400,000 |
| Total | 409 | 13,113,000 | 423 | 13,671,000 | +14 | +558,000 |

The Institute's laboratory and clinical research program has provided an effective blend of fundamental studies of the cardiovascular system, with research aimed directly at the solution of specific clinical problems posed by the cardiovascular diseases. A staff of approximately 170 professional scientists, with about an equal number of supporting staff, is devoted to this research program.

Six laboratories and branches of the National Heart Institute are involved in a vigorous program of clinical research—usually conducted concurrently with laboratory research efforts. At present 100 research beds in the NIH Clinical Center are allocated to these Heart Institute studies; in addition, research subjects are studied on an out-patient basis.

The fundamental research effort of the intramural program has received deliberate emphasis. Most cardiovascular diseases have their roots in subtle and complex metabolic processes and in the mechanisms that control or regulate these processes. A fuller exploration of these processes will improve our basic understanding of these disorders and will, thereby, provide improved methods of diagnosis, treatment, and prevention.

The close association between basic and clinical research activities within the intramural program has been highly advantageous. It provides for the more rapid clinical testing and application of those findings from basic studies that show promise in the solution of clinical problems.

In terms of budget and scientific staff, the intramural research program is modest indeed, yet the findings of Heart Institute scientists have exerted profound effects in practically every major area of cardiovascular research.

Its scientists pioneered in the use of enzyme inhibitors in the treatment of hypertension, discovered and proved the therapeutic potential of several antihypertensive drugs now in wide clinical use, and have made major contributions to scientific knowledge concerning the mechanisms by which many such agents lower blood pressure.

They have also made substantial contributions to our understanding of nerve and hormonal factors that regulate heart performance, mechanical and biochemical determinants of heart-muscle contractility, and the mechanisms by which the autonomic nervous system and various cardiac stimulants provide support to a failing circulation.

They have developed important new techniques for the detection and clinical evaluation of various types of congenital and acquired heart disease and have compiled an enviable record of success in the surgical treatment of these disorders.

Their work has helped to define more fully many of the complex processes involved in the synthesis, transport, and metabolism of cholesterol and other fats, and to identify and classify certain heritable disorders of fat storage and metabolism that are frequently associated with elevated blood-lipid levels and accelerated development of atherosclerosis.

These are only a few of the major accomplishments stemming from the work of this relatively small group of scientists.

The 1969 program increase of $475,000 allows for: (1) $175,000 for the outfitting of newly assigned laboratory space. This space will relieve crowded laboratory conditions and permit expansion of present programs that offer promise. (2) $150,000 is also requested for increases in selected other objects of research costs, such as data computation, purchase of equipment, and laboratory supplies. (3) Additional positions and funds are requested for expansion of the study of biochemical aspects of disease from the cellular level. Seven positions and $75,000 are requested to provide a much needed expansion for the Section on Polypeptide Hormones in the Laboratory of Molecular Diseases, which is making major contributions to the understanding of the structure, function, and immunologic assay of polypeptide hormones important in calcium and bone metabolism. Seven positions and $75,000 are also requested for the Section on Enzymes and Meta-

bolism, Laboratory of Clinical Biochemistry, which is concerned with the intermediary metabolism of enzymes involved in amino acid metabolism and with the role of the various co-enzymes related to these reactions.

Included in the increase is $65,000 for mandatory items such as annualization of the 1968 pay increase and the one extra day of pay in 1969. There are also increases of $18,000 for centrally furnished services from the "National Institutes of Health management fund."

COLLABORATIVE RESEARCH AND DEVELOPMENT

| | 1968 estimate | | 1969 estimate | | Increase or decrease | |
|---|---|---|---|---|---|---|
| | Positions | Amount | Positions | Amount | Positions | Amount |
| Personnel compensation and benefits | 42 | $337,000 | 42 | $343,000 | ---- | +$6,000 |
| Other expenses | ---- | 16,801,000 | ---- | 18,799,000 | ---- | +1,998,000 |
| Total | 42 | 17,138,000 | 42 | 19,142,000 | ---- | +2,004,000 |

## Introduction

This activity includes (1) the Artificial Heart-Myocardial Infarction Program, (2) the direct support of the Heart Cooperative Drug Study, and (3) the National Blood Resource Program.

## Artificial Heart-Myocardial Infarction Program

This program has as its primary goals (1) the development of devices and techniques for assisting a failing circulation and (2) reduction of death and disability from acute heart attacks. The program is combining biomedical and bioengineering approaches to this enormous health problem.

The Artificial Heart Branch is presently concentrating on the development and refinement of devices and techniques for providing pumping assistance to damaged or failing hearts. Later, with the closure of some formidable gaps presently existing in key areas of physiology and bioengineering, it is anticipated that the program will drive for the more ambitious goals of permanent assist devices and, possibly, a total replacement of hearts damaged beyond salvage.

Since June of 1964, when this program got underway, the Artificial Heart Branch has let 73 contracts totalling approximately $12,000,000 to chemical companies, electronic and engineering firms, other elements of private industry, and academic institutions. These contracts have supported research to identify and attack specific physiological, biochemical, engineering, and related problems in this field. Although the emphasis is on heart-assist devices, most areas of research—materials, pump designs, power sources, control mechanisms, and physiological problems of assisted circulation—are also fundamental to the development of permanent assist devices and artificial hearts.

The quest for blood-compatible materials has been a major concern since the inception of the program. Although the ideal material has not yet been developed, four or five appear promising: they do not cause clotting when exposed to blood for prolonged periods. Further development and improvement of these materials will be undertaken to increase their suitability for the construction of heart-assist devices.

Several new assist devices are nearing the developmental stage where they can be clinically tested and five others have already had limited clinical trials. These devices, used with modest success, have included veno-arterial pumping with oxygenation, the DeBakey partial bypass device, the Kantrowitz mechanical auxiliary ventricle, intra-aortic balloons, and counter pulsation.

The Medical Branch of the Artificial Heart-Myocardial Infarction Program is supporting the establishment of Myocardial Infarction Research Units at 5 university medical centers and hospitals. Eventually, 6–12 will be established. These Units will be specially equipped and staffed to conduct intensive research on acute heart attacks and their complications while providing the finest medical care to the heart-attack patients. The goal is the acquisition of new knowledge needed for improving all phases of medical care for heart-attack cases. Some specific research goals:

To learn as much as possible about the presently unpredictable clinical course of the acute heart attacks.

To determine what drugs or other measures might be used to minimize the injury suffered by the heart muscle.

To identify and define factors that operate in the development of potentially lethal complications of the attack. These include abnormalities of heart rhythm that may progress swiftly to cardiac standstill and the complete collapse of the circulation that may occur with cardiogenic shock.

To provide more rational bases for all phases of diagnosis, treatment, and patient care.

To evaluate more precisely and thoroughly than has previously been possible both accepted methods of treatment and promising new ones, including mechanical devices and techniques to provide pumping assistance to damaged or failing hearts.

The Units established thus far have already begun to conduct research and to collaborate on key issues of scientific planning and evaluation. Clinical studies in the units are being supplemented with extensive research in laboratory animals.

The program has also completed negotiations for 5 contracts aimed at developing a reliable and reproducible model of myocardial infarction in animals. Such a model, we believe, will be immensely valuable in future research in this problem.

The program increase of $2,000,000 in 1969 will be used in the artificial heart program for additional basic research, evaluation and development of materials, blood pump and oxygenator components of circulatory assist devices, and energy sub-systems; for more rapid and effective development of total system's testing and evaluation; and for increased myocardial infarction studies.

### The National Blood Resource Program

Major goals of this program are (1) to survey our Nation's blood resources and their utilization in terms of present and foreseeable needs; and (2) to meet a steadily accelerating demand for blood fractions without undue strains on these resources through improvements in technology that will make possible the more efficient production, storage, and distribution of blood products.

Some specific goals of the program are

To devise efficient, highly automated methods for the mass production of plasma and cellular fractions of blood (red cells, white cells, platelets).

To develop improved, high-yield techniques for the large-scale fractionation of plasma to provide albumin, gamma globulin, blood clotting factors, and other medically important protein fractions.

To investigate additives for prolonging the shelf life of whole blood and cellular fractions stored under standard conditions and improve techniques for preservation by freezing.

To study the feasibility of a computerized national or regional daily shelf inventory system for blood and blood products.

During the past year, the program awarded a large contract to the American National Red Cross for development work in blood fractionation. This work will be continued during 1968.

Another major project, initiated last year and to be completed in fiscal year 1968, is a series of studies to verify the effectiveness of adenine as a blood preservative, to ascertain its effects on blood components, and to establish the safety of adenine-treated blood and blood products for clinical use. Preliminary evidence indicates that adenine may significantly prolong, perhaps double the time that blood can be stored without deterioration (presently only 21 days). If this compound performs up to expectations, it should substantially reduce presently unavoidable losses of whole blood through outdating in storage.

Scheduled to get underway this year is a cooperative clinical trial of the clot-dissolving agents urokinase and streptokinase against blood clots in the pulmonary circulation. Such drugs hold great promise in combatting clotting complications of blood-vessel disease, but the clinical value has not yet been convincingly demonstrated in carefully controlled trials. These studies will be an essential prelude to possible future trials of clot-dissoving drugs against coronary occlusion and certain strokes.

Another major project will be a study of the feasibility of a computer-based national or regional inventory system for blood products and blood doners. If workable, such a system would insure more equitable distribution of blood and

blood products, forestall the development of local shortages through redistribution of temporary surpluses, minimize whole blood losses through outdating, and serve many other useful purposes.

The $2,792,000 available in 1968 and requested for 1969 will support the continuation of committed studies and the new projects proposed.

HEART COOPERATIVE DRUG STUDY

This is an Institute coordinated program to determine whether several lipid-lowering drugs will reduce the incidence of recurrent attacks and increase longevity among heart-attack victims. Most of the funding of this study is by research grants to approximately 55 participating clinics. Ancillary funds included under Collaborative Research and Development are for reimbursement to other Public Health Service units for performing the required laboratory determinations and for ordering, packaging, and distributing the necessary drugs.

There are also increases for Collaborative Research and Development of $6,000 for annualization of the 1968 pay increase partially offset by a $2,000 decrease for centrally furnished services from the "National Institutes of Health management fund."

BIOMETRY, EPIDEMIOLOGY, AND FIELD STUDIES

| | 1968 estimate | | 1969 estimate | | Increase or decrease | |
|---|---|---|---|---|---|---|
| | Positions | Amount | Positions | Amount | Positions | Amount |
| Personnel compensation and benefits | 83 | $958,000 | 83 | $974,000 | ---- | +$16,000 |
| Other expenses | ---- | 789,000 | ---- | 791,000 | ---- | +2,000 |
| Total | 83 | 1,747,000 | 83 | 1,765,000 | ---- | +18,000 |

This activity conducts direct studies and also participates in cooperative studies in cardiovascular research. The major thrusts of this program are in epidemiology, geographic pathology, biostatistics, and the clinical evaluation of therapeutic agents. This program provides a valuable mechanism not only for undertaking direct research in selected scientific areas, but also for collaboration with grantees, intramural research scientists, and foreign research workers conducting investigations of program interest.

As in other parts of the National Heart Institute, the collaborative studies program balances studies of relatively immediate clinical relevance with those of a more fundamental, long-range nature. Thus, the staff conducts or collaborates in epidemiologic research where "experiments of nature" have resulted in unusually high (or unusually low) rates of cardiovascular diseases, with the purpose of identifying those risk factors that may be responsible for such differences. Also, the program assists in the development of clinical trials to study the effectiveness of drugs, diet, or other factors which may be effective in reducing heart diseases. It is estimated that 70 percent of the funds in this activity are allocated to such clinically relevant studies. The remaining activities are of a more fundamental character and deal with the design and analysis of studies and the development of new biomathematical methods for biological research.

Included in the increase is $16,000 for mandatory items such as annualization of the 1968 pay increase and the one extra day of pay in 1969. There is also an increase of $2,000 for centrally furnished services from the "National Institutes of Health management fund."

DIRECT TRAINING

| | 1968 estimate | | 1969 estimate | | Increase or decrease | |
|---|---|---|---|---|---|---|
| | Positions | Amount | Positions | Amount | Positions | Amount |
| Personnel compensation and benefits | 12 | $107,000 | 12 | $109,000 | ---- | +$2,000 |
| Other expenses | ---- | 115,000 | ---- | 115,000 | ---- | ---- |
| Total | 12 | 222,000 | 12 | 224,000 | ---- | +2,000 |

Incorporated in this program is the training of Public Health Service personnel to meet the long-range and immediate scientific personnel needs of the Institute and the Service. This is an important and basic part of the heart research program in that it provides for the training of qualified investigators who must keep abreast of new knowledge, techniques, and methods that are constantly being developed so that they may function at the highest level of proficiency in the cardiovascular research effort.

The $2,000 increase requested provides for annualization of the 1968 pay increase.

REVIEW AND APPROVAL OF GRANTS

| | 1968 estimate | | 1969 estimate | | Increase or decrease | |
|---|---|---|---|---|---|---|
| | Positions | Amount | Positions | Amount | Positions | Amount |
| Personnel compensation and benefits | 105 | $1,021,000 | 110 | $1,070,000 | +5 | +$49,000 |
| Other expenses | | 1,474,000 | | 1,541,000 | | +67,000 |
| Total | 105 | 2,495,000 | 110 | 2,611,000 | +5 | +116,000 |

This activity provides for assembling, processing, and reviewing all cardiovascular grant applications; support of the National Advisory Heart Council and special review committees and consultants; grant tabulation and analyses; and the scientific and administrative management of grants.

Of the $116,000 increase requested $35,000 and 5 positions will provide for additional analytical and reporting functions. Also included is $18,000 for such mandatory increases as the annualization of the 1968 pay increase and the one extra day of pay in 1969. There are also increases of $63,000 for centrally furnished services from the "National Institutes of Health Management Fund".

PROGRAM DIRECTION

| | 1968 estimate | | 1969 estimate | | Increase or decrease | |
|---|---|---|---|---|---|---|
| | Positions | Amount | Positions | Amount | Positions | Amount |
| Personnel compensation and benefits | 31 | $274,000 | 31 | $279,000 | | +$5,000 |
| Other expenses | | 524,000 | | 560,000 | | +36,000 |
| Total | 31 | 798,000 | 31 | 839,000 | | +41,000 |

This activity supports the over-all administration, coordination, and direction of the varied programs and activities of the Institute. The Director and his immediate staff are responsible for introducing new knowledge into current operating programs and for the planning, development, and review of new areas of focus and interest.

Of the $41,000 increase requested, $19,000 will provide for additional program planning within the Institute and for ad hoc review groups. Also included is $5,000 for such mandatory increases as the annualization of the 1968 pay increase and the one extra day of pay in 1969. There are also increases of $17,000 for centrally furnished services from the "National Institutes of Health Management Fund".

NEW POSITIONS REQUESTED, FISCAL YEAR 1969

| | Grade | Annual salary |
|---|---|---|
| Laboratory and clinical research: | | |
| Scientist (2) | GS–13 | $27,014 |
| Medical officer (2) | GS–12 | 27,506 |
| Research technician (2) | GS–9 | 17,184 |
| Research technician (3) | GS–7 | 22,452 |
| Do | GS–5 | 18,927 |
| Clerical assistant (2) | GS–3 | 8,932 |
| Total (14) | | 122,015 |
| Review and approval of grants: | | |
| Scientist (2) | GS–13 | 27,014 |
| Administrative staff assistant (2) | GS–7 | 13,468 |
| Clerical assistant (1) | GS–5 | 5,565 |
| Total (5) | | 46,047 |
| Total new positions, all activities (19) | | 168,062 |

INTRODUCTION OF SUCCESSOR

Senator HILL. The committee will kindly come to order.

Dr. Fredrickson, come around, sir.

We are glad to have you here, sir. We will be glad to have you present this in your own way.

Dr. FREDRICKSON. I wonder, Senator Hill, if I might begin by introducing my very able successor to be, Dr. Theodore Cooper.

Senator HILL. Where are you going?

Dr. FREDRICKSON. Back to entirely scientific affairs, but still on the campus of NIH.

Senator HILL. But you will not have any administrative duties?

Dr. FREDRICKSON. Not entirely as I have now.

Senator HILL. Well, you are not leaving NIH?

Dr. FREDRICKSON. No, sir.

Senator HILL. I am glad to hear that. Glad to have you here, Doctor.

Dr. COOPER. Thank you.

ARTIFICIAL HEART-MYOCARDIAL INFARCTION PROGRAM

Dr. FREDRICKSON. Senator Hill, I have a short statement I would like to read to you. It touches briefly on some of the programs of the Heart Institute rather than the general plans and programs of the entire Institute's programs.

Senator HILL. All right, sir.

Dr. FREDRICKSON. This year the artificial heart-myocardial infarction program took its first steps toward the goal of focusing more of the Nation's outstanding research talent upon the acute heart attack, which annually causes over 140,000 deaths in Americans under 65 alone. The first five myocardial infarction research units were established. This year we plan to add three or four more units toward the planned network of 12. They will combine unexcelled medical care with intensive clinical and laboratory research involving many disciplines. The aim is better salvage techniques widely applicable to acute coronary care. We are encouraged by the promise of this program and by the extraordinary interest in it shown by the medical community.

1968 CONTRACT AWARDS

The Institute also awarded 41 new contracts and extended 16 others in support of research on artificial hearts and on the development of techniques and devices for temporary cardiac assistance. The feasibility of salvaging a patient by mechanical assistance has been demonstrated. We feel it is urgent to accelerate the necessary bioengineering and physiological studies related to development of the broad area of assisted-circulation techniques.

ASSISTED-CIRCULATION TECHNIQUES

Senator HILL. How do you mean, give a little more detail?

Dr. FREDRICKSON. We think that one of the most important tasks we have before us is to improve the techniques for temporarily assisting the failing heart by a variety of devices, of which we now have at least five that are ready for more complete testing in man; devices that will allow you to tide a failing heart over for a few hours or a number of days and thus allow the heart to recuperate its normal function.

Senator HILL. Would you classify the pacemaker as an instrument?

Dr. FREDRICKSON. This is certainly an instrument, although it is not an assist-device in the sense that it doesn't do any pumping for the heart. It performs the timing function of the heart.

CARDIAC REPLACEMENT: MECHANICAL HEARTS AND TRANSPLANTATION

Rather recent dramatic achievements have merged the development of mechanical hearts with transplantation into a general problem of cardiac replacement. We believe that development of these two possibilities should proceed collaterally. Major obstacles to transplantation are tissue rejection and preservation of donor tissues.

Senator HILL. That's your big problem, isn't it?

Dr. FREDERICKSON. Yes, sir; these are the two major problems, because the surgical problem has been overcome.

Senator HILL. The fact that the body rejects a foreign body, so to speak?

Dr. FREDERICKSON. Yes, and therefore, we still have this problem of rejection to overcome, but I think there is a good possibility that in time this will then be overcome and not represent the major problem.

Senator HILL. When you say "in time"?

Dr. FREDRICKSON. I think I would be very unwise to guess.

Senator HILL. Columbus discovered America in 1492. You don't care to make any estimate as to what you think that time would be?

KIDNEY TRANSPLANT EXPERIENCE

Dr. FREDRICKSON. I would say, sir, the first kidney transplant occurred in 1954 and since that time we have had very dramatic improvement——

Senator HILL. You have had tremendous improvement?

Dr. FREDRICKSON. Yes, we now have over 1,200 kidneys that have been transplanted.

Senator HILL. Over 1,200?

Dr. FREDRICKSON. And the chance for a "take" now is about 90 percent for 1 year.

### Heart-Transplant Projects

The Institute presently supports 64 projects totalling about $1.3 million, in the heart-transplantation field. This program will be strengthened as available funds permit.

Senator Hill. When you say heart transplant, that is a rather broad term?

Dr. Fredrickson. I mean here by research related to the surgery involved in replacing the heart to the immunology studies that are necessary in relationship to this and to the immediate problem of surgery and post-operative care as well as taking care of the rejection problem.

### Arteriosclerosis and Hypertension

At the same time, Mr. Senator, research to develop means of preventing premature arteriosclerosis and controlling hypertension must remain, we think, the paramount goals. Research is yielding much greater insight into these two major killers and providing opportunities for clinical application of promising discoveries.

### Coronary Drug Project

One such coordinated field trial, the coronary drug project, is testing the ability of four lipid-lowering drugs to reduce mortality rates among men who have recovered from at least one heart attack.

### Stroke Studies

Senator Hill. What about the effect on the blood vessels of the brain?

Dr. Fredrickson. We have as yet no study testing drugs for their effect on stroke. I think this will take more time and is a more difficult area: the diagnosis of minor strokes particularly being a very difficult problem, although we are supporting research now on a large study of strokes and, indeed, in cooperation with the Neurological Institute have, as you know, stroke centers which are providing us the kind of background information that might make it possible to mount such a drug trial in the future.

### Coronary Drug Project

In the coronary drug project the necessary 55 clinics is completed, and about 3,200 of the needed 8,500 patients have already been recruited.

### National Diet-Heart Feasibility Study

In their report on the national diet-heart feasibility study, the investigators concluded that the blood cholesterol levels of Americans could be reduced by diet. They recommended a study of sufficient size and duration to test whether such diets will cut the incidence of coronary artery disease. We are now carefully determining, with additional expert opinion, our recommendations on this most important challenge, and the Advisory Heart Council this June will take up this very important question of a possible diet trial.

### Large-Scale Production of Cellular and Protein Blood Components

The goal of the national blood resource program, begun last year, is to improve technology related to the supply and use of whole blood, plasma, or medically important blood fractions. Now being supported is research to develop means for the large-scale production of cellular and protein components of blood and to evaluate chemical preservatives for reducing losses of whole blood through outdating.

### Clinical Trial of Urokinase and Streptokinase

A cooperative clinical trial of the clot-dissolving agents urokinase and streptokinase is expected to begin this year. In fact, the protocol for this study is now ready and the enrollment of the necessary clinics has just begun.

Senator Hill. You are going to try just one clinic?

Dr. Fredrickson. No, sir; it will probably require at least 10 clinics for us to compare these agents for their effect on clots in the lung, which will be the first definitive trial of this agent.

Senator Hill. It will be the first one we have ever had, won't it?

Dr. Fredrickson. This will be the first careful trial on a scale sufficient to tell us whether it really helps this very important and tragic disease.

If the initial results are promising in the pulmonary embolism study, then the drugs will probably be tested against coronary occlusion in future studies.

## INHOUSE AND GRANT-SUPPORT RESEARCH

Substantial progress was also made during the year in the Institute's own research and through its regular grant-support programs. Our "Research Highlights" document presents a few of the noteworthy advances achieved through these programs in the prevention, diagnosis, and treatment of cardiovascular diseases.

### Research Progress Highlights

Senator Hill. Would you supply us a copy of these "Highlights"?

Dr. Fredrickson. We have, sir, and we will make sure you do have them.

(The information follows:)

### Highlights of Research Progress During 1967

#### ATHEROSCLEROSIS AND CORONARY HEART DISEASE

Elevated blood cholesterol levels have been the factor most consistently associated with increased susceptibility to coronary heart disease (CHD). However, two other blood lipid fractions also appear to be important determinants of heart disease risk, NHI grantees report. Elevated blood levels of triglycerides (neutral fat) or a high ratio of low-density lipoproteins appear to increase heart-disease risk in subjects with normal cholesterol levels. If two or three blood-lipid fractions are elevated, the risk is correspondingly higher.

These preliminary findings are drawn from a study of 3,182 men aged 39-59 at entry and found free of coronary heart disease at that time. The study, begun in 1960, is attempting to determine differences between those who subsequently develop CHD and those remaining free of it in order to define those factors that affect susceptibility.

The salient findings, expressed in terms of the annual rate of CHD per 1000 subjects at risk, were these:

Among men with cholesterol levels exceeding 259 mg. per 100 ml. the CHD rate was approximately 4 times that of men with levels below 220 (17.5 vs. 4.4).

Among men with triglyceride levels exceeding 176, the CHD rate was nearly 3 times that of men with levels below 100 (14.9 vs. 5.2).

Among men with low-density to high-density lipoprotein ratios exceeding 2.35, the CHD rate was more than double that of men with ratios below 2.01 (14.5 vs. 6.3). A preponderance of low-density lipoproteins is thought to be atherogenic because this lipoprotein class provides the transport vehicles for most of the cholesterol and triglycerides of the blood.

The CHD rate of 14.5 per 1000 for men with elevated cholesterol rose to 20.8 if triglycerides were also elevated and to 24.6 if all three fractions were elevated.

The grantees noted, however, that a large proportion of men developing CHD failed to exhibit elevated blood-lipids. Another risk factor appeared to be operating in this population group to increase risk whether or not blood lipids were elevated and to escalate risk in those also having blood-lipid abnormalities. This risk factor is a personality pattern, called type A, characterized by inordinate ambition, aggressiveness, and a strong sense of time urgency.

Men with this hard-driving behavioral pattern have developed CHD with about 3 times the frequency of their more placid counterparts (classified as personality type B). Moreover, of the 28 study subjects who died of CHD over a 5-year period, 25 were type A and only 3 type B. Autopsy studies performed on 51 of 82 subjects dying of all causes during the study indicated that coronary atherosclerosis in the type A subjects averaged nearly twice as severe as that in type B subjects. The disease process in the two groups appeared to differ in degree rather than in kind.

These findings were reported by Drs. R. H. Rosenman, M. Friedman, R. Straus, M. Wurm, and R. Kositchek of Burbank, California, Harold Brunn Institute, Mount Zion Hospital and Medical Center, San Francisco, California.

Most therapeutic diets and drugs for the management of elevated blood lipid levels have been aimed at the reduction of blood cholesterol. However, elevated blood cholesterol is only one facet of the larger clinical problem of hyperlipidemia. In turn, NHI studies have shown, hyperlipidemia is not a single entity, but at least 5, several of which include elevated cholesterol as one of their manifestations.

The NHI studies have resulted in a rational system for identifying and classifying hyperlipidemias on the basis of serum lipoprotein patterns, easily obtained by low-cost electrophoretic techniques. Under this system, most patients with elevated blood lipids fall conveniently into one of the categories of hyperliproproteinemia designated as types I–V. This is an important step toward a more systematic approach to clinical management, for standard "cholesterol lowering" regimens are not uniformly effective against all types of hyperlipoproteinemia. In fact, lumping patients with different types of hyperlipoproteinemia under the general heading of "hypercholesterolemia" may be responsible in large measure for the wide individual variability in response to diet or drug regimens frequently observed in clinical trials.

Currently Dr. R. I. Levy and co-workers in the NHI Laboratory of Molecular Diseases are determining which mode of therapy is best suited to each of the five types of hyperlipoproteinemia. The two most common are type II and type III.

Type II is characterized by a relative excess of low-density lipoproteins. It may be an inherited conditions, of dietary origin, or it may be a secondary manifestation of certain other metabolic disorders, especially hypothyroidism. It is probably responsible for most cases of "hypercholesterolemia" that the physician is called upon to treat. Type III, though less common than type II, is by no means rare. It, too, is characterized by an excess of low-density lipoproteins, especially the very-low-density ones that transport chiefly cholesterol and triglycerides in the blood. Both of these blood lipids are commonly elevated in type III patients. Both types of hyperlipoproteinemia are associated with accelerated development of atherosclerosis. In addition, a common characteristic of both types, if severe, is the appearance of fatty deposits called xanthomas in various soft tissues of the body, particularly around tendons of the hands and feet.

Nineteen patients with each type have been treated with a therapeutic diet containing 40 percent of total calories as fat, chiefly polyunsaturated; 40 percent carbohydrate; and 20 percent protein. Cholesterol intake was limited to 300 mg. per day.

In type II patients, average blood cholesterol levels fell from 438 to 330 and blood triglycerides decreased slightly. In type III patients, cholesterol fell from 486 to 228 and triglycerides from 650 to 194. Thus, the therapeutic diet substantially improved the blood-lipid pattern in type II and nearly normalized it in type III.

Further blood-lipid reductions were achieved when the therapeutic diet was supplemented with the lipid-lowering drug clofibrate. In type III patients, the drug reduced cholesterol by an additional 14 percent and triglycerides by 22 percent. The response was still more dramatic in type III patients: chloesterol fell by an additional 29 percent and triglycerides by 44 percent. Therapy resulted in rapid regression of xanthomas in type III patients.

These findings were reported by Drs. R. I. Levy, S. H. Quarfordt, H. R. Sloan, W. V. Brown, and D. S. Fredrickson of the Laboratory of Molecular Diseases, National Heart Institute, National Institutes of Health, Bethesda, Maryland.

Some scientists have maintained that attempts to prevent atherosclerosis are most likely to succeeed if initiated by pediatricians. Some support for this contention in the case of infants born of mothers with hereditary hypercholesterolemia is provided by findings reported by Drs. L. A. Lewis and H. B. Brown, of the Cleveland Clinic, and by Dr. J. G. Green, of NHI.

Three of the six infants exhibited abnormally high blood cholesterol level within a week of birth and the other 3 were hypercholesterolemic when first examined at 3, 13, and 28 months of age, respectively. When maintained on the usual diet for 8–36 months, all children exhibited increasing blood cholesterol levels. In 2 children the levels rose about 250 mg. per 100 ml. and in the other 4 above 300 (the normal level for children under ten is 165).

When the children were placed on diets low in saturated fat and cholesterol and high in unsaturated fat, their blood cholesterol levels fell by an average of 21 percent and have been maintained at these lower levels. The dietary modifications have not interfered with normal weight gain and growth.

Polyunsaturated fats (liquid fats derived chiefly from vegetable or marine oils) tend to reduce blood cholesterol levels, but the mechanism by which they do so has not been adequately defined. Studies by Dr. W. E. Connor and co-workers, of the University of Iowa, indicate that polyunsaturated fats substantially increase the excretion of cholesterol derivatives (neutral sterols and bile acids) in the feces. These losses may be made good, in part, at the expenses of blood cholesterol.

In these studies healthy subjects were fed cholesterol-free formula diets rich in saturated fat (cocoa butter) or polyunsaturated fats (corn oil) over 3 dietary periods of 3 weeks each. The subjects started on cocoa butter, were switched to corn oil, then back to cocoa butter.

During the first dietary period, blood cholesterol averaged 222 mg. per 100 ml., fell to 177 on the corn oil diet, then climbed to 225 when the cocoa butter diet was resumed. During the first dietary period, daily fecal sterol excretion averaged 744 mg. per day, climbed to 953 with corn oil, then fell to 672. Corn oil also increased the excretion of bile acids.

The total sterol excretion during the corn oil diet was approximately twice as high as the amount of cholesterol calculated to have left the blood. This suggests that polyunsaturated fats reduced tissue cholesterol levels as well as blood cholesterol.

Other NHI grantees studied the distribution of cholesterol in various tissues of 4 animal species—two (rats and dogs) known to be resistant to diet-induced hypercholesterolemia and atherosclerosis, the other two (prairie dogs and rabbits) know to be highly susceptible.

In these studies, conducted by Dr. W. Hollander and co-workers, of the Boston University Medical Center, half of the animals of each species received a low cholesterol diet for 3–12 months, the other half received a diet high in cholesterol derived from egg yolk.

When animals on the low-cholesterol diet were sacrificed, the scientists found no significant species differences in the cholesterol content of various organs and tissues.

Among the animals fed high-cholesterol diets, the two species resistant to atherosclerosis (rats and dogs) showed a moderate increase in the cholesterol content of the liver. But in all other organs and tissues studied, the cholesterol content did not differ significantly from that observed in the animals on the low-cholesterol diet.

However, in the susceptible species (prairie dog and rabbit), the high-cholesterol diet substantially increased the cholesterol content of all tissues and

organs except the brain. When some of these rabbits were switched from high-cholesterol diets, the excessive tissue cholesterol levels reverted to normal in all tissues except two: the cholesterol content of skin and of blood-vessel tissues remained elevated.

Apparently, resistance or susceptibility to hypercholesterolemia and atherosclerosis is determined in part by capability of the tissues of the body to handle cholesterol presented to them by the blood. Not only are there species differences in this capability, but within a given species some tissues and organs can cope with excessive cholesterol better than others. In susceptible species, the blood-vessel wall appears especially vulnerable to a cholesterol glut; and the cholesterol, once gaining entry, tends to stay.

A high proportion of patients with atherosclerosis exhibit a latent abnormality of carbohydrate metabolism that may accelerate the development of their blood-vessel diseases, according to Drs. P. T. Kuo and L. Y. Feng, of the University of Pennsylvania.

After consuming a meal high in carbohydrate, especially refined sugars, such patients show moderate to marked increases in plasma insulin activity, followed by increased production of very low density lipoproteins (VLDL) by the liver. Since this lipoprotein class provides the carrier vehicles for most of the cholesterol and triglycerides (neutral fat) of plasma, both of these blood lipid fractions are elevated and the elevations sustained by high-carbohydrate diets.

Of 286 randomly selected patients with atherosclerosis, 234 (91.6%) exhibited abnormally high VLDL synthesis and elevated blood lipid levels while subsisting on a diet containing 35–40 percent of its calories as carbohydrate. Subsequent studies in 20 of these indicated that sucrose, a simple sugar, provoked greater increases in plasma insulin activity and VLDL synthesis than did starch, a more complex carbohydrate.

The scientists found that the abnormality in carbohydrate metabolism and the patients' blood lipid levels could be kept under control by diets limiting daily carbohydrate intake to 125–150 gm., very low in sugar and alcohol, and low in short-chain triglycerides.

Autopsy studies of the development of atherosclerosis in the coronary arteries of individuals of widely different geographic and ethnic groups indicate that the distribution pattern of atherosclerotic deposits is distinct for each of the 3 coronary arteries. These three patterns held whether the subject was male or female, young or old, or from high-risk or low-risk populations.

In the circumflex branch of the left coronary, for example, lesions occurred with greatest frequency in the first 2 cm. of the artery, then declined sharply and progressively in frequency over the next 4 to 5 cm. Distinct distribution patterns were also observed in the left anterior descending branch and in the right coronary artery. In general, atherosclerosis usually attacked segments very close to the origin of the artery, leaving the "downstream" portion of the artery and it's branches relatively unscathed.

The distibution of lesions was the same whether observed early in the course of the disease, when they were usually fatty streaks, or in its advanced stages (fibrous, calcified plaques).

The results were obtained in autopsy studies of nearly 3,000 persons, aged 10–69 years, that included New Orleans whites and Negroes, Chilean whites, Guatemalan Indians, Brazilian whites and Negroes, and South African Bantu. They were reported by Dr. M. R. Montenegro, of Faculdade de Ciencias Medicas E. Biologicas de Botucatu, Sao Paulo, Brazil, and Dr. D. A. Eggen of Louisiana State University.

The results suggest that while ethnic factors and mode of life may affect the rate of development of coronary heart disease and its ultimate severity, its pattern of development is probably strikingly similar all over the globe.

Atherosclerotic deposits obsrtucting the coronary arteries and thus impeding bloodflow to the heart muscle itself are usually confined to the first few centimeters of the major coronary branches. The finer branches of the coronary tree, coursing within the heart muscle itself, seldom contain occlusive lesions. Because direct surgery to remove obstructions from the coronary arteries has proved risky and the percentage of successes low, surgeons have turned to indirect methods to supplement the blood supply reaching the heart. These methods entail the use of arterial implants or other blood-vessel grafting procedures to connect the heart's intact blood distribution network to a new blood source.

The best known of these procedures involves implanting into the wall of the left ventricle the left internal mammary artery that normally supplies blood

to the left side of the chest. The cut end of this artery is inserted into a small tunnel created surgically in the heart muscle. Thereafter, it rapidly forms connecting channels with the heart's collateral circulation and substantially improves bloodflow to the left ventricle.

Recently, Drs. R. M. Ferlic, F. W. Quattlebaum, and C. W. Lillehei, of the University of Minnesota, developed a procedure that can either supplement the internal mammary implant (for augmenting bloodflow to both ventricles or the anterior and posterior walls of the left ventricle) or else substitute for it when the internal mammary artery is diseased or otherwise unsuitable for implantation. It uses a segment of a vein as an arterial graft. One end of the venous graft is connected end-to-side into the aorta or subclavian artery, the other end inserted into a surgically prepared tunnel in the heart muscle.

The procedure has been used in 37 patients. In 15 of these it was used in combination with internal mammary implants. There were 6 deaths, only 1 of which appeared directly due to the surgical procedure. Followup of the survivors for periods up to 30 months indicate that 30 of the 31 have experienced significant reduction or complete relief of angina and most have been enabled to return to work.

Another technique, devised by Dr. C. W. Pierce and co-workers at Tulane, employs multiple artery implants when severe coronary artery disease has reduced the blood supply to more than one portion of the heart muscle. Their procedure permits implantation of both right and left internal mammary arteries into the anterior and posterior walls of the left ventricle. If necessary, the gastroepiploic artery of the stomach may also be mobilized and implanted into the wall of the right ventricle.

The scientists have employed multiple implants in 22 patients. There was one postoperative death. Nineteen of the 21 survivors have experienced clinical improvement, and X-ray arteriograms have demonstrated that the implanted arteries have remained open and functioning.

The short-term outlook for patients with angina pectoris is definitely improved by propranolol therapy, and internal mammary artery implants may also favorably affect prognosis, according to Drs. S. Wolfson, E. A. Amsterdam, and R. Gorlin, of Peter Bent Brigham Hospital, Boston. Their findings are based on a 2-year review of 135 patients with angina pectoris and coronary artery disease verified by X-ray visualization. Of these, 45 had undergone mammary artery implants and 55 had been treated with propranolol, a drug that selectively blocks receptors through which the sympathetic nervous system affects heart rate and the vigor of heart-muscle contraction. The drug relieves chest pain and improves exercise tolerance in angina patients, presumably by holding heart rate and heart work down to a level commensurate with its reduced blood supply. The control group consisted of 43 patients receiving standard medical therapy, including nitroglycerine and related agents for relief of chest pain.

In the control group there were 6 deaths, 5 heart attacks, and a 56.8 percent incidence of congestive heart failure.

In contrast, among 55 propranolol-treated patients, there was only 1 death, 3 heart attacks, and a 35.8% incidence of congestive heart failure. Among 45 patients who had undergone mammary artery implants to improve the heart's blood supply, there were 3 deaths and 2 heart attacks. In addition, this group had the lowest incidence of congestive heart failure.

Patients with angina pectoris who experience recurrent bouts of chest pain at rest usually have extensive atherosclerosis of the coronary arteries and even slight exertion brings on incapacitating chest pain. However, NHI grantees report on six patients who, despite episodes of chest pain at rest, experienced little or no pain during exertion, a condition they have termed "angina inversa."

When exercised on variable speed treadmills with a 10-degree incline, only two of the six subjects experienced chest pain (after three minutes at 3.5 and 4 mph, respectively). Only one of these exhibited ECG evidence of coronary insufficiency. Two female patients were stopped by fatigue and breathlessness at 2.5 and 3 mph. whereas two other men were able to walk or jog at speeds of 4.5 and 6 mph. Those four neither experienced significant chest pain during the exercise nor exhibited ECG changes indicative of coronary insufficiency.

Drs. R. N. MacAlpine and A. A. Kattus, Jr., of U.C.L.A., report that X-ray visualization of the coronary circulation in these patients revealed a single, well localized obstruction affecting only one major coronary artery and no significant atherosclerosis elsewhere. The scientists reported this distinct clinical syndrome because, when recognized, the underlying focal obstruction can usually be corrected by surgery with good prospects of complete cure.

NHI grantees report the successful use of a CDC 1700 computer to provide a comprehensive record of all arrhythmias occurring in heart-attack patients in a 4-bed intensive coronary care unit. The computer is programmed to scan the electrocardiograms of these patients continuously and instantly recognizes any deviations from normal. The scientists state that the computer provides a rapid, sensitive method for recognizing changes in the patient's clinical state. It also provides complete data on heart rhythm disturbances for correlation with hemodynamic changes occurring in these patients.

These findings were reported by Drs. L. J. Haywood, W. L. Kirk, Jr., G. A. Harvey and D. H. Blankenhorn of the University of Southern California.

The local anesthetic lidocaine appears to be a safe and effective agent for treating and preventing ventricular arrhythmias in patients who have experienced acute heart attacks, according to Drs. R. E. Gianelly, A. P. Spivak, J. van der Groben, and D. C. Harrison, of Stanford.

The heart muscle damage sustained during an acute heart attack makes the heart highly vulnerable to abnormalities in rhythm during the immediate post-attack period. They may reduce the pumping effectiveness of the heart and also pose the threat of progressing to cardiac arrest. Earlier studies had indicated that lidocaine reduced heart-muscle irritability after open-heart surgery and effectively curbed ventricular arrhythmias developing during the post-operative period.

The NHI grantees used the drug in 21 patients with ventricular arrhythmias following heart attacks. Each received a therapeutic dose of 25–100 mg., then was maintained by intravenous infusions of 0.5–4 mg. per minute for periods up to 72 hours.

Excessive ventricular rates were controlled in 20 instances and the frequency of premature contractions reduced in 17 patients. Therapeutic effectiveness was attained at blood lidocaine levels between 1 and 4 micrograms per cc. No side effects were observed at these levels. Side effects did occur in 2 whose blood levels rose above 8 micrograms per cc. One patient experienced a drop in blood pressure, but it returned to normal when lidocaine was discontinued. The other had two epileptic seizures. He was receiving a very high intravenous dose, having previously experienced recurrent cardiac arrest and brain oxygen deprivation.

The grantees conclude that lidocaine is a safe and effective drug for correcting existing abnormalities in ventricular rhythm and also for preventing their recurrence when given by continuous intravenous infusion.

Clinical studies by NHI grantees underscore the importance of therapy aimed at improving arterial blood pressure as well as heart output in patients with shock resulting from acute heart attacks.

A dreaded complication of heart attacks, cardiogenic shock formerly carried mortality rates ranging from 80–95%. Despite improved therapeutic techniques, it remains a major cause of death in heart attack patients. It appears to stem from the complex interplay of a number of factors: damage to the heart muscle itself, nerve reflexes originating in the autonomic nervous system, hormones from certain endocrine glands, and perhaps others. The salient features are usually failure of the heart to function adequately as a pump and the loss of normal blood vessel tone. The result is often complete circulatory collapse.

One goal of therapy is to increase the amount of blood pumped by the heart. However, the grantees report, this alone is inadequate. Unless there is also an increase in arterial blood pressure sufficient to provide adequate tissue perfusion, blood flow to vital areas is not improved and neither is the patient's clinical status.

Drs. H. S. Loeb, R. J. Pietras, J. R. Tobin, Jr., and R. M. Gunnar, of Cook County Hospital, Chicago, compared the effects of two drugs—norepinephrine and isoproterenol—in 13 patients with cardiogenic shock. Both drugs are powerful heart stimulants; but norepinephrine also acts to raise blood pressure by constricting the smallest arteries (arterioles), whereas isoproterenol dilates them.

Each patient received one, then the other drug. His response to each was evaluated in terms of average pretreatment values of heart output, arterial and venous blood pressure, and peripheral blood-vessel resistance obtained in 9 of the 13 patients.

Norepinehprine increased heart output by 15% and mean arterial blood pressure by 55%. During the period of increased arterial pressure, the patients' urinary output increased and general clinical condition improved.

Isoproterenol increased heart output by 35%, but arterial pressure fell slightly as a result of a significant decrease in peripheral blood-vessel resistance. No clinical improvement was observed during isoproterenol infusions; in fact, when

4 patients were switched from norepinephrine to isoproterenol, their clinical condition deterioriated markedly within minutes.

Other NHI grantees studied the effects of isoproterenol in patients during the first 3 days of recovery after open heart operations. The drug increased heart output, chiefly by increasing heart rate, and increased coronary bloodflow by an average of 20%. However, this increase did not keep pace with the 27% increase in left ventricular work. Moreover, heart oxygen consumption decreased by 19% as a result of reduced oxygen extraction from the blood presented to it. The sharp rise in heart work coupled with a reduced oxygen supply to heart tissues forced the heart to increase its rate of anaerobic metabolism.

These findings were reported by Drs. H. Mueller, S. Giannelli, Jr., J. J. Gregory, S. M. Ayres, and E. F. Conklin, of St. Vincent's Hospital and Medical Center, New York.

### HYPERTENSION

A new drug called Catapres (Geigy) appears to be a potent agent for reducing blood pressure in hypertension. NHI grantees report that oral doses of only 450–900 micrograms a day (a microgram is one millionth of a gram) reduced blood pressure by 20 points or to normotensive levels in 6 of 16 hypertensive patients. When Catapres was supplemented with a thiazide diuretic, similar degrees of blood-pressure control were achieved in 12 of 13 patients. The side effects noted were drowsiness and dryness of the mouth.

Intensive studies were carried out in patients receiving 300–750 micrograms of Catapres. Maximum blood pressure effects occurred after 1–2½ hours, when standing blood pressure fell by an average of 38 points, supine blood pressure by 35 points. The hypotensive effects were accompanied by reductions in heart output, peripheral blood-vessel resistance, and kidney bloodflow.

Catapres, developed in Europe, was intended for use as a nasal decongestant until it was discovered that, on the basis of weight, it was the most powerful hypotensive agent developed to date. The grantees feel that the drug shows promise in the clinical management of ambulatory hypertensive patients.

These findings were reported by Drs. A. N. Brest, K. E. Kim, G. Onesti, J. L. Cangiano, and C. D. Swartz of the Department of Medicine, Hahnemann Medical College and Hospital, Philadelphia, Pennsylvania.

A vital role in the regulation of blood pressure is assigned to specialized groups of pressure-sensitive cells called baroreceptors, which continuously monitor blood pressure in various arteries of the cardiovascular system. Perhaps the most important of these baroreceptors is the carotid sinus, located where the carotid artery (to the head) branches in the neck. Somewhat analogous to thermostats in heating or air conditioning systems, the baroreceptors are "preset" to maintain blood pressure within a narrow range. When blood pressure rises above or falls below these values, the barostats detect these changes and attempt to bring blood pressure back within this range. They act through the autonomic nervous system to bring about appropriate alterations in heart rate and output and in blood vessel tone.

There is growing evidence that, with the development of hypertension, the carotid sinus and perhaps other baroreceptors become less sensitive. This amounts to an "upward resetting" of these blood pressure regulators. The reset baroreceptors, regarding elevated blood pressure as "normal," attempt to stabilize blood pressure at excessive levels. Thus they act to sustain the hypertension whatever its original cause.

A novel approach to the treatment of hypertension involves the use of an implantable electronic device to control the activity of the carotid sinus. The device attempts to compensate for the reduced sensitivity of this baroreceptor by delivering electrical stimuli to the carotid sinus nerves. The device was tested for periods up to 12 months in 12 patients with severe hypertension by Drs. J. Tuckman, T. Reich, A. F. Lyon, and J. H. Jacobson, II, of Mt. Sinai Hospital, New York.

They report that the device effectively slowed heart rate and reduced blood pressure in 8 patients. Two patients did not respond at all to carotid sinus stimulation. In two others the device was initially effective, but lost control of blood pressure 6 and 10 months after implantation. In one of these, adjuvant use of a blood pressure drug restored control; the other patient failed to respond.

The device caused some discomfort in most patients, usually pain in the jaw, throat, inner ear or adjacent regions of the head. The grantees are currently designing and testing different types of electrodes in an attempt to eliminate these side effects.

The stimulus to the upward resetting of the baroreceptors is thought to be frequent or continuous exposure to elevated blood pressure. It is not certain that the resetting is either permanent or irreversible. In fact, there is evidence to suggest that prolonged reduction of blood pressure with drugs may sometimes result in a downward adjustment of the baroreceptors in hypertensive patients, reducing the amount of medication required for blood-pressure control or allowing it to be discontinued altogether for varying periods of time.

Drs. H. P. Dustan, I. H. Page, R. C. Tarazi, and E. D. Frohlich, of the Cleveland Clinic, studied the effects of drug withdrawal in 56 patients previously treated for periods from 1–12 years. Thirty-three patients had essential hypertension, 8 malignant hypertension, and 17 hypertension of renal origin. The periods of non-treatment ranged from 2 weeks to 10 years.

Patient response to discontinuing medication was extremely variable. In 11 patients, blood pressure promptly climbed to or toward previous hypertensive levels within 4 to 6 weeks. In most patients, blood pressure stabilized at levels some 10–15 points above treatment levels or else rose very slowly over a period of 3–27 months. Nevertheless, drug treatment eventually had to be reinstituted in all patients except 2. One, with kidney disease, had remained normotensive for 10 years; the other, with essential hypertension, had been normotensive for 5 years but died of a heart attack.

The results indicated that downward resetting of the baroreceptors often occurs during drug treatment of hypertension, but it is usually temporary. Long-term resetting occurs only infrequently.

Diuretic drugs, which increase salt and water excretion by the kidneys, are used to combat fluid retention in congestive heart failure and other clinical states causing edema. Certain diuretics also reduce blood pressure and potentiate the effects of other antihypertensive drugs.

Previously, the blood pressure effects of diuretics had been attributed primarily to the reduction in circulating plasma volume resulting from drug-induced water losses. However, salt excretion, rather than water excretion, appears to be the key to the blood pressure effects of furosemide and thiazide diuretics, accordings to Drs. M. Davidov, N. Kakaviatos, and F. A. Finnerty, Jr., of Georgetown and the District of Columbia General Hospital, Washington.

Two to 6 hours after either drug was given intravenously to patients, their blood pressures fell by an average of 16 millimeters of mercury. This was accompanied by a sharp decrease in plasma sodium concentrations and an average reduction of 500 ml (about a pint) in circulating plasma volume.

Maintenance or restoration of normal plasma volume with infusions of Dextran (a plasma substitute) did not affect the hypotensive action of either diuretic. Conversely, infusions of saline, given when the diuretics were administered, did not prevent the drug-induced reduction of plasma volume, but prevented any reduction in blood pressure.

When saline infusions were give after the hypotensive effects of the diuretics had developed, they caused no rise in blood pressure while the drug-induced sodium deficiency persisted. But when positive sodium balance was restored, blood pressure promptly climbed to pretreatment levels.

It has been estimated that 5 to 15 percent of all cases of hypertension may be due to kidney disorders, most often the obstruction of one or both renal arteries by atherosclerosis, clots, or other impediments to normal kidney bloodflow. Reduced bloodflow to the kidney causes it to release renin. In the blood this enzyme gives rise to angiotensin, a powerful blood-vessel constrictor. The renin-angiotensin system is believe to initiate renal hypertension, but whether it is also responsible for maintaining the hypertensive state is not so certain.

Many patients with renal hypertension can be cured or improved by surgery to restore normal kidney bloodflow and/or to remove a heavily damaged kidney. However, a thorough diagnostic workup is essential to select those patients most likely to benefit. Drs. J. H. Foster, R. K. Rhamy, and H. W. Scott, Jr., of Vanderbilt report that two essential tests are 1) X-ray visualization of the renal arteries to reveal and locate sites of obstruction and 2) individual kidney function tests. (In the latter tests urine is collected separately from each kidney by catheters placed in each ureter and/or the renin output of each kidney is determined separately by sampling blood from each renal vein.

The grantees summarized their operative results in 53 patients. Of these, 28 were cured, 13 improved, and 10 remained unchanged. There were 2 operative deaths. They state that most of the failures occurred in patients whose renal arterial obstructions were corrected even though individual kidney function tests had indicated that these obstructions probably were not responsible for

their high blood pressure. In 21 patients subsequently selected for surgery, primarily on the basis of individual kidney-function test results, 19 were cured or improved. In the two patients that remained unchanged, the operations failed to correct the underlying defect.

Drs. S. Sen, R. R. Smeby, and F. M. Bumpus, of the Cleveland Clinic, have isolated from kidney tissue a phospholipid compound that completely inhibits the blood-vessel response to renin and reduces blood pressure in animals with induced renal hypertension. It has proved effective against the renin of all species tested.

When injected into rats with acute or chronic renal hypertension, 8–15 mg. of the agent per kilogram of body weight reduced blood pressure by as much as 130 points. When injections were discontinued, blood pressures promptly returned to pretreatment levels. The agent had no effect on blood pressure in normal rats.

The agent appears to be a specific inhibitor of renin. It does not prevent the rise in blood pressure normally elicited by infusions of angiotensin. The grantees are currently working out the chemical structure of the agent and seeking to define the nature of its action.

### CEREBROVASCULAR DISEASE

Dr. William B. Kannel and co-workers, of the National Heart Institute's Framingham Study, report that elevated blood hemoglobin, when indicative of an elevated red-blood-cell count, appears to increase susceptibility to stroke resulting from cerebral arterial obstructions.

Moderately elevated hemoglobin appeared to double stroke risk in both men and women. It also appeared to be related to increased risk of high blood pressure, possibly the most serious factor affecting susceptibility to stroke. Among subjects with both elevated hemoglobin and high blood pressure, strokes were 7 times as frequent as among subjects having neither abnormality.

Elevated red-cell counts have been demonstrated to increase heart work, presumably by increasing blood viscosity and resistance to flow through the smallest blood vessels. It may also affect the clotting characteristics of blood. But whether and to what extent these factors affect stroke risk remains to be determined.

Radioistopic brain scans have proved clinically useful in the detection and localization of brain damage resulting from the blockade of cerebral blood vessels by clots or atherosclerotic deposits (cerebral infarction).

When injected into the cerebral circulation, the radioactive tracer (chloromerodrin labeled with mercury–203) concentrates in damaged brain tissue. When the brain is subsequently scanned by radiation detectors, the "hot spots" resulting from the concentrated radioisotope locate and define the damaged area.

The mechanism whereby the isotope concentrates selectively in damaged brain tissue had not been defined, nor had it been determined why radioisotopic scans were often negative immediately after a stroke, but were positive when the tests were repeated later.

Drs. S. Lunzer, A. W. Dudley, Jr., and A. Heyman, of Duke, studied this problem in animals with surgically induced cerebral infarction. Animals were sacrificed at intervals after the injection of the radioisotope and its localization in their brain tissues was examined. They found that infarcted areas contained 5 to 10 times as much isotope as normal ones; but it was localized, not in the damaged brain cells, but in macrophages. Macrophages are a species of white cell that ingests particulate matter, including bits of dead cells.

Negative brain scans shortly after cerebral infarction with positive scans later on are apparently a function of the time required for macrophages to concentrate in the damaged area.

### CONGESTIVE HEART FAILURE

A biochemical defect in the failing heart that may render it incapable of making full use of the chemical energy available to power its contractions has been reported by Dr. B. R. Chandler and co-workers, of the NHI Cardiology Branch.

The immediate source of energy for cardiac contraction is adenosine triphosphate (ATP). Energy generated during the combustion of foodstuffs is stored in the high-energy phosphate bonds of this compound. As needed, this

energy is released by enzymes called ATPase. ATPase activity in failing hearts averaged 39% lower than in normal hearts. Since ATPase activity controls the rate of energy release in heart muscle, the observed depression of ATPase activity may underlie the depressed heart-muscle contractility characteristic of congestive failure.

The disease process that often attacks the hearts of chronic alcoholics has been attributed by some to malnutrition, by others to a direct harmful effect of alcohol on the heart. Two studies by NHI grantees indicate that excess alcohol does produce degenerative changes in heart muscle and adversely affects heart function.

Dr. M. B. Bishop and co-workers, of Albany Medical College, fed rats a diet in which alcohol provided 36% of total calories; but the diet contained adequate quantities of protein, vitamins, and other essential nutrients. Nevertheless, after 80 days on this diet, the hearts of the animals were enlarged. Separation of heart muscle fibers and degenerative changes within them were observed under the microscope. Moreover, the heart-muscle fibers from alcoholic rats contracted less rapidly and forcefully than did fibers from control animals and were less responsive to the physiological heart stimulant norepinephrine.

The second study, by Dr. T. J. Regan and co-workers, of the New Jersey College of Medicine, involved alcoholics who had no clinical evidence of heart disease, malnutrition, or nervous system damage. Angiotensin was infused into these subjects and into 6 normal controls. Angiotensin has no direct effect on the heart, but raises blood pressure by constricting blood vessels. The normal heart responds to this blood-pressure rise with more forceful contractions and an increase in stroke volume (the amount of blood ejected per beat).

In the normal controls, stroke volume rose by 25%. In the alcoholics, pressure in the left ventricle at the end of its filling phase rose substantially, but there was no significant increase in the amount of blood subsequently ejected. These findings indicated a significant depression of left ventricular function in the alcoholics.

Subsequently, the alcoholics were studied while consuming alcohol. With increases in the total amount of alcohol consumed, there was a progressive decrease in heart output pre beat. Coronary bloodflow did not change, but samples of blood collected after passage through coronary circulation contained increasing amounts of potassium and phosphate ions and of certain heart-muscle enzymes. This suggested that alcohol resulted in the loss of cellular constituents of heart muscle fibers.

Growth retardation in children with congestive heart failure due to congenital heart disease may stem from inadequate insulin according to Drs. G. Hait, A. Gruskin, and E. P. Paulsen, of Albert Einstein College of Medicine, New York. This hormone not only promotes the uptake of glucose by the tissues of the body but also the incorporation of amino acids into protein. The impairment in both carbohydrates and protein metabolism possibly resulting from an inadequate insulin supply may account in part for these children's stunted growth and failure to thrive.

The scientists administered oral glucose loads to three groups of children: 11 normal children; 8 with heart disease but not in congestive heart failure; and 16 with heart disease and congestive failure. Concentrations of glucose and insulin were measured in blood samples collected at regular intervals thereafter. In those heart-disease patients not in congestive failure, glucose uptake and plasma insulin levels did not differ significantly from normal. However, the children in congestive heart failure exhibited delayed glucose uptake and complete suppression of insulin release from the pancreas.

Patients with congestive heart failure frequently have elevated blood levels of norepinephrine and epinephrine. These powerful heart stimulants provide important support to a failing circulation, but they are also known to inhibit insulin release.

Other NHI grantees, studying carbohydrate metabolism in patients with acquired heart disorders resulting in significant reduction of cardiac function, report that such patients show impaired uptake of glucose and abnormally low levels of circulating insulin. This impairment of insulin secretion and glucose uptake was accentuated by infusions of norepinephrine.

Preliminary evidence indicated that, in patients recovering from heart failure, the abnormalities in insulin secretion and glucose uptake diminished as heart function improved.

These findings were reported by Drs. P. D. Ettinger, H. A. Oldewurtel, and

T. J. Regan of the Department of Medicine, New Jersey College of Medicine, Jersey City, New Jersey.

A simple, reliable method of ascertaining proper maintenance dosages of digitalis in heart failure patients with impaired kidney function or in patients with altered renal function following surgery has been reported by Drs. R. J. Jelliffe and D. H. Blankenhorn, of the University of Southern California.

The dosage required to maintain body stores of digitalis must balance losses of the drug via kidney excretion. The grantees have found that maintenance doses can readily be calculated on the basis of a simple, routinely performed test of kidney function called the creatinine clearance test. The test is normally employed to measure the rate at which blood plasma is filtered by the kidney, but the grantees found that the rate at which the kidney removes creatinine from the plasma is directly proportional to the rate at which it removes digitalis. Hence, from creatinine clearance rates, which can be determined simply and quickly, the half-life of digitalis can be calculated and the appropriate dosage of the drug determined to hold body stores constant.

In patients whose renal function is expected to change, or in whom improvement or deterioration in function occur in the course of digitalis therapy, repeated creatinine clearance tests permit appropriate adjustment in drug dosage.

### COAGULATION AND FIBRINOLYSIS

Elevated levels of blood clotting factors—sometimes cited as indicative of hypercoagulability—do not of themselves increase the threat of clotting complications of cardiovascular disease. They affect blood coagulability only when present in an activated form, report Drs. S. Wessler and E. Yen, of Washington University, St. Louis. In animal experiments, the scientists studied the effects of activated and non-activated factor X. The activation of factor X is thought to be the first step in the complex sequence of events that lead ultimately to the formulation of a clot.

They found that infusions of only 2.5 units of activated factor X produced massive thrombosis in rabbits. When phospholipid, a cofactor in clotting, was added to the activated X, as little as 0.3 units resulted in thrombosis.

In contrast, when non-activated factor X was infused, 650 units did not produce clotting. Phospholipid neither induced clotting alone nor did it cause non-activated factor X to do so.

Thus it appears that whereas clotting factor deficiencies can induce bleeding tendencies. Clotting factor elevations do not result in hypercoagulability, so long as they are not activated.

Heparin, an anticoagulant added to the blood used to prime heart-lung machines, reduces the threat of clotting complications during open-heart surgery. However, after the operation, it must be neutralized to prevent excessive blood loss during the healing period. Heparin is readily neutralized by a compound called protamine sulfate; but this heparin antagonist can itself produce a bleeding tendency if given in excessive amounts.

Dr. K. Ramaswamy and co-workers, of Tufts University, Boston, report the results of their studies indicating that the recommended dosage of protamine is, in fact, excessive and may be responsible for some instances of hemorrhage occurring after open-heart procedures.

The two groups of patients studied were similar with respect to clinical status and the amount of heparin received in conjunction with heart-lung bypass. However, postoperatively, one group (33 patients) received the recommended dosage of protamine sulfate (1.02 mg. per 100 U.S.P. units of heparin), whereas in the other group (32 patients), the protamine dosage was reduced to 0.62 mg. per 100 units.

The reduced protamine dosage normalized blood clotting times within 25 minutes. Blood loss through the chest tubes ceased within 24 hours in 19 of the 32 patients and total blood drainage averaged only about 17 cc. per kilo of body weight.

In the 33 patients receiving the recommended protamine dosage, blood loss through the chest tubes had ceased in only 8 patients after 24 hours and total blood drainage averaged 29 cc/kg. Five patients required exploratory surgery for excessive bleeding and one of these died. In all 5, diffuse oozing rather than hemorrhage from some specific site was found to be the cause of blood loss. The grantees conclude that a protamine-induced bleeding tendency was probably responsible for the poorer results obtained in this group.

NHI grantees report that reflected ultrasound provides a rapid, sensitive, and safe diagnostic test for pulmonary embolism, the blockade of pulmonary blood vessels by blood clots.

Pulmonary embolism is a fairly common, frequently serious complication of inflammatory disease of the veins (thrombophlebitis), and it also poses a threat in any patient who must be immobilized for prolonged periods. Clots, usually arising in the deep veins of the legs, may break free, be carried to the right heart, then pumped to the lungs, where they become lodged in smaller arteries of the pulmonary circulation. The disorder is not easily diagnosed or its seriousness readily evaluated on the basis of clinical findings alone. Thus scientists have sought safe and reliable tests to determine the site and extent of arterial blockade as a guide to clinical management and to evaluate the effectiveness of therapy.

Two techniques are currently in clinical use. One entails injecting radiopaque contrast material into the pulmonary artery, then following its course through the pulmonary circulation with rapid-sequence x-rays to locate sites of blood-vessel obstruction. The other involves introducing albumin tagged with radioactive iodine, then scanning the lungs with a suitable radiation detector. Blood-vessel obstructions prevent the labeled albumin from reaching the portions of the lung supplied by those vessels, creating "cold spots" in the lung scan. Although both of these are effective diagnostic tests, neither is simple to perform and neither is completely without hazard to a critically ill patient.

The NHI grantees have found that ultrasound, beamed into the chest by a transmitter placed on the patient's chest, produces a distinct pattern of echoes from sections of the lung deprived of blood by arterial blockade. Such "pulmonary echograms" were obtained from 218 patients. Echograms indicative of pulmonary embolism were obtained in 65.

In 11 of these patients, the accuracy of the pulmonary echogram was confirmed by subsequent surgery or at autopsy. Thirty-six others also had radioisotopic lung scans and 2 others pulmonary x-ray arteriograms. In 36, these tests confirmed the diagnosis, and the findings correlated closely with those of the echograms. One patient with a positive echogram but a negative lung scan proved, on autopsy, to have pulmonary embolism.

The scientists found that echograms suggestive of pulmonary embolism may occasionally be produced by other lung disorders, such as lobar pneumonia, a collapsed lung, or cancer; but state that "false positive" diagnoses are unlikely if echograms are correlated with other clinical and radiological findings. They conclude that the pulmonary echogram is a rapid, simple, and safe diagnostic technique whose accuracy and sensitivity appears equal or superior to radioisotopic lung scans.

These findings were reported by Drs. C. R. Joyner, J. W. Gruber, S. J. Dudrick, and L. D. Miller, Robinette Foundation, Department of Medicine, and the Harrison Department of Surgical Research, University of Pennsylvania, Philadelphia, Pa.

Patients with pulmonary embolism stand to benefit from urokinase therapy if their symptoms have not been present for more than 2 weeks, according to Drs. E. Genton and P. S. Wolf, of the University of Colorado.

Urokinase is a drug that brings about the dissolution of blood clots by activating the body's normal clot-dissolving mechanisms. The "fresher" the blood clot, the more susceptible it is to dissolution. Earlier animal studies had indicated that urokinase could achieve near-complete dissolution of clots 7 days old and partial dissolution of 14-day-old clots. Clots older than this were resistant to attack by the drug.

Urokinase has subsequently been tested in 10 patients with pulmonary embolism documented by x-ray arteriography.

In 3 patients, symptoms had occurred within 2 weeks of urokinase therapy. All patients exhibited marked relief of symptoms, improvement of lung function, and arteriographic evidence of clot dissolution.

Three patients had experienced symptoms for more than 2 weeks, but also had evidence of fresh embolism superimposed on their pre-existing condition. In these patients urokinase therapy produced some relief of symptoms, but lung functions improved only slightly.

Three other patients had histories indicative of months to years of recurring pulmonary embolism and only slight worsening of symptoms within 2 weeks of urokinase therapy. In these patients, therapy produced no detectable improvement. The tenth patient had acute symptoms, but these proved to be due

to an old, organized clot. The patient, in shock when urokinase was administered, showed no improvement and subsequently died.

The clinical results supported the findings of the earlier animal studies: urokinase accelerates the dissolution of fresh clots, but not of "old" ones.

### SURGERY

Limited clinical experience by NHI grantees indicates that pulmonary artery and pulmonic valve malformations in patients with tetralogy of Fallot can be surgically corrected with healthy aortic and aortic-valve homografts obtained from human donors dying of causes other than cardiovascular disease.

Tetralogy of Fallot, a major cause of "blue babies," is a complex of congenital heart abnormalities. These include 1) a hole, usually large, in the muscular wall between the left and right ventricles; 2) displacement of the aorta to the right, so it receives blood from both ventricles; 3) narrowing of the portion of the right ventricle lying just below the pulmonic valve and/or malformation of the pulmonic valve itself; and 4) enlargement of the right ventricle. The overall result of this combination of defects is reduced bloodflow to the lungs and the mixing of large quantities of oxygen-poor venous blood with oxygenated blood destined for the organs and tissues of the body.

In the surgical correction of tetralogy of Fallot, pulmonic valvular malformations have proved least amenable to repair. Forcibly dilating a narrowed pulmonic valve may relieve the obstruction to pulmonary artery bloodflow, but often leaves the valve incompetent, so that it allows regurgitant flow. Replacement of the pulmonic valve with an artificial valve has not been feasible because of excessive risk of clotting complications.

Clinical experience with aortic valve homografts have shown them to be singularly free of clotting complications when used to replace diseased aortic valves. Accordingly, Drs. C. S. Weldon, R. D. Rowe, and V. L. Gott, of Johns Hopkins, used them as substitutes for deformed or congenitally absent pulmonic valves in 3 patients undergoing surgical correction of tetralogy of Fallot. All three also had pulmonary artery malformations which were corrected with aortic homografts.

One patient, who had done well for 3 months after surgery, subsequently developed bacterial endocarditis and died. The other 2 patients had uncomplicated recoveries.

A common complication of bacterial infections attacking the inner lining of the heart is heavy damage to the aortic valve. The malfunctioning valve may bring on acute heart failure, which is the most common cause of death in bacterial endacarditis. Drs. B. A. Braniff, N. E. Shumway, and D. C. Harrison, of Stanford, report that, if aortic valve incompetence precipitates heart failure that does not respond to medical treatment, valve replacement should be done whether or not the bacterial infection is under control.

The surgeons carried out valve replacements in 5 patients with life-threatening congestive heart failure developing during bacterial endocarditis. All had active endocarditis and only one had completed his antibiotic regimen. Surgery promptly reversed progressive heart failure in all 5, and no patient developed evidence of infection or heart failure during the recovery period. All patients were alive and well 7 to 28 months after surgery.

The addition of glucose, insulin, and potassium to the blood and Ringerlactate solution commonly used to prime the heart-lung machine may minimize adverse effects of prolonged heart-lung bypass in conjunction with open-heart surgery, according to Drs. A. L. Davies, M. J. Buckley, and W. G. Austen, of Massachusetts General Hospital. This "enriched" prime was tested in 15 dogs, each undergoing 2 hours of heart-lung bypass. All animals survived in good clinical condition. There was little postoperative depression of heart and nervous-system function and only minimal changes in blood acid-base balance.

Ten control animals underwent the same period of heart-lung bypass using the conventional prime of blood and Ringerlactate solution. Two died during bypass. Four survivors had moderate depression of heart function. All survivors exhibited marked abnormalities in blood acid-base balance and depression of the central nervous system.

The grantees are currently investigating the nature of the protection conferred by the glucose-insulin-potassium supplement. They suspect that it helps to maintain the integrity of cellular membranes of the heart and other tissues and thus prevents potentially harmful losses of essential electrolytes by the cells.

NHI grantees report that there is no adequate substitute for blood-volume determinations to insure restoration of normal blood volume after open-heart operations. Neither measurements of blood loss during surgery nor of central venous pressure provide sufficiently reliable guides to blood replacement therapy.

Blood volume determinations were run on 100 consecutive surgical patients as a check on the adequacy of blood replacement. The tests revealed an average deficit of 12.6 percent in 26 patients whose measured blood losses had been replaced 1.4 fold. Of 74 patients in whom replacement therapy was based on measurements of control venous pressure, near normal blood volumes were achieved in 32, but deficits ranging from 10–31 percent were detected in 22 patients. Correction of the deficits substantially improved heart performance.

Blood volume determinations are simple to perform. By one method, a measured quantity of radioactive iodine is injected and allowed enough time to become evenly distributed in the blood. A measured quantity of blood is then withdrawn and its radioactivity measured to determine the extent of dilution of the tracer. From this, the blood volume is easily calculated.

The grantees state that routine blood-volume determinations make possible accurate restoration of pre-operative blood volume, avoiding blood deficits and also overtransfusion, with its attendant threat of congestive heart failure developing during the postoperative period.

The findings were reported by Drs. R. L. Berger, M. L. Polanzak, and T. J. Ryan of St. Elizabeth's Hospital and Tufts University School of Medicine, Boston, Massachusetts.

Drs. J. M. Matloff and co-workers, of Peter Bent Brigham Hospital, Boston, report that the drug propranolol provides excellent control of post-surgical atrial arrhythmias that have failed to respond to countershock or digitalis therapy.

Efficient contraction of the heart's upper receiving chambers, or atria, aids the filling of the ventricles and thus contributes importantly to overall heart pumping performance. Atrial arrhythmias upset the smooth contraction sequence of these chambers and impede delivery of blood to the ventricles. Runaway rates of atrial contraction (atrial tachycardia) or the spasmotic, ineffectual contractions of atrial fiabrillation are often accompanied by extremely rapid ventricular rates. The combination can so severely compromise heart performance that the patient may develop congestive heart failure or serious symptoms of coronary or cerebral insufficiency.

Propranolol is a drug that selectively blocks beta receptors of the sympathetic nervous system, which exerts a considerable degree of control over heart rate and rhythmicity. Stimulation of beta receptors increases the firing rate of the heart's pacemaker (the sino-atrial node located in the upper right quadrant of the right atrium) and also affects the heart-muscle response to pacing stimuli. Blockage of beta receptors with propranolol slows the pacemaker, curbs runaway atrial and ventricular rates, and restores the normally smooth contraction sequence of the heart chambers.

The grantees used the drug in 22 patients developing refractory atrial arrhythmias after cardiac surgery. These arrhythmias had failed to respond to countershock, digitalis, or quinidine. Propranolol effectively slowed the high ventricular rates in all patients and restored normal heart rhythm in 15. The scientists conclude that propranolol, carefully used, is an extremely valuable drug for managing post-surgical atrial arrhythmias that resist conventional methods of treatment.

Congenital heart defects causing severe tissue oxygen deficiencies often result in a sharp increase in red-blood cell production. Whether this "compensatory polycythemia" is good or bad for the patient has been a matter of some controversy. An elevated red-cell count does increase the oxygen-carrying capacity of the blood; but it also increases the viscosity of the blood, making it harder for the heart to pump and increasing its resistance to flow in the smallest blood vessels.

Dr. R. L. Replogle and co-workers, of the University of Chicago Medical School, studied this problem in normal dogs and in dogs with blood-oxygen deficiencies resulting from surgically induced heart defects to interfere with bloodflow to the lungs. Red blood cell count was increased by removing a quantity of whole blood then replacing it with a concentrated red-cell suspension.

In both groups of dogs, the red-cell infusions reduced heart output from an average of 1430 ml. per minute to only 546. Blood viscosity and resistance to flow increased markedly. The overall result was a substantial decrease in the amount of oxygen reaching the tissues.

The grantees conclude that even moderate increases in red-cell count can markedly alter the flow properties of blood and produce profound circulatory and metabolic consequences. In view of the consequences noted in this study, it would appear that "compensatory polycythemia" in patients with congenital heart disease and cyanosis is more likely to worsen the tissue oxygen deficiencies than to ameliorate them.

Complex congenital heart malformations often cannot be surgically corrected during infancy. Instead, a palliative operation may be performed to keep the infant alive and reasonably healthy until he is older, when corrective surgery is less risky and more likely to succeed. A palliative procedure often employed in infants with tetralogy of Fallot or other congenital defects resulting in decreased bloodflow to the lungs is the Blalock-Taussig operation. It entails directing bloodflow from a major systemic artery (the left subclavian) into the pulmonary circulation. The left subclavian artery is severed near its point of origin, the aortic arch. The proximal portion (closest to the aortic arch) is then spliced, end-to-side, into the pulmonary artery; the other segment is tied off. The tied off segment includes a small subclavian branch, the left vertebral artery, which normally supplies some blood to the brain.

Drs. R. I. Tapper, J. S. Vasko, and J. W. Kilman, of Ohio State, had observed that, even though this operation spares the major arteries to the brain, a significant number of patients developed postoperative symptoms, usually transient, of cerebrovascular insufficiency. To determine the cause of these symptoms, they performed Blalock-Taussig operations in dogs, then studied resultant bloodflow in the arteries supplying the brain.

Feeding a large, high-pressure systemic artery into the low-pressure pulmonary circulation reduced the resistance against which the left ventricle worked in pumping blood and increased its output by about 28%. However, it also reduced the perfusion pressure of the vessels to the brain arising off the aortic arch. As a result, despite the increased heart output, there were substantial decreases in average bloodflow through the carotid arteries and the right vertebral artery. These reductions were due chiefly to substantial backflow of blood in these arteries occurring between pumping strokes.

Another factor was the left vertebral artery arising from the tied off section of the left subclavian. Bloodflow in this vessel was reversed, and the resulting blood loss to the brain averaged 50% of that reaching it through the right vertebral artery. The grantees state that this "subclavian steal" phenomenon, which might underlie symptoms of cerebral insufficiency, was eliminated by tying off the left vertebral artery.

Other NHI grantees report that the "subclavian steal" phenomenon may have been responsible for some of the failures incurred in operations requiring complete replacement of the aortic arch because of extensive aneurysms affecting that segment.

Despite success in replacing the diseased aortic segment and in re-establishing connections between the graft and arteries arising from the aortic arch, the overall operative results had been disappointing. The chief cause of failure was brain damage, apparently resulting from inadequate perfusion during surgery.

During the procedure the surgeons had clamped both subclavian arteries upstream from the vertebral arteries and had perfused the brain only via the carotid arteries. They think it likely that backward flow in the vertebral arteries downstream from the clamps may have been robbing the brain of blood. In two subsequent operations, they supplemented carotid perfusion with retrograde perfusion of the clamped subclavian and its vertebral branch (via the axillary artery). They state that this eliminated cerebral complications of aortic arch replacement.

These findings were reported by Drs. R. D. Bloodwell, D. A. Cooley, and G. L. Hallman of the Cora and Webb Mading Department of Surgery, Baylor University College of Medicine, Houston, Texas.

All heart-lung machines of current design cause some damage to red-blood cells. This damage may result in breakdown of these cells (hemolysis) or it may shorten their survival in the circulation. Studying this problem, NHI grantees found that most of the damage stemmed, not from mechanical trauma incurred during passage through the blood pump, but from interaction with the chemical substance (polymethylsiloxane) used as a defoaming agent. The chief cause of foaming is aspiration of blood from the operative site to prevent it from obscuring essential anatomical details during surgery. This is removed in a defoaming

chamber before the blood re-enters the patient's circulation. Drs. R. Wells, S. Bugdeman, and A. A. Wells, of Peter Bent Brigham Hospital and Harvard Medical School, subsequently found that blood cell damage resulting from contact with the defoaming agent could be prevented by Pluronic, an agent used to prevent fat emboli in heart-lung machines. Pluronic did not interfere with the defoaming action of polymethylsiloxane. In fact, the grantees state, certain Pluronic derivatives have defoaming actions of their own.

### BIOENGINEERING

Complete heart block usually results from disease or operative injury to the specialized conduction system that normally initiates and conveys to all parts of the heart muscle the electrical impulses causing heartbeat. Heart block may slow heart rate and decrease its output of blood below the level required to sustain normal activity, and it poses an ever present threat of arrhythmias that may progress to heart stoppage and death.

Normal heart rate may be restored and maintained in heart block patients by any of a number of currently available artificial pacemakers. These electronic devices may deliver their pacing pulses to the heart either by wire electrodes implanted in the hear muscle wall via an incision in the chest (transthoracic pacing) or else the electrodes may be introduced into the right ventricle by a catheter, usually passed into the heart via the jugular vein (transvenous pacing.)

Dr. J. W. Harthorne and co-workers, of Massachusetts General Hospital, report that transvenous pacing is attended by fewer complications and yields better long-term results than does transthoracic pacing.

Transvenous pacing was used in 56 of the 100 cases in this series. No complications were encountered during electrode implantation. There were 5 late deaths, none of them due to pacemaker failure. In the 51 survivors, 6 pacemaker problems have occurred during follow-up periods averaging 9 months. Five of these were easily corrected; the sixth required switching the patient from transvenous to transthoracic pacing.

Transthoracic pacing was used in 44 patients. Four patients failed to recover from the major surgery required for electrode placement. There were 6 late deaths, only one of which appeared due to pacemaker failure. However 25 of the 34 long-term survivors have experienced a total of 52 pacemaker problems. A major problem has been electrode breakage, apparently the result of the greater stresses imposed on transthoracic electrodes by the incessant motion of the heart. Five patients were subsequently switched from transthoracic to transvenous pacing.

The grantees conclude that, although transthoracic pacing can provide satisfactory control of heart block, the transvenous approach, being both simpler and safer, is clearly the procedure of choice.

Dr. C. A. Hufnagel, P. W. Conrad, and R. R. Schulte, of Georgetown, have developed a new artificial aortic valve that combines strength, durability, and excellent performance characteristics in a design that is anatomically very similar to the normal aortic valve.

The three leaflets of the valve, which are suspended from three vertical posts arising from the base ring, consist of a thin layer of tough, resilient polypropylene mesh embedded in soft rubbery silicone. They are designed for a flex life exceeding human life expectancy. They open under very low pressure to provide a maximum orifice during forward bloodflow, but close firmly and completely at the end of the ventricular pumping stroke to prevent backflow. The base ring configuration is specifically designed to fit the aortic annulus, the ring of tissue remaining after excision of the aortic valve and to which the replacement valve is anchored. To prevent clotting on valve surfaces, the silicone coating of the base ring, valve leaflets, and supporting posts are specially treated to incorporate heparin, an anticoagulant.

The valve has been installed in nine patients. All survived and had an unusually smooth postoperative course. All have exhibited excellent postoperative valve function.

NHI grantees report the development of a miniaturized electromagnetic flowmeter probe that can be mounted in the tip of a catheter only 3.3 mm. in diameter. The flowmeter probe generates a magnetic field. When blood, a conductor of electricity, flows by the probe it cuts across the surrounding magnetic lines of force and induces a voltage in the probe that is proportional to the velocity of flow.

The grantees tested the flowmeter in the aortas of dogs, comparing the results with those obtained with a conventional perivascular flowmeter that must be

implanted around the blood vessel in which flow is monitored. The measurements obtained wtih the catheter tip flowmeter were in good agreement with those obtained with the perivascular flowmeter, both at high and low flow rates.

The advantages of the new device are that it does not require surgical exposure of blood vessels to measure flow within them and can be freely maneuvered along the length of the vessel rather than measuring flow only at a single site.

A new heart assist device has performed well in limited clinical trials conducted by Drs. W. S. Blakemore, E. T. Tragus, C. L. Arnstadt, and A. E. Baue, of the University of Pennsylvania. The device has a glass outer housing that is placed around the heart. The housing contains an elastic diaphragm that fits snugly around both heart pumping chambers.

Compressed air, forced into the housing, causes the diaphragm to squeeze down on both ventricles, thus assisting them in expelling blood. Subsequently, the air is sucked out, pulling the elastic diaphragm back from the ventricles and allowing them to refill.

Previous studies had established that the device could maintain a normal heart output and blood pressure in animals despite induced fibrillation (spasmotic, uncoordinated heart contractions). Subsequently it was tested in three patients. In two, the device sustained the circulation for two hours and could have sustained it longer had there been hope for recovery. The third patient had severe fibrillation that had not responded to heart massage or countershock. The device sustained his circulation for 41 minutes, after which defibrillation was successful and the patient survived.

### BUDGET REQUEST

In conclusion, Mr. Chairman, the request for the National Heart Institute is $169,735,000 for 1969 as compared with an operating level of $165,748,000 in 1968, an increase of $3,987,000.

Senator Hill. That's no great increase, is it?

Dr. Fredrickson. No, sir.

Of the requested increase, $1,248,000 will be allocated for extramural research and training activities as follows: $629,000 for research grants, $165,000 for fellowships, and $454,000 for training grants. The remaining $2,739,000 will be allocated for direct operations to provide an increase of $558,000 for laboratory and clinical research, $2,004,000 for collaborative research and development in the artificial heart-myocardial infarction program, and $177,000 for biometry, epidemiology, and field studies, for the review and approval of grants, and for program direction.

I shall be happy to answer any questions.

### BUDGET BUREAU REDUCTION

Senator Hill. If you had received the $19,413,000 which the Budget Bureau cut, how would that largely have been used?

Dr. Fredrickson. This increase related primarily to three major programs, Senator Hill. One of these is the artificial heart-myocardial-infarction program in which we seek more opportunities for development of pumps and assist devices and for establishing centers to study myocardial infarction in depth; we have more program needs than we are able to fund at the present time.

The second major program involved is the cardiovascular research training centers for which we have had planning grant funds for the past several years, but for which we do not yet have significant operational funds.

And a third aspect involved in the reduction will be the general area of research grants.

Senator Hill. You need this planning; don't you?

Dr. FREDRICKSON. In terms of the centers, sir, you mean?

Senator HILL. Yes.

Dr. FREDRICKSON. Yes; we do have a number of planning grants out now and we are ready when funds become available to begin some of these centers in their operational phase.

### CARDIOVASCULAR DISEASES: DEATH RATE DECLINE

Senator HILL. It seems to me, I may be wrong, but it seems to me we have made about as much progress in heart and vascular disease as we have in any other field; haven't we?

Dr. FREDRICKSON. It has been a dramatic decade, sir. All of the major cardiovascular diseases save one have shown a decline in death rate in the past years. In the one outstanding exception we have also seen a leveling out; this is the major disease problem in the United States, hardening of the arteries or arteriosclerosis.

### FLOW OF BLOOD TO BRAIN

Senator HILL. I had that in mind when I spoke about the blood vessels in the brain. I had in mind one of the greatest surgeons we had in the country; I'm sure that's what he suffers from today. I don't mind telling you frankly, Dr. Ravkin at the University of Pennsylvania.

Dr. FREDRICKSON. It is a big problem. We have over 200,000 deaths each year from cerebrovascular diseases.

Senator HILL. You have not made much progress in the field then?

Dr. FREDRICKSON. I think this has been one of the most difficult problems to tackle, although we are learning more about the flow of the blood to the brain and ways of determining its insufficiency; but it is one of our toughest research problems at the present time.

Senator HILL. With this budget figure like it is, how much are you going to be able to do on this?

Dr. FREDRICKSON. We shall be able to almost hold our own in terms of the current research, we fall a little behind the cost-of-living increases, sir.

Senator HILL. You will not be able to keep up?

Dr. FREDRICKSON. No, we will not.

Senator HILL. It seems to me, that's a very compelling need?

Dr. FREDRICKSON. Yes, it is a very important problem.

Senator HILL. Isn't that an important problem?

Dr. FREDRICKSON. Yes, it is.

Senator HILL. As people get older, they have that trouble more and more, don't they?

Dr. FREDRICKSON. Yes, it is more common when people grow older.

Senator HILL. How much in terms of funds did you seek for this additional work?

Dr. FREDRICKSON. Senator Hill, I believe that at the present time we have approximately $1.63 million research grants in cerebrovascular diseases at the present time. We had hoped to increase this in 1969.

Senator HILL. But you did not get the increase?

Dr. FREDRICKSON. We will not be able to increase this amount.

JOHN SHAW BILLINGS, ARCHITECT

Senator HILL. Let me ask you a question that's a little bit off the subject. I notice you were house officer at Peter Bent Brigham Hospital in Boston.

Dr. FREDRICKSON. Yes, sir.

Senator HILL. John Shaw Billing designed the hospital at Johns Hopkins. Was it Peter Brigham or Massachusetts General he assisted so much in designing, or was that a little before your day?

Dr. FREDERICKSON. It was before my day. He may have been involved; whoever it was was very much disposed to the old European pavilion style.

When I was there, those walkways were still open in wintertime. Due to the cases of pneumonia among the house staff, they had to close them.

Senator HILL. Do you know, Dr. Shannon?

Dr. SHANNON. No, I had not realized he was in that aspect of the business.

Senator HILL. He helped design the Johns Hopkins Hospital, Johns Hopkins as great as it is and has been over the years, it is a relatively new school compared to a school like the University of Pennsylvania, or Harvard, I know he helped design the hospital there at Hopkins and he either helped design Peter Bent Brigham or Massachusetts General; I wasn't sure which of the two it was. I would think the Surgeon General would know.

Dr. STEWART. No, he doesn't either.

Senator HILL. You mean it was before your day, too?

Dr. STEWART. It certainly was.

WITNESS STUDY OF MEDICINE AT UNIVERSITY OF MICHIGAN

Senator HILL. I guess I can look it up and find out. I see you took your medicine at the University of Michigan.

Dr. FREDRICKSON. Yes, sir.

Senator HILL. Who was the head man in surveying at Michigan when you were there?

Dr. FREDRICKSON. Dr. Fredrick Coller was the chief surgeon there.

Senator HILL. Head of the department of surgery?

Dr. FREDRICKSON. Yes, he was.

Senator HILL. You have one great thing in your advantage, you are a relatively young man. Born after the war to end all wars.

Dr. FREDRICKSON. Yes, that's true, sir, although there were a few after that.

Senator HILL. We didn't quite end the war, did we?

Dr. FREDRICKSON. We failed.

Senator HILL. Yes, we failed.

WITNESS DEVOTION OF FULL TIME TO DUTIES AS CHIEF OF LABORATORY OF MOLECULAR DISEASES

Anything else you would like to add? What are you going to do at NIH, if you are not going to leave the Heart Institute?

Dr. FREDRICKSON. I am at this time also the chief of the laboratory of molecular diseases, which is the laboratory that has the major share

of the study of hardening of the arteries—I am going back to give full time to this issue.

Senator HILL. To the very field we are talking about?

Dr. FREDRICKSON. Yes, I am. It has been somewhat neglected, I am afraid, with my double duties.

Dr. Shannon mentioned our particular area of work. At the moment it is the development of a practical system which can be used widely for the determination of defects in the blood fat patterns. We have been able to establish a number of familial diseases which have a very high relationship to hardening of the arteries and through this technique we hope to be able to develop a more specific attack on this problem.

Senator HILL. You are going to work in that field?

Dr. FREDRICKSON. Yes, sir; also in that field.

Senator HILL. That sounds most interesting and challenging and I would say it sounds most timely to me. It is a tremendous problem.

Dr. FREDRICKSON. Yes, there is great opportunity there for advance.

Senator HILL. I am delighted that you are not leaving the Heart Institute and that you are going to stay there and work in this field at the Institutes.

Dr. FREDRICKSON. Yes, sir; I am looking forward to it, sir.

Senator HILL. How long have you been head of the Heart Institute?

Dr. FREDERICKSON. For 18 months.

FORMER INSTITUTE DIRECTOR, DR. GRANT

Senator HILL. Your predecessor was ——

Dr. FREDRICKSON. Dr Grant, sir, Dr. Robert Grant.

He died of this very problem, he had a heart attack.

Senator HILL. That's what I thought. He died of this very thing you and I are talking about.

Dr. FREDRICKSON. Yes, sir, quite tragically.

Senator HILL. Sure, rather suddenly, unexpectedly, I picked up the Washington paper and saw where the head of the Heart Institute had died of this very condition we have been talking about.

Dr. FREDRICKSON. That is correct.

Senator HILL. He had not been in there too long, had he?

Dr. FREDRICKSON. I think about 5 months.

Senator HILL. His predecessor was Dr.——

Dr. FREDRICKSON. Stewart.

Senator HILL. Well, Dr. Stewart escaped before the problem caught up with him.

Dr. FREDRICKSON. Yes, he did.

Dr. STEWART. I hardly had a chance. I was only there about 6 weeks.

DEATHS FROM HEART DISEASE

Senator HILL. I remember Dr. Grant's death well. What a shock it was. He was a relatively young man.

Dr. FREDRICKSON. He was 50 years old.

Senator HILL. Just 50 years old?

Dr. FREDRICKSON. Yes, we have 150,000 of those deaths every year under age 65.

Senator HILL. Under age 65?

Dr. FREDRICKSON. Yes. That's twice the rate of Sweden.

Senator HILL. How do you explain that?

Dr. FREDRICKSON. We don't know. Of course, that is one of the major problems we need to continue in research. It is possibly due somewhat to diet, not entirely so. This is a disease that involves many factors and dissecting out each of these is really our great challenge today.

Senator HILL. I see all these advertisements about canned food of all kinds, sorts and descriptions. I am just wondering whether that plays any part.

Dr. FREDRICKSON. Canned food or the canning of foods has not been indicated in any way.

Senator HILL. I don't mean the fact it's canned; I wonder what maybe they put in there as a preservative or something of that kind.

Dr. FREDRICKSON. It's possible, of course, but there has never been any research that has exposed the possibility.

Senator HILL. You will get into all of this, won't you?

Dr. FREDRICKSON. Yes, we are very heavily engaged in that area.

Senator HILL. All right.

Anything you gentlemen want to add? Dr. Shannon?

### U.S. Diet of Unsaturated Fat Margarine

Dr. SHANNON. Speaking about food, the thought occurred to me that one thing that might be very pertinent to the problem we are talking about is that the American diet has changed very substantially in the past 5 years. It has gone from butter to margarine, and now from margarine to margarine with a very high proportion of unsaturated fatty acid.

This is something we will look into.

Senator HILL. It is certainly well worth investigating; isn't it?

### Dietary Supplement Development

Dr. SHANNON. It is not a problem that is going to be solved by a specific time. The disease starts in the late twenties and early thirties. Eventually what is going to happen, I'm sure, is that some food substance may be found, comparable perhaps to a vitamin, that affects the metabolism of the body. It could then be introduced as a normal dietary supplement, even as we take vitamins today. It would be taken for life.

### Consideration as Biologic Change Accompanying Age

You talk about it happening in the male at age 30, or beginning at that time to show signs, the female after menopause. This is delayed primarily, apparently because of the intricate setup of the female, but we have built into our biological mechanisms this susceptibility to this peculiar disease that while it's not a normal—not considered a normal effect of simple aging, it actually happens with age in so many people as I think to warrant consideration as one of the biologic changes that accompany age in a very large proportion of our people.

When one starts meddling with the internal economy of the body and does it in a fashion that particularly will have to be done for decades, it makes the problem even more difficult.

Senator HILL. It makes it more difficult.

Dr. FREDERICKSON. Yes, it's the premature expression of this disease, the premature expression in our population that is the real serious problem. I think we are on the threshold of real opportunity in this particular area of research, but it is going to take a lot of very careful trials in large populations to get the answer, I am sure.

But a lot of basic research is needed to tell us which of the right paths we must follow.

Senator HILL. I spoke earlier of Christopher Columbus coming over here in 1492. You are now the discoverer in this field. You have the job. You have this job, isn't that right, Dr. Stewart?

Dr. STEWART. That's right.

Senator HILL. Anything you would like to add, Dr. Stewart?

Dr. STEWART. No, sir.

Senator HILL. As former head of the Heart Institute? How long were you head of the Heart Institute?

Dr. STEWART. About 6 weeks. [Laughter.]

Senator HILL. You didn't stay there very long, did you?

Dr. STEWART. No, sir; I was passing through.

Senator HILL. You saw the problems and moved on. [Laughter.]

Dr. STEWART. I sometimes wonder if it wouldn't have been better if I had stayed.

Senato HILL. Anything you would like to add, Doctor?

Dr. FREDERICKSON. That's all I have, sir.

Senator HILL. You brought us some fine testimony, sir; anything you want to add, sir?

Mr. HENSCHEL. No, sir.

Senator HILL. How about our new man?

Dr. COOPER. No, sir.

## National Institute of Dental Research

STATEMENT OF DR. SEYMOUR J. KRESHOVER, DIRECTOR
ACCOMPANIED BY:
DR. JAMES A. SHANNON, DIRECTOR, NATIONAL INSTITUTES OF HEALTH
HERBERT C. CHRISTOFERSON, EXECUTIVE OFFICER, NATIONAL INSTITUTE OF DENTAL RESEARCH
DR. RICHARD C. GREULICH, DIRECTOR OF INTRAMURAL RESEARCH, NATIONAL INSTITUTE OF DENTAL RESEARCH
MRS. FRANCES H. PETTINATO, BUDGET OFFICER, NATIONAL INSTITUTE OF DENTAL RESEARCH
JAMES A. HICKEY, ACTING FINANCIAL MANAGEMENT OFFICER, NATIONAL INSTITUTES OF HEALTH
DR. WILLIAM H. STEWART, SURGEON GENERAL
CHARLES MILLER, CHIEF FINANCE OFFICER
JAMES B. CARDWELL, DEPUTY ASSISTANT SECRETARY, BUDGET

### Appropriation Estimate

"NATIONAL INSTITUTE OF DENTAL RESEARCH"

"For expenses, not otherwise provided for, necessary to enable the Surgeon General to carry out the purposes of the Act with respect to dental diseases and conditions, [$30,307,000] *$30,414,000.*"

AMOUNTS AVAILABLE FOR OBLIGATION

| | 1968 | 1969 |
|---|---|---|
| Appropriation | $30,307,000 | $30,414,000 |
| Transfer to "Operating expenses, Public Buildings Service," General Services Administration | −19,000 | |
| Cutback from the 1968 President's budget required by H.J. Res. 888 | −551,000 | |
| Total currently authorized for obligation | 29,737,000 | 30,414,000 |
| Plus proposed release of reserves for increased pay costs | 184,000 | |
| Total available for obligation | 29,921,000 | 30,414,000 |

Disposition of cutback:

| | |
|---|---|
| To be used for pay costs in this account | $184,000 |
| To be returned to Treasury | 367,000 |
| Total cutback | 551,000 |



92-753—68—pt. 1——95

OBLIGATIONS BY ACTIVITY

| | 1968 estimate | | 1969 estimate | | Increase or decrease | |
|---|---|---|---|---|---|---|
| | Positions | Amount | Positions | Amount | Positions | Amount |
| GRANTS | | | | | | |
| Research | | $15,626,000 | | $15,636,000 | | +$9,000 |
| General research support grants | | (1,256,000) | | (1,194,000) | | (−62,000) |
| Scientific evaluation grants | | (42,000) | | (42,000) | | |
| Categorical clinical research centers | | (400,000) | | (400,000) | | |
| Dental research institutes | | (3,000,000) | | (3,000,000) | | |
| Fellowships | | 1,971,000 | | 2,015,000 | | +44,000 |
| Training | | 5,469,000 | | 5,609,000 | | +140,000 |
| DIRECT OPERATIONS | | | | | | |
| Laboratory and clinical research | 231 | 4,541,000 | 236 | 4,740,0000 | +5 | +199,000 |
| Collaborative research and development | 4 | 841,000 | 4 | 844,000 | | +3,000 |
| Biometry, epidemiology, and field studies | 22 | 432,000 | 22 | 435,000 | | +3,000 |
| Review and approval of grants | 39 | 647,000 | 40 | 706,000 | +1 | +59,000 |
| Program direction | 26 | 403,000 | 27 | 439,000 | +1 | +36,000 |
| Total obligations | 322 | 29,921,000 | 329 | 30,414,000 | +7 | +493,000 |

OBLIGATION BY OBJECT

| | 1968 estimate | 1969 estimate | Increase or decrease |
|---|---|---|---|
| Total number of permanent positions | 322 | 329 | +7 |
| Full-time equivalent of all other positions | 5 | 5 | |
| Average number of all employees | 308 | 315 | +7 |
| Personnel compensation: | | | |
| Permanent positions | $2,903,000 | $3,007,100 | +$104,100 |
| Positions other than permanent | 30,000 | 30,000 | |
| Other personnel compensation | 32,000 | 32,000 | |
| Total personnel compensation | 2,965,000 | 3,069,100 | +104,100 |
| Personnel benefits | 337,000 | 347,100 | +10,100 |
| Travel and transportation of persons | 130,000 | 147,800 | +17,800 |
| Transportation of things | 30,000 | 36,000 | +6,000 |
| Rent, communications, and utilities | 97,000 | 101,000 | +4,000 |
| Printing and reproduction | 35,000 | 35,000 | |
| Other services | 312,000 | 338,000 | +26,000 |
| Project contracts | 629,000 | 629,000 | |
| Services of other agencies | 200,000 | 200,000 | |
| Payment to "National Institutes of Health management fund" | 1,534,000 | 1,601,000 | +67,000 |
| Supplies and materials | 370,000 | 394,000 | +24,000 |
| Equipment | 230,000 | 271,000 | +41,000 |
| Grant, subsidies, and contributions | 23,057,000 | 23,250,000 | +193,000 |
| Subtotal | 29,926,000 | 30,419,000 | +493,000 |
| Deduct quarters and subsistence charges | 5,000 | 5,000 | |
| Total obligations by object | 29,921,000 | 30,414,000 | +493,000 |

*Summary of changes*

| | |
|---|---|
| 1968 enacted appropriation | $30,307,000 |
| Transfer to "Operating expenses, Public Buildings Services," General Services Administration | −19,000 |
| Cutback from the 1968 President's Budget required by H.J. Res. 888 | −551,000 |
| Proposed release of reserves for increased pay costs | +184,000 |
| 1968 estimated obligations | 29,921,000 |
| 1969 estimated obligations | 30,414,000 |
| Total change | +493,000 |

| Increases | Base | | Change from base | |
|---|---|---|---|---|
| | Positions | Amount | Positions | Amount |
| A. Built in: | | | | |
| 1. Annualization of 1968 pay increases | | | | $42,000 |
| 2. One extra day of pay in 1969 | | | | 11,000 |
| Total built-in increases | | | | 53,000 |
| B Program: | | | | |
| 1. Research grants | | $15,617,000 | | 9,000 |
| 2. Fellowships | | 1,971,000 | | 44,000 |
| 3 Training grants | | 5,469,000 | | 140,000 |
| 4 Laboratory and clinical research | 231 | 3,370,000 | 5 | 125,000 |
| 5. Review and approval of grants | 39 | 444,000 | 1 | 35,000 |
| 6. Program direction | 26 | 282,000 | 1 | 20,000 |
| Total program increases | | | 7 | 373,000 |
| Payment to "National Institutes of Health management fund" for centrally furnished services: | | | | |
| Laboratory and clinical research | | 1,171,000 | | 33,000 |
| Collaborative research and development | | 6.000 | | 2,000 |
| Review and approval of grants | | 203,000 | | 19,000 |
| Program direction | | 121,000 | | 13,000 |
| Total management fund increases | | | | 67,000 |
| Total increases | | | 7 | 493,000 |
| Total net change requested | | | +7 | +493,000 |

EXPLANATION OF CHANGES

*Research grants.*—The net increase of $9,000 represents an increase of $934,000 for competing requirements of the regular program. This is offset by a decrease of —$863,000 in noncompeting continuations, and a decrease of —$62,000 in the general research support grant program.

*Fellowships.*—The increase of $44,000 will provide funds for increased stipends for postdoctoral awards.

*Training.*—The increase of $140,000 will provide funds for increased stipends for postdoctoral awards.

*Laboratory and clinical research.*—The increase of $125,000 and 5 positions will allow for expansion of research in dental caries and oral and related diseases.

*Review and approval of grants.*—The increase of $35,000 will provide support for one additional position necessary in the management of the extramural programs.

*Program direction.*—The increase of $20,000 will support one additional position in the Office of the Director in the area of program analysis and review.

EXPLANATION OF TRANSFERS

| | 1968 estimate | Purpose |
|---|---|---|
| Transferred to: | | |
| "Operating expenses, Public Building Service," General Services Administration. | —$19,000 | Transfer of rental costs to GSA. |

JUSTIFICATION—NATIONAL INSTITUTE OF DENTAL RESEARCH

| | | | | | | |
|---|---|---|---|---|---|---|
| Personnel compensation and benefits | 322 | $3,302,000 | 329 | $3,416,200 | +7 | +$114,200 |
| Other expenses | | 26,619,000 | | 26,997,800 | | +378,800 |
| Total | 322 | 29,921,000 | 329 | 30,414,000 | +7 | +493,000 |

GENERAL STATEMENT

The National Institute of Dental Research conducts and supports basic, clinical, and applied research and research training, in the causes, diagnosis, prevention, and cure of oral diseases and disorders: (1) conducts intramural laboratory, clinical and field research, (2) supports dental and medically-related research and research training by assisting individuals, universities, institutions, and agencies through grants-in-aid for research projects, training, fellowships, and dental research institutes, (3) conducts and supports collaborative and developmental research programs aimed at specific dental problems where major advance seems clearly possible, and (4) disseminates and supports dissemination of research findings and related information. The long-range objective of the Institute is the improvement in the oral health of all individuals through the greater understanding of the biological phenomena underlying oral diseases and disorders, the advancement of capability for the diagnosis, treatment, and prevention of oral disease, and the acceleration of the effective flow of new knowledge to health practice.

RESEARCH GRANTS

| | 1968 estimate | 1969 estimate | Increase or decrease |
|---|---|---|---|
| Research projects | $10,919,000 | $10,990,000 | +$71,000 |
| Special programs | 4,698,000 | 4,636,000 | −62,000 |
| Total research grants | 15,617,000 | 15,626,000 | +9,000 |

PROGRAM PLANS FOR 1968 AND 1969

*Dental caries and hard tissues program*

Dental caries is a multifactorial disease resulting from the interaction of three different categories of contributory factors: host resistance, dietary substrate, and oral microflora. Accordingly, a concerted effort will be continued to (1) acquire additional definitive information on agents such as fluoride which enhance the resistance of the tooth to destructive acid attack, (2) investigate the chemotherapeutic elimination or control of the noxious microorganisms involved, and (3) seek ways of reducing the fermentable, acid producing ingredients of the diet.

Since the effectiveness of fluoride in preventing dental decay is seemingly largely dependent upon the fluoride content of the enamel, studies of factors affecting enamel uptake of fluoride will continue to be emphasized. Of fundamental importance to this research are additional investigations of the precise crystal structure of dental hard tissues, including the process by which they become mineralized and their chemical interaction with the body fluids. The investigation of the role of trace elements other than fluoride in the resistance of the tooth to dental caries also will be encouraged.

The observation that the organisms responsible for the initiation of dental decay are streptococci requires further study of their metabolic behavior in both man and lower forms of mammalian life. Thus, investigators are seeking to compare the relative ability of certain microorganisms to produce acid from a variety of carbohydrates commonly found in the diet. Other research has as its objective clarification of the growth requirements and immunologic specificities of these microorganisms, and the chemical pathways involved in the development of caries. Studies of the distribution of potentially cariogenic streptococci in human populations varying widely in susceptibility to dental caries will be continued.

Since the microorganisms implicated in dental caries have been found to produce highly adherent bacteria-rich films on tooth surfaces (plaque) which are considered a prerequisite for the development of the disease, efforts will be intensified to investigate further the chemical nature of this material and the factors which affect its deposition. The recent observation in animals that the plaque-like substances which adhere to the crown of the tooth can be dissolved by the enzyme dextranase suggests a possible means of preventing dental decay in man through its administration. Studies of the use of antibiotics in the control of decay-producing microorganisms will be supported in human population

groups, as will be an evaluation of the effect of substituting in the diet sugar thought to be less conducive to dental decay.

*Periodontal diseases and soft tissues program*

Periodontal diseases include a number of conditions affecting the investing tissues of the dentition. Since greater knowledge of the normal structure and function of these components is critical to the better understanding of periodontal diseases and their ultimate prevention, basic science studies of the normal bone, connective tissues and epithelial covering of the oral cavity will be continued during 1968 and 1969.

Periodontal diseases are commonly characterized by a loss of the epithelial attachment to the tooth with a concurrent or ensuing degradation and resorption of the connective tissue and bone supporting the tooth. Studies of gingival wound healing and the prevention and inhibition of bone resorption will be encouraged. Emphasis will be placed on histopathological and biochemical studies to clarify the relationship between gingival inflammation and alveolar bone resorption.

Recent developments of animal model and tissue culture systems for the investigation of periodontal diseases have permitted the identification of a number of potential physical, physiological and psychological factors in the etiology of periodontal diseases. Studies designed to evaluate the interactions of these factors, as well as to identify additional contributing conditions, are being supported. Other research into the status of host tissues and the natural resistance of these tissues to periodontal diseases is also being encouraged.

In order to accelerate clinical research in periodontal diseases, an accurate and reproducible measurement technique must be developed for the assessment of clinical changes occurring in periodontal tissues during disease and therapy. Thus, research will focus on the development of direct, radiographic, and photographic measurement techniques.

*Oral and dental infection and conditions*

The most common oral soft tissue lesions are herpes simplex (fever blisters and cold sores) and aphthous stomatitis (canker sores). The clinical histories of these conditions show a common pattern of frequent recurrence at irregular intervals following an intial attack, usually in childhood. The recurrence of the herpetic lesions can usually be correlated with a lowering of host resistance through systemic or local stress situations, i.e., fever, sunburn, and trauma.

Investigations designed to define better the pathogenesis of these oral lesions will be carried out, and special emphasis given to study at the cellular level of the triggering mechanism which results in their recurrence. Development of improved diagnostic techniques and therapeutic measures for these diseases will also be encouraged.

*Oral neoplasia*

Approximately six percent of all malignancies diagnosed occur in the oral cavity. Current therapeutic techniques, primarily surgical and radiation procedures, result in substantial morbidity and residual disfigurement of patients. Obviously, research into early detection and improved diagnostic techniques for oral cancer is needed, as is an exploration of chemotherapeutic agents and other approaches that can control the disease without causing tissue destruction and facial disfigurement.

*Salivary gland physiology*

The salivary gland system produces and secretes the liquid environment of the oral apparatus. Recent studies have established that salivary secretions play a role in most diseases of the teeth and supporting structures. Directing attention particularly to the pathogenesis of dental caries and the periodontal diseases, current studies will be carried out to (1) further define the role of the organic and inorganic constituents of saliva in disease initiation and progression, and (2) determine the metabolism of proteins by salivary glands.

*Normal and abnormal growth and development including congenital (genetic) and acquired diseases and anomalies*

The evaluation and refinement of surgical and rehabilitative treatment for the cleft palate child is to be continued. Studies will embrace (1) the identification of diagnostic procedures for determining the anatomical and physiological adequacy of the oral structure for speech; (2) the better understanding of sensory and motor mechanisms in the pharyngeal, laryngeal, and oral area; (3)

the development of standard measures of the degree of speech competency; (4) the approaches to better restoration of masticatory and overall neurological function; and (5) the attainment of optimum dental and facial growth. Studies of psychosocial factors which affect the adjustment of the cleft palate individual and his family to society will be continued as corollaries to these studies.

Studies of the causes of the cleft syndromes to clarify genetic and other developmental factors are to be emphasized. In investigations of teratogenic agents responsible for oral-facial malformations, emphasis will be placed on the mode of action using biochemical methods. Particular attention will be paid to interspecies variability including selected sub-human primates and the pharmacological distribution and metabolism of specific agents which produce cleft palate and other oral-facial malformations. It is anticipated that two new centers for multi-disciplinary studies into the etiology of clefts will be started by 1969.

The development of interceptive and corrective treatment procedures for malocclusion will be continued. Epidemiologic studies will be encouraged to develop criteria for assessing the prevalence and severity of the occlusal anomalies in populations. These criteria should aid in detecting the need for preventive orthodontic care at an early age.

Anthropological and other related studies are needed to provide information concerning the normal growth and development patterns of the oral-facial region. Such knowledge is necessary for the early diagnosis of incipient malocclusion. Proceeding from this base, clinical orthodontic research programs will be needed to develop practical techniques to prevent malocclusion and thereby reduce or perhaps eliminate the need for corrective therapy. In addition, projects aimed at evaluating prevention and interceptive procedures for the treatment of malocclusion, which are applicable to large groups of individuals, will be supported. Research will also examine tissue response (e.g. bone changes) to various mechanical and physical forces as encountered in orthodontic therapy; and longitudinal and comparative studies in the area of physical anthropology will be continued to provide the necessary correlations between dental age, chronological age, and maturity.

As part of a program of collaborative research with various treatment and rehabilitation resources, support will be given to the development of centers for storage, retrieval, analysis, and dissemination of data collected in studies of congenital and acquired anomalies.

*Materials science*

Since 98 percent of the population suffers from dental caries, any significant improvement in restorative materials and techniques would have a far-reaching impact. A concerted effort will be directed to the development of an adhesive filling material that will bond chemically to the hard structures of a tooth. As part of the broad study of physical and chemical properties of synthetic and biological materials and their relations to the oral environment, bonding mechanisms and properties of various substances will be examined.

Emphasis will also be placed on the development of biologically acceptable implants to replace lost or missing teeth. Continuing studies over the past five years show that plastic implants have been uniquely successful in being maintained in the jaws of sub-human primates in the same functional capacity as are natural teeth. Clinical trials with human subjects will be conducted as soon as the physical and toxicological properties of the plastic implants are determined.

Efforts are being made to spur progress in materials science by bringing the skills and knowledge of industry increasingly to bear on oral health problems.

The number of individuals suffering aesthetic and functional defects from radical surgery for the removal of cancerous tissue is increasing. The impressive survival rate of these persons, who now appear as 30,000 new cases each year, and the increasing number of congenital oral-facial defects in the expanding population, impose an obligation to place greater emphasis on developing prostheses (replacement parts) which are more functional and which better meet aesthetic requirements. Accordingly, studies which characterize the physical, chemical, toxicological, and aesthetic properties of materials for maxillofacial prosthesis will be carried out, and clinical evaluations will be made as new materials become available. One aspect of this research will focus on polymer degradation due to mechanical stress, chemical absorption, surface defects, and ultraviolet light exposure. Hopefully, materials and fabrication methods can be altered to eliminate or circumvent failure of restorations and to lessen their cost to the patient.

*Dental research institutes (centers)*

The national purpose of the newly established dental research institute grant support program is to create centers of excellence in the sciences related to oral health. The program is designed to develop broad, interdisciplinary, university-based complexes serving national as well as regional purposes with adherence to high standards of scientific merit and fiscal accountability. The program seeks to attract to the dental environment and to the solution of oral health problems the knowledge and skills of personnel in disciplines not heretofore intimately involved in dental research.

The institutes will build on and extend existing institutional research strengths, provide for participation in multiple disciplines, facilitate the cooperation of a broad range of biological, physical, and social sciences in the study of problems of common interest, and interact with the educational programs of their parent universities by having appreciable components of their investigator staffs serve also as members of the academic departments that represent their basic fields of competence. The institutes will also seek out and align themselves, wherever practicable, with other existing regional resources, including educational and research institutions, hospitals, computer facilities, Medlars regional centers, and primate colonies. Such interactions will provide added strengths to other institutions within the geographic areas.

Currently, five dental research institutes are in various stages of development at the following universities: Alabama, Michigan, North Carolina, Pennsylvania, and Washington. It is expected that two or possibly three more centers will be initiated in 1968 and 1969.

DISTRIBUTION OF RESEARCH GRANTS

| | 1968 estimate | | 1969 estimate | | Increase or decrease | |
|---|---|---|---|---|---|---|
| | Number | Amount | Number | Amount | Number | Amount |
| Noncompeting continuations | 225 | $8,581,000 | 196 | $7,718,000 | −29 | −$863,000 |
| Competing projects | 72 | 1,853,000 | 92 | 2,872,000 | +20 | +1,019,000 |
| Supplementals | | 485,000 | | 400,000 | | −85,000 |
| Subtotal, regular program | 297 | 10,919,000 | 288 | 10,990,000 | −9 | +71,000 |
| General research support | | 1,256,000 | | 1,194,000 | | −62,000 |
| Scientific evaluation | | 42,000 | | 42,000 | | |
| Categorical clinical research centers | | 400,000 | | 400,000 | | |
| Dental research institutes | | 3,000,000 | | 3,000,000 | | |
| Total, research grants | 297 | 15,617,000 | 288 | 15,626,000 | −9 | +9,000 |

RESEARCH GRANTS PROGRAM ANALYSIS

| Fields | 1968 estimate | 1969 estimate | Increase or decrease |
|---|---|---|---|
| Dental caries and hard tissue studies | $3,603,000 | $3,623,000 | +$20,000 |
| Periodontal diseases and soft tissue studies | 2,705,000 | 2,725,000 | +20,000 |
| Oral neoplasia | 134,000 | 140,000 | +6,000 |
| Normal and abnormal growth and development including congenital (genetic) and acquired diseases and anomalies | 2,730,000 | 2,743,000 | +13,000 |
| Materials science | 1,747,000 | 1,759,000 | +12,000 |
| Subtotal, regular program | 10,919,000 | 10,990,000 | +71,000 |
| General research support grants | 1,256,000 | 1,194,000 | −62,000 |
| Scientific evaluation and planning | 42,000 | 42,000 | |
| Categorical clinical research centers | 400,000 | 400,000 | |
| Dental research institutes | 3,000,000 | 3,000,000 | |
| Total, research grants | 15,617,000 | 15,626,000 | +9,000 |

FELLOWSHIPS

| | 1968 estimate | 1969 estimate | Increase or decrease |
|---|---|---|---|
| Total, fellowships | $1,971,000 | $2,015,000 | +$44,000 |

PROGRAM PLANS FOR 1968 AND 1969

The fellowship program is designed to complement the training grant program by providing training opportunities in colleges and universities which do not have training grant support for this purpose. Thus, maximum utilization of location and disciplines is accomplished.

Special fellowships and research career development awards provide highly specialized research training at advanced levels. It is anticipated that more emphasis will be placed on the use of these awards since the number of qualified recipients is steadily increasing.

The additional funds in 1969 are required to support increased stipends for postdoctoral awards.

DISTRIBUTION OF FELLOWSHIPS

| | 1968 estimate | | 1969 estimate | | Increase or decrease | |
|---|---|---|---|---|---|---|
| | Number | Amount | Number | Amount | Number | Amount |
| 1. Continuations: | | | | | | |
| a. Noncompeting | 70 | $1,067,000 | 75 | $1,275,000 | +5 | +$208,000 |
| b. Competing | 8 | 142,000 | 3 | 55,000 | −5 | −87,000 |
| 2. Supplementals | (8) | 8,000 | (8) | 8,000 | | |
| 3. New awards | 65 | 754,000 | 60 | 677,000 | −5 | −77,000 |
| 4. Total fellowships | 143 | 1,971,000 | 138 | 2,015,000 | −5 | +44,000 |

FELLOWSHIPS (BY TYPE OF PROGRAM)

| | 1968 estimate | | 1969 estimate | | Increase or decrease | |
|---|---|---|---|---|---|---|
| | Number | Amount | Number | Amount | Number | Amount |
| 1. Predoctoral | 13 | $75,000 | 13 | $75,000 | | |
| 2. Postdoctoral | 48 | 409,000 | 48 | 494,300 | | +$85,300 |
| 3. Special | 23 | 287,000 | 23 | 287,000 | | |
| 4. Research career: | | | | | | |
| a. Career | 4 | 117,000 | 4 | 125,000 | | +8,000 |
| b. Development awards | 55 | 1,083,000 | 50 | 1,033,700 | −5 | −49,300 |
| 5. Total fellowships | 143 | 1,971,000 | 138 | 2,015,000 | −5 | +44,000 |

TRAINING GRANTS

| | 1968 estimate | 1969 estimate | Increase or decrease |
|---|---|---|---|
| Total training grants | $5,469,000 | $5,609,000 | +$140,000 |

PROGRAM PLANS FOR 1968 AND 1969

The continued expansion of existing dental schools and the creation of several new dental schools have intensified the search for competent dental research and teaching manpower. Current training grants must supply the greatest share of these young investigator trainees.

The additional $140,000 in 1969 will support increased stipends in postdoctoral awards.

DISTRIBUTION OF TRAINING GRANTS

| | 1968 estimate | | 1969 estimate | | Increase or decrease | |
|---|---|---|---|---|---|---|
| | Number | Amount | Number | Amount | Number | Amount |
| 1. Continuations: | | | | | | |
| a. Noncompeting | 68 | $3,764,000 | 77 | $4,435,000 | +9 | +$671,000 |
| b. Competing | 25 | 1,330,000 | 19 | 999,000 | −6 | −331,000 |
| 2. Supplementals | (13) | 150,000 | (13) | 150,000 | | |
| 3. New grants | 4 | 200,000 | | | −4 | −200,000 |
| 4. Scientific evaluation | (1) | 25,000 | (1) | 25,000 | | |
| 5. Total training grants | 97 | 5,469,000 | 96 | 5,609,000 | −1 | +140,000 |

TRAINING GRANTS (BY TYPE OF PROGRAM)

| | 1968 estimate | | 1969 estimate | | Increase or decrease | |
|---|---|---|---|---|---|---|
| | Number | Amount | Number | Amount | Number | Amount |
| Graduate training grants: | | | | | | |
| 1. Basic sciences | 76 | $4,394,000 | 75 | $4,506,000 | −1 | +$112,000 |
| 2. Clinical sciences | 21 | 1,050,000 | 21 | 1,078,000 | | +28,000 |
| 3. Scientific evaluation | (1) | 25,000 | (1) | 25,000 | | |
| 4. Total training grants | 97 | 5,469,000 | 96 | 5,609,000 | −1 | +140,000 |

LABORATORY AND CLINICAL RESEARCH

| | 1968 estimate | | 1969 estimate | | Increase or decrease | |
|---|---|---|---|---|---|---|
| | Positions | Amount | Positions | Amount | Positions | Amount |
| Personnel compensation and benefits | 231 | $2,384,000 | 236 | $2,462,000 | +5 | +$78,000 |
| Other expenses | | 2,157,000 | | 2,278,000 | | +121,000 |
| Total | 231 | 4,541,000 | 236 | 4,740,000 | +5 | +199,000 |

## INTRODUCTION

The research mission and public health goal of this Institute's intramural program continue to be that of ascertainment of new and relevant information regarding the cause of a variety of oro-facial malfunctions, including those stemming from dental caries, periodontal diseases, oral cancer and from abnormal oro-facial development. Clearly, the net effect of successes in this quest would be measured ultimately in their expression as new and efficacious approaches to the alleviation of disease.

The development of each of the abnormal states listed above is most certainly attributable to multiple factors, about which all too little is presently known. As a consequence, the Institute's continuing systematic approach to these problems involves a tripartite commitment to relevant basic laboratory investigations; to clinical and applied investigations relating to the solution of specific questions which may be formulated as a consequence of progress made at the basic level; and to field studies directed either toward clinical trials of newer therapeutic or preventive concepts, which have evolved from basic and applied studies, or those directed toward further definition of the nature and distribution of oro-facial disease on an epidemiologic or geographic basis.

## PROGRAM PLANS FOR 1968 AND 1969

*Dental caries*

It will be recalled that, largely through the impetus of research from this Institute, community fluoridation of public water supplies has provided the single most effective public health approach to the reduction of dental decay. While in theory fluoridation would appear to be a most efficacious and economical approach to control of dental caries at the public health level, the reality is that only 40% of the population of this country is regularly exposed to this preventive measure. Moreover, it should be recognized that the acquisition of the fluoride ion by tooth enamel consequent to exposure to fluoridated drinking water, though significantly increasing the intrinsic resistance of the tooth to decay, does little if anything to affect the immediate causative agents of decay, i.e., the oral microflora.

Consequently, the Institute's research efforts in dental caries continue to be focused upon the genesis of a more thorough understanding of oral bacteria, specifically, those strains of oral streptococci which appear to be integrally involved in the etiology of caries. These organisms are characterized by their ability to adhere tenaciously to the enamel surface, as a component of dental plaque; by preferential utilization of dietary sucrose for their growth and metabolism; and most significantly, by their propensity for producing large amounts of acid as a consequence of sucrose metabolism. It is the latter property, coupled with the close environmental relationship to the tooth surface, which presumably render these organisms highly cariogenic. Their cariogenicity has

been amply demonstrated in animal experiments. Indeed, organisms of similar properties have not only been isolated from human mouths, but have also been shown to occur in numbers proportionate to the degree of severity of carious involvement.

Recognizing that specific organisms may be the key to the control of dental caries, this Institute's reseach is now being expanded in areas which will serve to define more precisely their absolute role in the caries process; to determine the efficacy of local treatment by antibiotic or by related bactericidal agents so as to eliminate these organisms; and to test alternate biological approaches aimed at altering the metabolism of the organisms so as to render them harmless. With regard to the latter approach, Institute scientists are much involved in experiments relating to the possible efficacy of specific enzymes, among them dextranase, whose chief effect would be that of preventing the adherence of streptococci to the tooth surface, thereby breaking the vicious circle of events which seems so essential to their role in the genesis of decay.

Finally, field studies continue to provide a rewarding outlet for the exploration of even more effective methods of extending the benefits of fluoride to a wide share of the population, particularly to children. Topical application of fluoride in fitted vinyl mouthpieces, undertaken in the school environment with appropriate professional supervision, has already been shown to exert striking benefits to children of primary school age in areas where water fluoridation is not practiced. This approach is being further expanded to determine whether the benefits of topical application in mouthpieces augment those already existent in areas where community water supplies are fluoridated. A related study of considerable promise is examining the benefits which the topical mouthpiece method may provide to even smaller, pre-school children who have not yet developed their adult dentition.

*Periodontal disease*

Clinical and field studies described last year continue with regard to the relationship between the various clinical signs of periodontal disease and its pattern of subsequent development, such that rational methods of clinical therapy, up to this point in time largely empirical, might be developed.

With the growing concern regarding the role of dental plaque in the etiology of dental caries has developed an increasingly attractive hypothesis that similar adherent masses of bacterial, food debris and gummy materials which comprise the plaque may, over a period of some years, be instrumental in initiating gingival inflammation, and ultimately, frank periodontitis. Research results have already indicated quite clearly that the organism or organisms involved in periodontal disease do not resemble the streptococci which are now being scrutinized with respect to caries. On the other hand, a specific filamentous microorganism has previously been isolated from human diseased gums, and has been shown in experimental animals to elicit a disease state closely resembling periodontal disease. This filamentous organism, *Odontomyces viscosus*, shares with cariogenic streptococci, their capacity for producing large amounts of gummy extracellular material which, as in the case of the streptococci, also tends to hold the organisms in close approximation to the tooth surface at and below gingival margin. Thus, while research continues with respect to the basic characteristics of this organism, increased emphasis is being given to the possibility that its occurrence and its deleterious effects may be facilitated and/or enhanced by pre-existing dental plaque containing cariogenic streptococci. These two aspects of the Institute's research effort, both bearing on dental plaque as the common denominator in caries and periodontal disease, are being carried on in close and effective collaboration.

Basic and clinical studies with respect to the biology of the gums and adjacent tissues continue to provide information which may ultimately contribute to preventive and therapeutic approaches to periodontal disease from the point of view of increasing host resistance to the infectious process. Major support will be given to the ongoing effort to define the nature of those factors, particularly intrinsic enzymes, involved in normal synthesis and breakdown of the major structural protein of the gums, namely collagen and elastin. These functions are seriously disturbed in periodontal disease. Other basic studies, including field programs in geographic epidemiology will also continue to better assess the role of systematic factors such as nutrition in determining host susceptibility and/or resistance to periodontal disease.

*Oral cancer*

Cancers primarily focused in the mouth include those stemming from oral epithelium, those arising from specific dental tissues (usually of an embryonic origin) and those arising from disordered growth and differentiation of the supporting bony structures of the jaws. By far the most serious in number and in consequence are those originating from aberrant growth of the oral epithelium.

Occasionally, white patches can be visualized on the surface of the tissues lining the cheeks, lip or tongue, and are generally classified as leukoplakia. This condition, though not perfectly defined, is generally accepted as being premalignant. During the past year, Institute scientists have embarked on a systematic study of the oral-mucas membrane, particularly with regard to the biological properties of normal and abnormal oral epithelium. Their efforts have now demonstrated that one variety of white patch, frequently mistaken for leukoplakia, is not associated with malignant change. This condition, termed leukodema, can be differentiated from leukoplakia by appropriate microscopic analysis.

Exploration of the unique properties of the oral mucous membrane appears essential to any ultimate understanding of the relationship between leukoplakia and malignant change. As a consequence, these studies will be continued and expanded with such deliberate speed as funds and manpower will permit.

*Growth and development*

Disorders of normal oro-facial growth are manifested as a spectrum of malfunction, ranging from the serious cleft palate to relatively harmless, if aesthetically dissatisfying malocclusions. Significant energy has been devoted by Institute scientists to the end of providing a more rational understanding of the genesis of these conditions. Particular emphasis continues in the area of induced developmental abnormalities of the face and jaws arising from experimental introduction of drugs and other substances into the pregnant animal mother. Of specific importance is the broadening effort in the Institute to apply these studies to non-human primate species in order to obviate confusion which may arise as a consequence of studies of lower and less immediate related forms.

Another aspect of great programmatic relevance has been that of exploration into the relationships between anatomical abnormalities in the mouth region and neurological deficits. Institute scientists have demonstrated a constant though paradoxical association between form and function in children afflicted with certain distinct hypoplastic anomalies of the facial skeleton.

Programs for the future in this area continue to be that of systematic expansion, such that truly meaningful data may be accumulated regarding prenatal influence on facial growth and development and regarding the relationship between normal and aberrant oro-facial growth and other systemic disorders.

Of the increase requested for this activity, $125.000 will support five additional positions. Also included in the net increase is $31.000 for annualization of the 1968 pay increase, $10,000 for one extra day of pay in 1968, and $33,000 for centrally furnished services from the National Institutes of Health management fund.

COLLABORATIVE RESEARCH AND DEVELOPMENT

| | 1968 estimate | | 1969 estimate | | Increase or decrease | |
|---|---|---|---|---|---|---|
| | Positions | Amount | Positions | Amount | Positions | Amount |
| Personnel compensation and benefits | 4 | $49,000 | 4 | $50,000 | ---- | +$1,000 |
| Other expenses | ---- | 792,000 | ---- | 794,000 | ---- | +2,000 |
| Total | 4 | 841,000 | 4 | 844,000 | ---- | +3,000 |

PROGRAM PLANS FOR 1968 AND 1969

Support under this activity is required for research and development of an adhesive filling material that will bond chemically to the surface of the tooth. As part of a broad study of physical and chemical properties of synthetic and biological adhesive materials, various substances, including marine biological adhesives, are under investigation.

Research emphasis will focus on the development of more effective reconstructive materials and techniques for the repair or replacement of structures lost as a result of dental or oro-facial diseases and conditions. This research will be accomplished through collaborative activities with other Federal institutions, such as the National Bureau of Standards, other non-Federal organizations, and private industry.

The development of effective tooth implants will be pursued. Emphasis will be placed on the development of implantation procedures designed to overcome the immunologic rejection response and permit permanent, effective functioning of the implanted teeth.

Included in this net increase is $1,000 for annualization of the 1968 pay increase and $2,000 for centrally furnished services from the National Institutes of Health management fund.

BIOMETRY, EPIDEMIOLOGY, AND FIELD STUDIES

| | 1968 estimate | | 1969 estimate | | Increase or decrease | |
|---|---|---|---|---|---|---|
| | Positions | Amount | Positions | Amount | Positions | Amount |
| Personnel compensation and benefits | 22 | $242,000 | 22 | $245,000 | ---- | +$3,000 |
| Other expenses | ---- | 190,000 | ---- | 190,000 | ---- | ---- |
| Total | 22 | 432,000 | 22 | 435,000 | ---- | +3,000 |

PROGRAM PLANS FOR 1968 AND 1969

This activity supports the Institute's scientific staff in the planning and conducting of biometric and epidemiological studies to test the hypotheses regarding factors influencing incidence, severity and genetic patterns of oral diseases and conditions.

Emphasis will be placed on field trials of new or improved means, agents and technics so urgently needed if such diseases and conditions are to be better diagnosed, controlled and ultimately prevented.

Large-scale clinical trials of recently developed caries-preventive agents and methods will be continued to provide the scientific basis for improved public health programs in preventive dentistry.

Field investigations will also be conducted on oral cancer, oral-facial abnormalities which cover not only hereditary factors but also the effect of environmental elements, and development of new findings from basic and clinical research to the point where their application in general practice may be demonstrated.

There is a net increase of $3,000 which represents annualization of the 1968 pay increase.

REVIEW AND APPROVAL OF GRANTS

| | 1968 estimate | | 1969 estimate | | Increase or decrease | |
|---|---|---|---|---|---|---|
| | Positions | Amount | Positions | Amount | Positions | Amount |
| Personnel compensation and benefits | 39 | $364,000 | 40 | $384,200 | +1 | +$20,200 |
| Other expenses | ---- | 283,000 | ---- | 321,800 | ---- | +38,800 |
| Total | 39 | 647,000 | 40 | 706,000 | +1 | +59,000 |

This activity provides support for the administration of the Institute's grants programs, which include research grants, fellowships, and training grants. The National Advisory Dental Research Council and staff are responsible for the planning, development, review, and evaluation of the various extramural programs of the Institute. Continuous surveillance of scientific activities and progress is maintained as well as recording and reporting of fiscal and scientific data relevant to all transactions.

Reorganization of the extramural programs area along categorical program lines has given this area a significantly increased role in the Institute's total mission.

The increase requested for this activity will provide one position and $35,000 for its support. Included in the net increase requested is $1,000 for one extra day of pay in 1969, $4,000 for annualization of the 1968 pay increase, and $19,000 for centrally furnished services from the National Institutes of Health management fund.

PROGRAM DIRECTION

| | 1968 estimate | | 1969 estimate | | Increase or decrease | |
|---|---|---|---|---|---|---|
| | Positions | Amount | Positions | Amount | Positions | Amount |
| Personnel compensation and benefits | 26 | $263,000 | 27 | $275,000 | +1 | +$12,000 |
| Other expenses | | 140,000 | | 164,000 | | +24,000 |
| Total | 26 | 403,000 | 27 | 439,000 | +1 | +36,000 |

This activity provides support for the Director of the Institute and his immediate staff who are responsible for the over-all program planning, direction, coordination and administration of the Institute. The administrative functions include management in the areas of finance, personnel, supply, travel, space utilization and management analysis.

One position and $20,000 is requested to strengthen Institute program planning and evaluation. Included in the net increase is $3,000 for annualization of the 1968 pay increase and $13,000 for centrally furnished services from the National Institutes of Health management fund.

NEW POSITIONS REQUESTED, FISCAL YEAR 1969

| | Grade | Annual salary |
|---|---|---|
| Laboratory and clinical research: | | |
| Biologists (2) | GS–5 | $11,130 |
| Research technician | GS–7 | 6,734 |
| Senior dental surgeons (2) | C.O. | 26,750 |
| Total (5) | | 44,614 |
| Review and approval of grants: Dental director | C.O. | 17,632 |
| Program direction: Program analyst | GS–12 | 11,461 |
| Total new positions, all activities | (7) | 73,707 |

COMPREHENSIBLE ORAL DISORDERS

Senator Hill. Dr. Kreshover, Director, National Institute of Dental Research. Doctor, we will be happy to have you proceed in your own way now, sir.

Dr. Kreshover. Thank you, Senator Hill.

I am happy to have this opportunity to appear before you again. This year marks the 20th anniversary of the National Institute of Dental Research. Like a mosaic being pieced together, the bits of new information garnered over these two decades have made the whole problem or oral disorders more comprehensible, and thus more amenable to attack.

DENTAL CARIES

One of our most promising current achievements is in the field of dental caries, or tooth decay. The search for causative micro-organisms has now narrowed down to specific anaerobic streptococcal bacteria with certain unique distinguishing characteristics. An especially significant property is the ability of the bacteria to produce and surround themselves with a gummy polysaccharide material.

This extracellular coat appears to be responsible for the bacteria's adherence to the tooth as microbial plaque. In collaborative research

we have found that a specific enzyme, when given to animals in food and water, breaks down this dextran polysaccharide and almost completely prevents plaque formation and decay. We hope to initiate controlled clinical trials in the near future. If they bear out earlier findings, this enzymatic treatment may prove to be a real boon to preventive dentistry.

Following the demonstrated success of water fluoridation, we are further exploring the use of fluoride through other means in order to bring this benefit to those populations not having access to fluoridated communal water supplies. The use of a fluoride gel topically applied in fitted mouthpieces continues to be promising.

Senator HILL. And we still have opposition to fluoridization?

Dr. KRESHOVER. We certainly do.

Senator HILL. We had a witness before us last session. How much he knew about it, I don't know. We heard him.

Dr. KRESHOVER. Still in a preliminary stage, a new technique seals the pits and fissures in the grinding surfaces of teeth with a plastic mixed with fine silica particles. Of potential importance, particularly to children whose caries risk is high, the adhesive wears off in time, but reportedly gives excellent protection against tooth decay for as long as 6 months.

### PERIODONTAL DISEASE

In studies related to periodontal disease, work has now progressed to the point where we can begin to determine the specific composition and arrangement of the polypeptide or amino acid chains that make up the large and complex collagen molecule. Since collagen constitutes a principal structural component of the periodontal tissues, these findings suggest that defects in the collagan molecule, probably associated with periodontal disease, may be susceptible to correction through such means as nutrition and not involve more complex genetic alterations.

Also, during this year, and for the first time, so-called hyaluronidase activity has been demonstrated in diseased human gingival tissue. This is significant because hyaluronidase, an enzyme, is known to be antagnostic to the jelly-like hyaluronic acid that is a component of the cementing substance between fibers of the normal gingivae.

Recent studies have also provided experimental support for the concept of sensitization and allergic response in periodontal disease. Thus, it has been shown that tissue-bound immunoglobulins are abundant in inflamed human gingiva but not in normal gingiva, and that gingival inflammation similar to that seen in humans can be produced in animals by local treatment with allergens.

Senator HILL. You can produce it in animals?

### FEVER BLISTERS

Dr. KRESHOVER. Yes, sir, we can.

Institute scientists have also recently found that a virus can combine with its antibody without losing infectivity. This finding helps to explain the persistence in some patients of certain viral diseases such as herpes labialis, better known as fever blisters, despite the presence of high levels of antibodies in their sera.

ORAL CANCER

In oral cancer, the research focus is on the detection of subtle changes in the oral mucosa that may lead to cancer. Certain irritants are implicated in preliminary research findings that suggest a correlation between a condition known as submucous fibrosis and cancer. Studies on oral cancer will be expanded because of the magnitude and severity of this problem.

Senator HILL. Do you have funds in this request?

Dr. KRESHOVER. Yes, sir; we have funds for a rather modest launching of this program and we are hopeful that with these resources we might be able to extend our base of knowledge of certain predisposing factors related to oral cancer.

DENTAL RESTORATIONS

Efforts in the area of dental restorations are directed toward the development of a broad spectrum of materials, ranging from adhesive fillings to prostheses for persons disfigured by oral-facial injury or cancer. Approaches are equally diversified, ranging from studies of the adhesive properties of barnacle cement to observations of plastic tooth implants in experimental animals.

CLEFT PALATE

Recent progress in the study and treatment of cleft palate is covered, Senator Hill, in a special report. In a related area of study, it has been shown recently that the individual who suffers from a congenital retardation of tongue growth and function can compensate to the point of achieving excellent speech articulation.

Senator HILL. That's being done today?

Dr. KRESHOVER. Yes, sir; we are making rather notable progress in the cleft palate field.

As I am sure you will recall from previous testimony, this deformity constitutes about 13 percent of all reported birth anomalies and our approach to this complex deformity has been rather broad in its base, devoting time and attention not only to causative factors, but also to methods of rehabilitation through surgery and speech correction.

DEVELOPMENT OF RESEARCH INSTITUTES

To provide a further stimulus to basic and clinical investigation of the oral disorders, five broad-based reasearch institutes are now in varying stages of development at the Universities of Washington, Pennsylvania, Alabama, Michigan, and North Carolina. Strong interest in establishing such interdisciplinary centers has also been evidenced by four other universities or university consortia.

Senator HILL. You mean you just haven't had the funds to get started on this?

Dr. KRESHOVER. Yes, sir; as you will recall $3 million was earmarked for this program by your committee and we have been able to launch these five institutes with, we suggest, a rather important strategic deployment as far as geography is concerned and we are anticipating a great return as these institutes would not only influence the broadening base of the dental sciences, but also the educational component in the field of dentistry.

TRAINING OF SCIENTIFIC MANPOWER

Mr. Chairman, gratifying progress against oral diseases is further reflected in the research highlights that have been transmitted to this committee. Significant efforts are being pursued in the training of promising young people to make available the scientific manpower resource so essential for continued progress.

Senator HILL. Do you find a sufficient number of young people interested in this work?

Dr. KRESHOVER. Yes, sir; there are many young people interested in careers in the field of dental research and dental investigations relating to clinical areas as well as laboratory areas. We find, however, that with our training efforts and fellowship support that we can identify today only slightly over 5,000 people constituting the full-time and part-time faculties of our existing 49 dental schools and since these people are also responsible for the conduct of research and can devote only a reasonable share of their time to research, our analysis would indicate that we have today only about 1,400 people engaged in dental research activities.

FIVE-YEAR REQUIREMENT PROJECTION

We would anticipate that our need for the future, particularly projecting over the course of the next 5 years, must show at least a tripling of our currently available manpower for research and educational endeavors.

This would require——

Senator HILL. Additional funds?

Dr. KRESHOVER. Additional funds over the course of the next 5 years, needless to say.

Senator HILL. You don't have those funds in this budget?

Dr. KRESHOVER. No, sir; we do not, Senator.

This is a projection, as I had indicated, though, Senator Hill, that is over a 5-year span.

We are requesting a budget——

Senator HILL. If it's over a 5-year span, you had better get started if you are going to do the job.

BUDGET REQUEST

Dr. KRESHOVER. Yes, sir.

The budget request for 1969 is $30,414,000, an increase of $493,000 over the 1968 operating level of $29,921,000. Included are increases of $184,000 for training grants and fellowships, $199,000 for laboratory and clinical research, $59,000 for review and approval of grants, and $36,000 for program direction. We will then operate at about the same level in research grants, collaborative research and development, and biometry, epidemiology, and field studies.

Senator HILL. You have just about the same amount of money you had this year, in fact no increase?

Dr. KRESHOVER. That is correct, Senator Hill.

Senator HILL. The Department cut you $445,000, the Budget Bureau cut you more?

Dr. KRESHOVER. Yes, sir.

Senator HILL. Well, you cannot do much more than you have been doing; is that right?

Dr. KRESHOVER. Yes, sir.

DEATH OF DR. ARNOLD

Senator HILL. We lost our old friend Dr. Arnold not too long ago.

Dr. KRESHOVER. Yes, sir. He had just begun a new position at the University of the Pacific in San Francisco when he met his untimely death.

Senator HILL. He wasn't too old?

Dr. KRESHOVER. He was 57 years old.

Senator HILL. I better stop raising this age question here. It may be discouraging to some of our friends.

When I think about Dr. Grant and Dr. Arnold and some of the others we have lost, it just illustrates what the situation is; is that right?

Dr. KRESHOVER. That's very true, sir.

Senator HILL. The last time I saw him he seemed to be in very good condition.

Dr. KRESHOVER. Yes, sir.

HEPATITIS

Senator HILL. What was the immediate cause of his death?

Dr. KRESHOVER. He had a rather severe liver disease that was the immediate responsible cause of death.

Senator HILL. He had hepatitis?

Dr. KRESHOVER. Yes, sir.

Senator HILL. I quit eating raw clams and raw oysters several years ago. I didn't want to take a chance of getting this hepatitis.

We had the peak in 1961, didn't we? 72,651. This goes to a very large extent, too, to the pollution of our streams, doesn't it?

Dr. SHANNON. That's the best guess. The problem is that the agent that causes hepatitis, which is presumably a virus, has never been certainly isolated. This is one of the really challenging infectious diseases of today.

Senator HILL. I notice from 1961, 72,651 to 1965, 33,658. What do you ascribe this reduction to?

Dr. SHANNON. I don't know. It has a cyclical course, and I would point out that those are diagnosed cases of hepatitis. The actual cases in the population, we would guess from the studies we have done on viral hepatitis, are perhaps three times that number.

Senator HILL. Three times the number here?

Dr. SHANNON. Yes, but I don't know the variation.

Dr. STEWART. It has an epidemiology somewhat like measles. It affects the susceptible people in the population, and then it is about 7 or 8 years before another such susceptible group builds up.

Senator HILL. These figures tend to substantiate that. In 1957, 15,652, by 1962 it got up to 72,651.

Dr. SHANNON. If you figure that the actual incidence of the disease was three or four times that number, then you are hitting a very substantial slug of the population.

### Risk to U.S. Oversea Populations

Senator Hill. You spoke about arteriosclerosis in Sweden. What about this hepatitis in other countries?

Dr. Shannon. It's found around the world and, as I understand it, the figures are not particularly good. Our Armed Forces are particularly susceptible when they move into some of the developing countries.

We can actually have an epidemic in those circumstances. The vaccine is badly needed by the Armed Forces.

Senator Hill. People don't realize when we send our troops abroad what we have to defend against is not only the bullets from the enemy, so to speak, but these diseases can cause lots of trouble; is that right?

Dr. Shannon. Well, it's discouraging, Senator Hill, because we are continually under very substantial pressure, as you know, to reduce expenditures overseas.

Dr. Kreshover. Many of these problems are better studied overseas and some of the problems can only be studied overseas, and when we have troop concentrations in the order of magnitude of 500,000 or 600,000 in Southeast Asia, it would be above 600,000 if you took all, together with civilian contractors and the like, probably another 200,000 or 300,000, that we Americans are putting very large segments of our population at risk in these developing countries and we should know much more about the diseases, what we are going to have to handle.

Senator Hill. These boys we send over are subject to those diseases; is that right?

Dr. Shannon. Yes, sir.

Senator Hill. Of course, we have not given it enough thought and attention. A person just doesn't think in terms of that. It certainly presents a problem, a very serious problem.

Senator Hill. Anything else you would like to add? Dr. Stewart?

Dr. Stewart. No, sir; I don't have anything to add, Mr. Chairman.

Senator Hill. Well, when you think about the head of the Heart Institute, Dr. Grant, dying at his age right on the campus of the NIH——

Dr. Shanon. Some of us are still pretty healthy, Senator.

Senator Hill. I hope you will remain that way, sir. [Laughter.]

When I think about Dr. Grant and Dr. Arnold, I'm not so sure what's going to happen. I hope you will remain that way.

### Training of Scientific Manpower

Dr. Shannon. I would like to comment on Dr. Kreshover's problem. The dental schools that he talked about, I think, only make sense if they are viewed against the pattern of what he is trying to do for the dental sciences as a whole.

Dr. Kreshover mentioned that there are about 1,400 people in more or less full-time research in the dental sciences. Dental diseases, caries and the like, cost the American public about $6 or $7 billion a year. We are convinced that the dental schools are not in the mainstream of biological development. This causes difficulties. They are falling

behind their counterparts in the medical sciences, as, indeed, are some of the poorer medical schools. It's our hope that through these research institutes we can develop the faculties for the dental schools and that with more ample funds under the Health Educational Assistance Act we can subsidize some of these educational enterprises so that they can develop a critical mass of scientists that will help move some of these problems.

It's surprising to me that the dental sciences have moved as far as they have when one considers the very small amount of effort that is going into them.

I have sometimes wondered if educational assistance for this field may not warrant very special emphasis to see if we can do in a 5-to-10 year period what otherwise might take 10 to 20. The need is there, the opportunity is there. The economic costs is certainly very high. I don't believe, looking back over the past decade, that we have moved this field nearly as much as we should have. The lack of scientific personnel led to the beginnings of these research institutes as a means of stimulating interest in the dental sciences. But I think this is just one step. I think we have to follow through.

### PAUCITY OF PAST INSTITUTE APPROPRIATIONS

Senator HILL. We haven't given the Dental Institute too much money in the years past, generally speaking, have we?

Dr. SHANNON. No, sir. I think that over the years of our rapid growth they probably couldn't have used more. On the other hand, they now have to share with the whole field of medical research cutbacks and holdbacks at a time when they are just about ready really to take off. At least this is my conviction.

Senator HILL. I think you are about ready to take off now.

Dr. KRESHOVER. Yes, as Dr. Shannon has said so very well, we are at a cross-roads today in our history and I believe at this very strategic time we are in a very unique position to plot and lead a course for dental science and education. I believe the time is now.

### EFFECT OF BUDGET REQUEST REDUCTION

Senator HILL. How much is this reduction from $3.5 billion going to slow you up in that?

Dr. KRESHOVER. Well, one most critical area, needless to say, is the program to further extend dental research programs in university settings. Another critical area that we are in a particularly vital position today to exploit is dental caries.

We have recently established, with the strong support of the NIH front office, a caries task force that will provide us with an opportunity to extend our research into three very important areas. These approaches relate to dental materials, to the further utilization of fluoride with other vehicles where water supplies are not available for adequate fluoridation, and thirdly, a multidisciplinary approach that will bring to bear our assemblage of new knowledge regarding the bacterial component of dental caries: the dietary factor; and the unique susceptibility, on a systemic or genetic basis, of man himself.

Senator HILL. You say "himself," that would apply to "herself," too?
Dr. KRESHOVER. Yes, sir, himself and herself.
Senator HILL. Anything you would like to add, Doctor?
Dr. KRESHOVER. No, Senator Hill.
Senator HILL. Anything you would like to add, sir?
Mr. CHRISTOFERSON. No, sir.
Senator HILL. You have brought us some good testimony and we certainly appreciate it very much. Thank you very much, Doctor.

## National Institute of Arthritis and Metabolic Diseases

STATEMENT OF DR. G. DONALD WHEDON, DIRECTOR
ACCOMPANIED BY:
DR. JAMES A. SHANNON, DIRECTOR, NATIONAL INSTITUTES OF HEALTH
DR. BENJAMIN T. BURTON, ASSOCIATE DIRECTOR FOR PROGRAM ANALYSIS AND SCIENTIFIC COMMUNICATIONS, NATIONAL INSTITUTE OF ARTHRITIS AND METABOLIC DISEASES
W. GILBERT BAYLIS, EXECUTIVE OFFICER, NATIONAL INSTITUTE OF ARTHRITIS AND METABOLIC DISEASES
DONALD F. CYPHERS, BUDGET OFFICER, NATIONAL INSTITUTE OF ARTHRITIS AND METABOLIC DISEASES
JAMES A. HICKEY, ACTING FINANCIAL MANAGEMENT OFFICER, NATIONAL INSTITUTES OF HEALTH
DR. WILLIAM H. STEWART, SURGEON GENERAL
CHARLES MILLER, CHIEF FINANCE OFFICER
JAMES B. CARDWELL, DEPUTY ASSISTANT SECRETARY, BUDGET

### Appropriation Estimate

NATIONAL INSTITUTE OF ARTHRITIS AND METABOLIC DISEASES

For expenses necessary to carry out the purposes of the Act relating to arthritis, rheumatism, and metabolic diseases, [$143,954,000] *$146,489,000.*

AMOUNTS AVAILABLE FOR OBLIGATION

| | 1968 | 1969 |
|---|---|---|
| Appropriation | $143,954,000 | $146,489,000 |
| Cutback from the 1968 President's budget required by H.J. Res. 888 | −2,170,000 | |
| Total currently authorized for obligation | 141,784,000 | 146,489,000 |
| Plus proposed release of reserves for increased pay costs | 560,000 | |
| Total available for obligation | 142,344,000 | 146,489,000 |
| Disposition of cutback: | | |
| To be used for pay costs in this account | 560,000 | |
| To be returned to Treasury | 1,610,000 | |
| Total cutback | 2,170,000 | |

OBLIGATIONS BY ACTIVITY

| | 1968 estimate | | 1969 estimate | | Increase or decrease | |
|---|---|---|---|---|---|---|
| | Positions | Amount | Positions | Amount | Positions | Amount |
| Grants: | | | | | | |
| Research | | $94,777,000 | | $97,546,000 | | +$2,769,000 |
| General research support grants | | (9,551,000) | | (9,409,000) | | (−142,000) |
| Scientific evaluation and planning | | (20,000) | | (20,000) | | |
| Categorical clinical research centers | | (1,500,000) | | (1,500,000) | | |
| Fellowships | | 6,591,000 | | 6,737,000 | | +146,000 |
| Training | | 15,706,000 | | 16,109,000 | | +403,000 |
| Direct operations: | | | | | | |
| Laboratory and clinical research | 538 | 14,352,000 | 571 | 15,042,000 | +33 | +690,000 |
| Collaborative research and development | 29 | 7,587,000 | 29 | 7,599,000 | | +12,000 |
| Biometry, epidemiology, and field studies | 27 | 713,000 | 27 | 721,000 | | +8,000 |
| Review and approval of grants | 80 | 2,247,000 | 85 | 2,311,000 | +5 | +64,000 |
| Program direction | 23 | 371,000 | 25 | 424,000 | +2 | +53,000 |
| Total obligations | 697 | 142,344,000 | 737 | 146,489,000 | +40 | +4,145,000 |

OBLIGATIONS BY OBJECT

| | | 1968 estimate | 1969 estimate | Increase or decrease |
|---|---|---|---|---|
| | Total number of permanent positions | 697 | 737 | +40 |
| | Full-time equivalent of other positions | 22 | 22 | 0 |
| | Average number of all employees | 687 | 712 | +25 |
| 11 | Personnel compensation: | | | |
| | Permanent positions | $6,798,000 | $7,343,000 | +$545,000 |
| | Positions other than permanent | 227,000 | 230,000 | +3,000 |
| | Other personnel compensation | 41,000 | 42,000 | +1,000 |
| | Total, personnel compensation | 7,066,000 | 7,615,000 | +549,000 |
| | Personnel benefits | 779,000 | 819,000 | +40,000 |
| 21 | Travel and transportation of persons | 330,000 | 345,000 | +15,000 |
| 22 | Transportation of things | 62,000 | 64,000 | +2,000 |
| 23 | Rent, communications, and utilities | 195,000 | 200,000 | +5,000 |
| 24 | Printing and reproduction | 95,000 | 100,000 | +5,000 |
| 25 | Other services | 994,000 | 1,100,000 | +106,000 |
| | Project contracts | 7,278,000 | 7,278,000 | 0 |
| | Payment to "National Institutes of Health management fund" | 6,388,000 | 6,464,000 | +76,000 |
| 26 | Supplies and materials | 1,249,000 | 1,270,000 | +21,000 |
| 31 | Equipment | 852,000 | 860,000 | +8,000 |
| 41 | Grants, subsidies, and contributions | 117,074,000 | 120,392,000 | +3,318,000 |
| | Subtotal | 142,362,000 | 146,507,000 | +4,145,000 |
| | Deduct quarters and subsistence charges | −18,000 | −18,000 | 0 |
| | Total obligations by object | 142,344,000 | 146,489,000 | +4,145,000 |

*Summary of changes*

| | |
|---|---|
| 1968 enacted appropriation | $143,954,000 |
| Cutback from the 1968 President's budget required by H.J. Res. 888 | −2,170,000 |
| Proposed release of reserves for increased pay costs | 560,000 |
| 1968 estimated obligations | 142,344,000 |
| 1969 estimated obligations | 146,489,000 |
| Total change | +4,145,000 |

| Increases | Base | | Changes from base— | |
|---|---|---|---|---|
| | Positions | Amount | Positions | Amount |
| A. Built-in: | | | | |
| 1. Annualization of new positions authorized in 1968 | | | | $60,000 |
| 2. Annualization of 1968 pay increase | | | | 95,000 |
| 3. One extra day of pay in 1969 | | | | 21,000 |
| Subtotal, built-in | | | | 176,000 |
| B. Program: | | | | |
| 1. Research grants | | $94,777,000 | | 2,769,000 |
| 2. Fellowships | | 6,591,000 | | 146,000 |
| 3. Training grants | | 15,706,000 | | 403,000 |
| 4. Laboratory and clinical research | 538 | 9,468,000 | 33 | 525,000 |
| 5. Review and approval of grants | 80 | 937,000 | 5 | 30,000 |
| 6. Program direction | 23 | 258,000 | 2 | 20,000 |
| Subtotal, program increase | | | 40 | 3,893,000 |
| C. Centrally furnished services from the National Institutes of Health management fund: | | | | |
| 1. Laboratory and clinical research | | 4,884,000 | | 34,000 |
| 2. Collaborative research and development | | 38,000 | | 6,000 |
| 3. Biometry, epidemiology, and field studies | | 43,000 | | 1,000 |
| 4. Review and approval of grants | | 1,310,000 | | 15,000 |
| 5. Program direction | | 113,000 | | 20,000 |
| Subtotal, management fund | | | | 76,000 |
| Total, change requested | | | +40 | +4,145,000 |

EXPLANATION OF CHANGES

*Research grants*

The net increase of $2,769,000 is the result of an increase of $2,911.000 for regular research projects offset by a decrease of $142,000 for general research support grants. Due to the general increased average costs, however, the total available funds will provide support for 55 fewer regular research projects.

*Fellowships*

The increase of $146,000 will provide for an estimated additional 10 fellowships in 1969.

*Training grants*

The increase of $403,000 will provide for an estimated additional 6 new training centers.

*Laboratory and clinical research*

The increase of 33 positions and $525,000 will provide for initiating new studies and for strengthening of clinical investigations and laboratory studies in the fields of arthritis, gastroenterology, endocrinology, hematology and metabolic diseases including diabetes.

*Review and approval of grants*

The increase of 5 positions and $30,000 will provide for strengthening of grants management and analysis activities.

*Program direction*

The increase of 2 positions and $20,000 will provide a modest strengthening of Institute management staff.

JUSTIFICATION.—NATIONAL INSTITUTE OF ARTHRITIS AND METABOLIC DISEASES

| | 1968 estimate | | 1969 estimate | | Increase or decrease | |
|---|---|---|---|---|---|---|
| | Positions | Amount | Positions | Amount | Positions | Amount |
| Personnel compensation and benefits | 697 | $7,845,000 | 737 | $8,434,000 | +40 | +$589,000 |
| Other expenses | | 134,499,000 | | 138,055,000 | | +3,556,000 |
| Total | 697 | 142,344,000 | 737 | 146,489,000 | +40 | +4,145,000 |

The National Institute of Arthritis and Metabolic Diseases bears responsibility for a broad array of diseases characterized by their chronicity and long-term disabling effects rather than mortality: various arthritic diseases and related rheumatic and connective tissue disorders, diabetes and other inherited errors of metabolism, diseases of the gastrointestinal tract including diseases of the liver and gallbladder, endocrine disorders, diseases of the blood and bone, urological and kidney diseases, and such fields as orthopedic surgery, dermatology, and nutrition.

The total program necessarily includes studies of a fundamental nature as they are associated with the specific disease objectives described above. Thus, the Institute has an important stake in the pursuit or support of research in fundamental sciences which constitute the foundation of knowledge pertinent to any of the above disease categories: Chemistry, biochemistry, enzymology, molecular biology, anatomy, histology, pathology, physiology, medicinal chemistry, pharmacology, toxicology, and genetics.

The Institute's efforts in support of fundamental research are conditioned by the type of diseases within its sphere of interest, and are based on the hard-headed realization that no major progress in solving these health problems results without specific advances in the fundamental disciplines deeply involved with each disease.

The Institute, therefore, endeavors to maintain a rational balance in the allocation of its funds and efforts among clinical studies, fundamental investigations and, where the opportuity is ripe for exploitation, specifically directed, planned developmental research.

RESEARCH GRANTS

| | 1968 estimate | 1969 estimate | Increase or decrease |
|---|---|---|---|
| Research projects | $83,706,000 | $86,617,000 | +$2,911,000 |
| Special programs | 11,071,000 | 10,929,000 | −142,000 |
| Total research grants | 94,777,000 | 97,546,000 | +2,769,000 |

INTRODUCTION

The National Institute of Arthritis and Metabolic Diseases (NIAMD) supports more than 2,300 studies and research projects at over 425 research-oriented institutions, including universities, medical centers, and hospitals throughout the country. These studies cover the broadest array of disease categories of all the Institutes of the National Institutes of Health. The principal objectives of these diverse research studies receiving grant support from this Institute are to increase our understanding of normal life processes as the basis for understanding disease, to identify the causative agents and faulty biochemical mechanisms that create disease conditions, to improve therapeutic modalities, and to discover means of prevention of many, varied diseases.

Foremost among the disease categories within the research interest of the Institute are the various forms of arthritis and related connective tissue disorders; diabetes and other metabolic diseases both inherited and acquired; endocrine disorders; gastroenterological diseases, such as peptic ulcer, regional enteritis, ulcerative colitis, and diseases of the liver and gallbladder; bone diseases; blood disorders; diseases of the kidney and urological disorders; dermatological diseases, and the fields of nutrition and orthopedic surgery.

Many of these maladies are prime contributive causes of death, such as diabetes, certain gastrointestinal diseases, and kidney diseases. In the main, however, they are lingering, chronic and debilitating diseases which impose an awesome burden on their victims physically, psychologically, and economically.

In the coming year, Institute support of research will continue to focus on the 10 Program Areas—arthritis, diabetes, endocrinology, gastroenterology, hematology, metabolism, dermatology, urology, nutrition, and orthopedics—which comprise its Extramural Programs, with special emphasis in those areas and disease categories in which more fruitful research may be expected.

In addition, in the years ahead the Institute will become increasingly active in the support of research with clinical application in the field of organ transplantation, involving particularly the liver, the kidneys, the intestines, and glands of internal secretion. This long-range research effort is aimed at develop-

ing the ability to transplant an entire normal organ, such as the kidney and liver, as well as portions of organs and internally secreting glands, such as the pancrease, not only as replacements for non-functioning diseased organs but also for therapeutic amelioration of hormonal deficiencies and inherited enzyme defects which cause disease.

### ARTHRITIS AND RELATED DISEASES

Program emphasis in this field of research will continue to be given to determining the causative agents or factors in arthritic disorders of unknown etiology, to improving existing methods of treatment and management, and to discovering means of preveting them.

A primary objective will be rheumatoid arthritis, by far the most devastating and crippling of all the arthritides. In support of this goal, this Institute will continue the research efforts of a new program, initiated last year, known as the Experimental Clinical Research Program and Rheumatoid Arthritis. The program involves studies of (1) the etiology of rheumatoid arthritis, particularly as related to infectious agents, and (2) clinical research, with particular attention to evaluation of new treatments.

In the coming year, particular emphasis will continue to be given to studies into the relationship to rheumatic diseases of promising new etiologic possibilities which have implicated a viable organism. Particular attention will be paid to mycoplasma, a group of organism as yet incompletely studied, for which problems of isolation and identification remain the primary obstacle. Thorough investigation also will be made of viruses of the genus *Bedsonia*. Arthritis was produced in monkeys recently by injecting them with Bedsonia organisms isolated from human patients with Reiter's syndrome, a disorder related to rheumatoid arthritis.

Specific goals in the coming year will include studies and support of research on the possible etiologic relationship of viable agents to certain rheumatic diseases, especially inflammatory diseases of connective tissue, rheumatoid arthritis, systemic lupus erythematosus and polyarteritis. Planning also calls for the development of suitable experimental animal models, as well as extension of present knowledge of the role of basic immune mechanisms and the possible role of lysozymes in these diseases. Studies on the mechanical function of joints and their lubrication mechanisms also will be emphasized, as will studies on the early diagnosis of gout.

Research into bone metabolism as it relates to bone fractures and degenerative bone diseases, such as osteoarthritis, also will be pursued.

### DIABETES

An inherited metabolic disease, diabetes, which afflicts an estimated 4 million Americans, is a major area for research support by this Institute. Research on this disorder has in recent years passed through a phase which saw significant therapeutic advances, notably the development of oral antidiabetic drugs for effective blood sugar control in middle-aged and elderly diabetics without recourse to daily injections of insulin. Institute support in this area of research now and in the immediate future will focus on broadly-based, fundamental investigations which will lead us closer to the discovery of the underlying cause of diabetes.

The most obvious defect in diabetes is the inability to utilize carbohydrates normally for energy. Underlying the disease is a basic impairment of insulin activity. Institute support of diabetes research in the coming year will stress studies into the mechanism of insulin secretion and the impairment of insulin activity as a result of physiologic, chemical, endogenous or exogenous inhibitors or antagonists, as well as investigations to ascertain the specific genetic factors which make some individuals more susceptible to this disease than others.

Also contemplated by the Institute in the coming year is the extension of specific studies designed to improve present methods of treatment and control and investigations aimed at avoiding or controlling the development of the serious neurological and vascular complications of diabetes.

In 1969, Institute planning also will focus on studies designed to improve procedures and methods for early detection of prediabetic individuals (those genetically predisposed to the disease, but as yet not displaying its signs and symptoms) with a view toward eventual development of methods for postponement of the emergence of the overt disease.

### OTHER INHERTED DISEASES OF METABOLISM

Although diabetes is the most prevalent and widely known of the inherited metabolic diseases, there are many other such disorders for which the Institute serves as the focus of research support. Among these are cystic fibrosis, phenylketonuria, Wilson's disease, galactosemia, alcaptonuria, histidinemia, homocystinuria, familial Mediterranean fever, the various glycogen storage diseases, congenital nonhemolytic jaundice, and many others.

Institute support of research in cystic fibrosis, characterized by an abnormality in the products of all glands which secrete fluid to external body surfaces, has lead to a number of significant advances. Foremost among these was the finding that sweat and saliva from children with cystic fibrosis introduced into the salivary gland duct of rats caused a marked increase in rat salivary sodium output (a phenomenon characteristic of cystic fibrosis). The implications of this finding are most important in that they suggest that an unknown but probably specific substance is present in the secretions of children with cystic fibrosis which causes the excessive salinity of sweat and saliva. Future studies will be directed at isolation and identification of this unknown factor. Other research will pursue a factor in the blood of cystic fibrosis patients which has been shown to interfere with the normal sweeping action of the cilia of the respiratory tract.

An example of productive research in the area of inborn errors of metabolism last year was the finding by Institute-supported investigators that prolonged daily administration of D-penicillamine, a chelating agent that promotes urinary copper excretion, can delay or even prevent the development of clinical manifestations of Wilson's disease in genetically and biochemically predisposed relatives of patients with this disorder; without this treatment relatives usually develop the disease. Wilson's disease, an inherited disorder of copper metabolism, causes progressive neurologic and hepatic disease and is ultimately fatal.

Overall, in the coming year, the Institute's program of support in the area of inborn errors of metabolism will emphasize basic studies designed to advance existing knowledge of intracellular processes of metabolism, including protein synthesis and enzyme regulation and their genetic control. Research support also will stress investigations to improve current methods of diagnosis and treatment.

### METABOLIC AND ENDOCRINE DISORDERS (UNRELATED TO GENETICS)

Major areas of research receiving Institute support in this category include studies of the nature and function of the glands of the endocrine system—the adrenals, thyroid, parathyroid and pituitary glands. The study of normal and abnormal endocrine function not specifically disease oriented encompasses a spectrum of problems since the endocrine system, along with the nervous system, controls virtually all the metabolic, reproductive and growth functions of man and higher animals. Thus, it is obvious that any one specific hormonal activity or definciency will interrelate with an affect profoundly an unlimited number of biological reactions.

Current understanding and accepted methods of treatment of hyper- and hypothyroidism, for example, result from detailed knowledge of thyroid hormones and of the pituitary hormone, thyrotropin, which affects the endoctrine output of the thyroid gland. Similarly, fundamental research which led to the isolation and purification of the pituitary human growth hormone (HGH), although still limited in supply, now makes it possible for a small number of children afflicted with hypopituitary dwarfism to attain improved growth through HGH replacement therapy.

Institute support will continue to place emphasis on the search to overcome the critical problem of species-specificity- the fact that in many cases a hormone derived from one species of animal will not exert its biological effect when administered to a member of another species. Knowledge of the molecular structure variations associated with hormones from different species will facilitate discovery of what part of a hormone constitutes the "active core" (which may be *common* to the various hormones from different species) and, perhaps, make it possible to modify the structure of hormones of animal origin so as to promote their effectiveness for treating human endocrine disorders. Knowledge of what constitutes the "active core" of a hormone also is essential to develop a method for laboratory synthesis of hormones for therapeutic use in endocrine diseases.

Support of research in this area in the coming year also will stress studies in glucagon and insulin synthesis and action, and in the fast developing field of

neuroendocrinologic control, the latter designed to isolate and purify a number of "releasing factors," substances originating in the hypothalamus of the brain which are transmitted to the adjacent pituitary and stimulate the release of specific pituitary hormones into the individual's general circulation. It is essential that progress continue toward the isolation and purification of these factors.

In 1969, Institute emphasis will be placed on expanding studies on the precise mechanisms by which hormones influence metabolism and how they cross-react with each other; studies to synthesize in the laboratory hormones of known structure and their known molecular fragments and to elucidate the as yet unknown structure of other hormones and to synthesize them; and studies to develop more sensitive and reliable chemical and biological assays for the amounts of hormones circulating in patients with suspected endocrine disease.

Such research is of great pertinence since the mechanism of hormone action really is germaine to all disease in as much as they affect the metabolic process of all tissues of the body.

## GASTROENTEROLOGY AND LIVER DISEASE

Broadly speaking, the basic objectives of Institute-supported research in the complex area of gastroenterology are to increase scientific and clinical understanding of the fundamental processes of digestion, absorption, secretion, excretion and other functions of the gastrointestinal tract, the liver, pancreas, and gallbladder both in health and in disease. Such basic knowledge is essential to improving the treatment of the diseases of the gastrointestinal tract and its organs, as well as for the development of improved understanding of its normal metabolic and physiologic processes.

Institute emphasis will again be placed on specific studies and research projects dealing with the physiology and diseases of the stomach, small intestine, and the liver. Studies in *acute* liver failure will be aimed at developing extracorporeal treatment systems to "carry" such patients until their own livers heal sufficiently to resume normal function (for instance, circulating the patient's blood through the isolated liver of a large experimental animal until his own liver regains its ability to function). Some success in this approach was reported last year by Institute grantees and the technique warrants continued investigation. Similarly, dramatic success was scored by Institute-supported investigators in the field of liver transplantation in the past year. In this significant advance, these investigators successfully transplanted livers into four young girl patients who had lost their own liver functions, all of whom were alive and reasonably healthy three to six months after the transplants. The four patients, ranging from 13 months to 2 years in age, were suffering from disorders which usually are fatal; three, from biliary atresia (a congenital absence of bile ducts); and one, from liver cancer. The success achieved with these liver transplants was attributed by the investigators to the judicious use of a relatively new antilymphocyte serum fraction and to improved organ storage procedures, tissue typing and operating techniques.

Continued strong Institute support also is contemplated in research on peptic ulcer disease, ulcerative colitis, regional enteritis (ileitis), and related digestive tract diseases, as well as studies in malabsorption disorders, such as celiac disease, and investigations seeking new diagnostic, therepeutic and preventive procedures for the broad spectrum of ailments that afflict the digestive tract.

## KIDNEY AND UROLOGIC DISEASE

Planned research support by this Institute in the coming year in kidney and urologic diseases will strengthen previous efforts to increase the understanding of and to improve therapeutic modalities and means of prevention of diseases of the genitourinary tract. Other research support will be directed to the expansion of current knowledge and understanding of the ultimately fatal uremic syndrome in end-stage kidney failure.

Institute support of research in this area will stress kidney transplantation as a means of long-term replacement therapy, with particular emphasis on development of effective means of organ storage and preservation. The increasing success in the field of kidney transplantation more than warrants the continuation of a strong and vigorous program of support in this area.

Other clinically important areas in urology that will receive increased Institute research support include problems of painful urination, urinary stone formation, obstructions of the urinary tract, diseases of the prostate and endocrine

relationship to prostatic hypertrophy, and urinary tract infection. Another area that will receive Institute support involves the congential abnormalities of the lower genitourinary tract in children and the related development of kidney disease in later life. Such research, it is hoped, will lead to improved means of detection, treatment and management.

### HEMATOLOGY

The primary objectives of this Institute's continuing and multi-faceted program of research support in hematology are to promote an improved understanding of diseases of the blood and their basic causes, to discover better diagnostic procedures and methods of treatment and prevention, and to clarify the role played by blood factors and elements in coagulation and certain immunity reactions.

Among the more fruitful and productive areas of research being pursued intensively are red blood cell production and anemias, immunological aspects of transplantation, other immunology reactions, blood coagulation, drug reactions, and hemoglobin synthesis. Specifically, areas of research to receive support in the coming year include development of antihemophilic factor preparations for treating hemorrhage in hemophilic patients and for prophylaxis prior to elective surgery, as well as studies in the genetic transmission of hemophilia, sickle cell anemia and other hereditary blood diseases; Rh compatibility, blood clotting, immunologic aspects of the coagulation disorders, and investigations of the composition, structure and characteristics of serum proteins and fibrinogen, thrombin and hemoglobin.

In the search for improved knowledge of blood disorders, sickle cell anemia, an inherited disease widespread in the United States, is illustrative of the role played by fundamental research. Its cause, discovered only several years ago, was found to be due to a change in the molecular structure of an abnormal type of hemoglobin in red blood cells which cause them to twist into a sickle shape. In their changed shape, the "sickled" blood cells cannot roll freely through very small blood vessels, leading to a variety of symptoms and death. Having found the cause, scientists supported by this Institute are now seeking to discover better methods of detection of the disease, and of prevention of sickling. Already the life span of victims of this disorder has been increased considerably through antibiotic drug therapy to counteract the many frequent infections found intercurrent with this disorder.

### DERMATOLOGY

The primary interest of most investigators in this still underdeveloped field of research continues to focus on the growth, structure and function of skin as vital to any future research progress. Overall, the support of research in dermatology by the Institute in the coming year will emphasize the extension of clinical and laboratory investigations in both normal and abnormal skin, and studies designed to relate certain cellular malfunctions to specific chemical disturbances in order to gain a better understanding of the etiology and pathogenesis of skin diseases.

Emphasis also will be placed on the continuation and expansion of ongoing studies on the effectiveness of the various cytotoxic (anti-cancer) chemotherapeutic agents in severe and disabling psoriasis, and the search for chemotherapeutic agents which might be effective in the treatment of other skin disorders. Psoriasis, a common skin disorder characterized by an abnormal local proliferation of skin cells, is being studied by an increasing number of scientists since it provides a model for other, related research in skin disorders.

An increasing amount of research will involve the study of biosynthetic pathways of the skin and the process of epidermal keratinization, which is expected to shed ultimately new light on psoriasis and ichthyosis. New insight into the possible mechanism of certain bullous skin diseases has been gained by immunologic studies which should lead to an improved understanding of the nature of pemphigus and certain other skin diseases.

### NUTRITION

Although interest in nutrition research is spread throughout many of the National Institutes of Health, the NIAMD is the major focus of research support in this area, providing approximately 58 percent of all extramural support. Research in nutrition is difficult to categorize with any precision since it is

closely related to and directly concerned with many areas of study such as metabolism, endocrinology, and gastroenterology. About 50 percent of research supported in this area, however, relates to the following six major categories: deficiency-induced states, the nutritional and metabolic based for cardiovascular disease, fats and fatty acids, malabsorption diseases and the specific requirements for actions of and metabolism of vitamins and trace elements, proteins and carbohydrates.

Specifically, Institute support of research in nutrition in the coming year will stress studies on the interrelationship between carbohydrate, fat, and protein metabolism, and expanded studies on the effects of qualitative and quantitative variations in the diet on body composition, appetite regulation and food intake.

RESEARCH GRANTS PROGRAM ANALYSIS

| Fields | 1968 estimate | 1969 estimate | Increase or decrease |
|---|---|---|---|
| 1. Arthritis | $6,750,000 | $6,990,000 | +$24,,000 |
| 2. Dermatology | 1,850,000 | 1,910,000 | +60,000 |
| 3. Diabetes | 4,750,000 | 4,920,000 | +170,000 |
| 4. Endocrinology | 12,600,000 | 13,040,000 | +440,000 |
| 5. Gastroenterology | 9,300,000 | 9,620,000 | +320,000 |
| 6. Hematology | 6,500,000 | 6,730,000 | +230,000 |
| 7. Metabolism | 21,500,000 | 22,250,000 | +750,000 |
| 8. Nutrition | 6,800,000 | 7,030,000 | +230,000 |
| 9. Orthopedics | 3,600,000 | 3,720,000 | +120,000 |
| 10. Urology and kidney diseases | 6,100,000 | 6,300,000 | +200,000 |
| 11. Other or interrelated areas | 3,956,000 | 4,107,000 | +150,000 |
| 12. Subtotal | 83,706,000 | 86,617,000 | +2,911,000 |
| 13. General research support grants | 9,551,000 | 9,409,000 | −142,000 |
| 14. Scientific evaluation and planning | 20,000 | 20,000 | 0 |
| 15. Categorical clinical research centers | 1,500,000 | 1,500,000 | 0 |
| 16. Total obligations | 94,777,000 | 97,546,000 | +2,769,000 |

DISTRIBUTION OF RESEARCH GRANTS

| | 1968 estimate | | 1969 estimate | | Increase or decrease | |
|---|---|---|---|---|---|---|
| | Number | Amount | Number | Amount | Number | Amount |
| 1. Noncompeting continuations | 1,650 | $57,214,000 | 1,624 | $60,125,000 | −26 | +$2,911,000 |
| 2. Competing projects | 369 | 13,688,000 | 356 | 13,188,000 | −13 | −500,000 |
| 3. New | 382 | 11,663,000 | 366 | 11,163,000 | −16 | −500,000 |
| 4. Supplementals | (123) | 1,141,000 | (230) | 2,141,000 | (+107) | +1,000,000 |
| 5. Subtotal, regular program | 2,401 | 83,706,000 | 2,346 | 86,617,000 | −55 | +2,911,000 |
| 6. General research support grants | | 9,551,000 | | 9,409,000 | | −142,000 |
| 7. Scientific evaluation | | 20,000 | | 20,000 | | 0 |
| 8. Categorical clinical research centers | | 1,500,000 | | 1,500,000 | | 0 |
| 9. Total, research grants | 2,401 | 94,777,000 | 2,346 | 97,546,000 | −55 | +2,769,000 |

*Fellowships*

| | |
|---|---|
| 1968 estimate | $6,591,000 |
| 1969 estimate | 6,737,000 |
| Increase or decrease | +146,000 |

The fellowship program is designed to increase the number of individuals trained for research and related teaching in the biomedical disciplines and clinical research areas that fall within the purview of this Institute. Through this program fellowships are awarded to outstanding scientists preparing for careers in research to support part of the cost of the necessary academic training and research experience.

The Postdoctoral Fellowship program is a primary mechanism to bring about the increase in number of individuals trained for research and teaching by providing support directly to selected individuals, training may be taken at any institution in the United States or abroad which is qualified to provide the necessary facilities and direction. One of the special advantages of this type of award is that it may be unique in character or content and, thereby, be a contributing first step in evolving an important future research field.

The Research Career Development program provides an advance form of fellowship to support more extended training and development of a limited number of individuals who show outstanding talent and a promise of significant biomedical research contributions as independent investigators.

DISTRIBUTION OF FELLOWSHIPS

| | 1968 estimate | | 1969 estimate | | Increase or decrease | |
|---|---|---|---|---|---|---|
| | Number | Amount | Number | Amount | Number | Amount |
| 1. Continuations: | | | | | | |
| (a) Noncompeting | 212 | $3,545,000 | 218 | $3,645,000 | +6 | +$100,000 |
| (b) Competing | 51 | 745,000 | 52 | 760,000 | +1 | +15,000 |
| 2. Supplementals | (4) | 20,000 | (4) | 20,000 | 0 | 0 |
| 3. New | 199 | 2,281,000 | 202 | 2,312,000 | +3 | +31,000 |
| 4. Total fellowships | 462 | 6,591,000 | 472 | 6,737,000 | +10 | +146,000 |

FELLOWSHIPS (BY TYPE OF PROGRAM)

| | 1968 estimate | | 1969 estimate | | Increase or decrease | |
|---|---|---|---|---|---|---|
| | Number | Amount | Number | Amount | Number | Amount |
| 1. Postdoctoral | 210 | $1,700,000 | 215 | $1,750,000 | +5 | +$50,000 |
| 2. Special | 104 | 1,300,000 | 106 | 1,325,000 | +2 | +25,000 |
| 3. Research career: | | | | | | |
| (a) Career | 28 | 780,000 | 28 | 780,000 | 0 | 0 |
| (b) Developmental | 120 | 2,811,000 | 123 | 2,882,000 | +3 | +71,000 |
| 4. Total fellowships | 462 | 6,591,000 | 472 | 6,737,000 | +10 | +146,000 |

*Training grants*

| | |
|---|---|
| 1968 estimate | $15,706,000 |
| 1969 estimate | 16,109,000 |
| Increase or decrease | +403,000 |

As a result of its responsibilities for the largest number and greatest variety of diseases, this Institute is the principal focus at NIH of support for training in clinical departments of medical schools and centers. The basic problem confronting the Institute and which this program deals with is the inadequate number of independent clinical research investigators and teachers having the necessary competence and scientific sophistication required for effective biomedical research and to engage in research training. The situation applies to the well established fields of research interest, such as arthritis, diabetes and endocrinology, and in even greater degree to emerging or resurgent areas of research interest, such as dermatology, orthopedics, urology and gastroenterology.

Immediate and long-range goals emphasize attracting, training and retaining within biomedical research and academic careers able, imaginative clinical researchers and teachers in numbers sufficient to pursue and train for present and anticipated promising research opportunities. The eventual clarification, treatment, management and prevention of disease problems depends on continued, competent investigative pursuit. In response to the long training-time problem, the Institute has estalished a limited number of "Experimental Training Programs for Clinical Invesigation." These programs have demonstrated the manner in which medical schools with an excellent record of research productivity are able to solve the problems of earlier identification of and greater in-depth training in fundamental research for outstanding physicians better than can be accomplished through the usual categorical training program.

DISTRIBUTION OF TRAINING GRANTS

| | 1968 estimate | | 1969 estimate | | Increase or decrease | |
|---|---|---|---|---|---|---|
| | Number | Amount | Number | Amount | Number | Amount |
| 1. Continuations: | | | | | | |
| (a) Noncompeting | 251 | $12,230,000 | 255 | $12,506,000 | +4 | +$176,000 |
| (b) Competing | 32 | 2,196,000 | 34 | 2,318,000 | +2 | +122,000 |
| 2. Supplementals | (18) | 420,000 | (18) | 425,000 | (0) | +5,000 |
| 3. New | 20 | 800,000 | 20 | 800,000 | 0 | 0 |
| 4. Scientific evaluational | (1) | 60,000 | (1) | 60,000 | (0) | 0 |
| 5. Total training grants | 303 | 15,706,000 | 309 | 16,109,000 | +6 | +403,000 |

TRAINING GRANTS (BY TYPE OF PROGRAM)

| | 1968 estimate | | 1969 estimate | | Increase or decrease | |
|---|---|---|---|---|---|---|
| | Number | Amount | Number | Amount | Number | Amount |
| 1. Graduate | 303 | $15,646,000 | 309 | $16,049,000 | +6 | +$403,000 |
| 2. Scientific evaluation | (1) | 60,000 | (1) | 60,000 | | 0 |
| 3. Total training grants | 303 | 15,706,000 | 309 | 16,109,000 | +6 | +403,000 |

LABORATORY AND CLINICAL RESEARCH

| | 1968 estimate | | 1969 estimate | | Increase or decrease | |
|---|---|---|---|---|---|---|
| | Positions | Amount | Positions | Amount | Positions | Amount |
| Personnel compensation and benefits | 538 | $6,360,000 | 571 | $6,854,000 | +33 | +$494,000 |
| Other expenses | | 7,992,000 | | 8,188,000 | | +196,000 |
| Total | 538 | 14,352,000 | 571 | 15,042,000 | +33 | +690,000 |

INTRODUCTION

The major objectives of the Institute's intramural program are:

(1) To develop more complete information about fundamental mechanisms in chemical and physiological sense of how cells grow, divide and control their activities.

(2) To employ this knowledge to discover the mechanism by which diseases develop and incapacitate man.

(3) To discover methods of therapy and prevention for those diseases for which the Institute is responsible.

The total program is extremely broad, encompassing both basic and applied research, and is designed to overcome the lack of fundamental knowledge in such disease categories as arthritis and related rheumatic and connective tissue disorders, diabetes and other inborn errors of metabolism, gastroenterology, diseases of the endocrine system, renal and urological diseases, and blood, bone and skin disorders, among others.

In support of the basic mission of the NIAMD, therefore, Institute research necessarily emphasizes studies and projects in the fundamental sciences as they are related to the previously-mentioned, specific disease categories, including chemistry, biochemistry, enzymology, molecular biology, anatomy, pathology, histology, physiology, medicinal chemistry; pharmacology, toxicology and genetics. Virtually all of the diseases within the purview of the NIAMD are closely related to, and require a thorough understanding of, metabolic processes—the multitude of biochemical reactions through which energy is provided for all bodily functions—, modulating effects of hormones on metabolism, the manner in which these metabolic processes are altered in specific diseases, and how aberations of normal metabolism may cause various diseases.

## ARTHRITIS AND RHEUMATISM

Arthritis and rheumatism are broad terms applied to a large number of disease conditions, all of which inflame and destroy joints and affect tissues adjacent to the joints. Arthritis and rheumatic diseases are generally divided into 13 categories, foremost of which are: arthritis of unknown etiology, such as rheumatoid arthritis and ankylosing spondylitis; degenerative arthritis or osteoarthritis; connective tissue disorders, such as systemic lupus erythematosus; infectious arthritis; traumatic arthritis; and arthritis associated with biochemical abnormalities, such as gout. Each condition in every category is a distinct disease entity but all have one common denominator—symptoms in the joints or adjacent tissues.

In the past year, Institute research investigators have performed a great many difficult and ingenious laboratory and clinical studies designed to gain new knowledge and insights into the causes of these diseases. Rheumatoid arthritis, the most vicious and crippling of all, continued to be the subject of aggressive and productive investigations. Also receiving intensive investigation were Reiter's disease, Sjogren's syndrome, leukopenia in connective tissue disease, and systemic lupus erythematosus with renal complications.

Significant progress during the past year has been made by Institute scientists in further clarifying the nature of gout, an inherited metabolic disorder resulting from deranged metabolism of purines. In gout, uric acid, a breakdown product of purines, accumulates in the blood and body tissues either because of overproduction of the potentially harmful substance or because of failure to excrete it adequately via the urine. When uric acid accumulates as urate crystals in the joints (in many cases characteristically in and around the big toe) the result is gouty arthritis. Excessive uric acid production, Institute investigators found, is associated with enzyme defect. This finding is closely related to results of studies of the Lesch-Nyhan syndrome, a recently discovered metabolic and neurologic disease of young males. Children with this disorder while appearing normal at birth fail to develop normally, showing instead mental retardation, uncontrollable movements of the hands, and eventually compulsive self mutilation of fingers and lips. The investigators who first identified this peculiar neurological and behavioral disorder associated it with a biochemical abnormality. They found that children with this disorder produced six times more uric acid than normal for their body weight. These findings led Institute scientists to further investigation in hopes that discovery of the the biochemical basis for excessive uric acid formation in these children might provide leads to the primary biochemical derangement responsible for excessive uric acid formation in gouty arthritis patients as well. After months of studies on Lesch-Nyhan victims, the Institute scientists identified the primary enzyme defect in these children, an absence of the enzyme hypoxanthine-guanine phosphoribosyltransferase (PRTase), which is involved in purine metabolism. Ordinarily, this enzyme's highest activity is in the brain, especially in the basal ganglia. Since the affected children's major neurological symptoms indicate dysfunction of basal ganglia, this suggests a cause and effect relationship.

The discovery of the primary defect in Lesch-Nyhan disease, as anticipated by the Institute scientists, provided new insight into the metabolic derangement in some gout patients. When they determined PRTase activity in blood cells of gout patients who produced an excess of uric acid, they found a markedly diminished activity of this same enzyme in a number of patients. Further, some of the gout patients (those with the least amount of PRTase activity) also showed evidence of a neurological defect that had not previously been recognized as being related in any way to their known gout conditions. These investigations demonstrate that at least one form of gouty arthritis may be the end result of a specific enzyme defect which results in excessive amounts of uric acid in the blood.

## DIABETES AND OTHER METABOLIC DISEASES

Diseases of deranged metabolism represent a broad area of research responsibility for Institute investigators. Intensive, basic studies have been conducted by NIAMD scientists this past year in diabetes, the best known of this group of diseases, in the continuing search for the cause of the body's inability to utilize carbohydrates normally, and to clarify the true nature of diabetes. These investigations are designed to develop further knowledge of diabetes and of the normal role of insulin in various tissues and on the cellular level. Other studies by Institute scientists seek to elucidate further the nature of a postulated inter-

ference with normal insulin activity in diabetes and of the substances which can destroy or inactivate insulin after its release from the pancreas—a relatively new concept of "insulin antagonism" or blockage. This past year has also seen continuation of studies on the role played by growth hormone, adrenocorticotropin (ACTH), and the adrenal steroid hormones in the induction of diabetes in rats, the results of which are providing a better understanding of the complicated hormonal interrelationship in this disease.

Another metabolic disease undergoing exhaustive investigation by Institute scientists is cystic fibrosis (CF), a serious hereditary metabolic disease which affects the exocrine glands of the body (glands which excrete their products directly to the outer environment on into the lungs and gastrointestinal tract). Institute researchers are continuing to seek the precise mechanism responsible for the production of the abnormally viscous mucus which characterizes many exocrine secretions in cystic fibrosis. Likewise the abnormally high electrolyte output of the sweat glands in cystic fibrosis is being investigated. New techniques of micropuncture of individual sweat glands are being used in these investigations in an effort to establish morphologically and functionally the specific nature of the defect in sweat electrolyte secretion.

During the past year, scientists of this Institute and the National Institute of Dental Research have obtained evidence that calcium combines with glycoproteins in submaxillary saliva of cystic fibrosis patients to form a precipitate which might cause obstruction of the gland's ducts. A similar phenomenon if found in other mucus secreting glands of the body in cystic fibrosis may explain many of the pathologic and clinical findings in this disorder. The observation that abnormal ionic concentration in CF may have an important effect on the solubility of glycoproteins has important implications in the pathogenesis of CF. This is especially true because an increase in calcium levels in many glycoprotein-rich biologic fluids is one of the most constant findings in cystic fibrosis.

Significant research by Institute scientists last year also identified a previously unrecognized disease and discovered its underlying biochemical cause. Called sulfite oxidase deficiency, the disease is characterized by severe neurological and mental retardation, dislocated eye lenses, and death in early childhood. The underlying biochemical abnormality is impaired activity of sulfite oxidase, the enzyme which normally catalyzes conversion of sulfite to sulfate. Sulfite oxidase deficiency joins two other causes of mental retardation, homocystinuria and cystahioninuria, as a disease of the metabolism of sulfur-containing compounds. The investigators who also discovered the fundamental biochemical defects in the other two diseases, are not attempting to learn how frequently sulfite oxidase deficiency occurs in the population at large and among mentally retarded children in particular, simultaneously, possible methods of prevention of the clinical abnormalities are being explored.

Institute researchers also discovered an enzyme defect in maple syrup urine disease, a familial metabolic disorder, characterized by progressive cerebral dysfunction and excretion of urine with an odor like that of maple syrup. Biochemically, victims of this disorder show elevated blood and urine levels of the amino acids leucine, isoleucine and valine and of their corresponding keto acids. The presence of these metabolites suggested a defect in the enzyme responsible for the further metabolism of these keto acids to carbon dioxide. Such a defect, the absence of the enzyme alpha-ketoisocaproic acid decarbonxylase, was demonstrated by these scientists in leukocytes and in fibroblasts grown from skin explants obtained from a child with this disorder. The absence of this enzyme helps explain the buildup of the aforementioned amino acids and their keto acids in the blood and urine of affected individuals.

## ENDOCRINOLOGY

The field of endocrinology embraces broad studies of the internally secreting glands of the human body, such as the pituitary, thyroid, parathyroid and adrenal glands, their respective hormones, and the roles they play in the normal and abnormal physiology of the body. Hormones—specialized chemical messenger substances produced in the various endocrine glands are capable in some instances of modifying specific metabolic or physiologic reactions and in others of modulating the over-all rate of metabolic processes. Additionally hormones are primarily responsible for and control sexual differentiation of an individual before birth and, later, growth, intellectual development, vigor, reproduction and

senescence. Thus, hormones regulate a broad spectrum of organ and body activities; abnormalities in hormonal action are the basis for a multiude of serious diseases.

Institute researchers are pursuing broad, intensive studies designed to elucidate precisely how hormones influence metabolism and other body functions and how they cross react with one another, as well as to clarify their molecular structure. Research projects also are under way which seek to develop feasible methods for chemical synthesis of hormones, especially the pituitary human growth hormone, and to modify other mammalian growth hormones so as to obtain fractions biologically active in man.

Osteoporosis is a bone thinning disorder which affects at least one of every five individuals over 50 years of age in the United States, primarily elderly women. It is believed to have resulted from hormonal and dietary factors combined with the inactivity of old age. The main dietary factor implicated is a long term defect in calcium intake over outgo. The most important dietary sources of calcium in the American diet are milk and milk products. In the past year, Institute scientists obtained evidence that in some patients this defect may result principally from prolonged abstention from milk ingestion instituted voluntarily to avoid symptoms of milk intolerance caused by a deficiency of the intestinal enzyme lactase. This enzyme is responsible for the orderly digestion of the milk sugar lactose. Its absence results in symptoms of milk sugar intolerance: gaseousness and bloating, flatulence abdominal cramps, pain and diarrhea.

Although the number of osteoporotic patients studied was small, there was a manifestly significant difference in the prevalence of lactase deficiency between groups of osteoporotic and normal subjects. The investigators feel that long-term dietary calcium restriction voluntarily instituted to avoid milk intolerance symptoms may have accentuated greatly the loss of bone mineral leading to osteoporosis. This association between lactase deficiency and osteoporosis, they believe, could provide one biochemical basis for the development of osteoporosis in one segment of the elderly population.

In another important study in this area of research, Institute scientists in the past year have shown that a recently discovered hormone produced in the thyroid gland, thyrocalcitonin, lowers blood levels of calcium by inhibiting resorption of calcium from bone. This finding provides new and significant knowledge about the mechanism of action of this hormone and warrants further research into its physiologic role and possible therapeutic application.

### GASTROENTEROLOGY

The field of gastroenterology, which encompasses the study of the gastrointestinal tract, the biliary tract, and the associated organs, is as diverse as it is complex; it involves all the fundamental processes which enable the body to digest, absorb, secrete, and excrete all that it ingests and to perform other additional specialized functions of the liver. The extraordinary advances in knowledge of the physiological and clinical aspects of the myriad number of gastrointestinal diseases in recent years have been achieved only through a determined and sustained research effort.

In the past year, Institute scientists have conducted a number of clinical and laboratory investigations designed to improve our understanding of the factors involved in intestinal malabsorption and sprue diseases. Other studies were devoted to the clinical entity "protein-losing gastroenteropathy."

A long-term project by Institute investigators, designed to evaluate the pathologic physiology of Whipple's disease and to study the effect of therapy on its natural history, is providing insight into a form of intestinal malabsorption which appears to be caused by bacterial agent and which can be reversed by therapy developed by the staff.

### HEMATOLOGY

The field of hematology is another that presents an extremely broad category of research interest to this Institute. The many studies conducted by Institute researchers in this area are designed to improve current understanding and knowledge of the various blood disorders and their basic causes, and to discover improved diagnostic techniques and new methods of therapy, management and prevention.

In the past year, Institute investigators have performed numerous fruitful studies on the biochemistry of blood coagulation, with particular emphasis on developing better forms of therapy for various congenital and acquired hemor-

rhagic ("bleeding") diseases, among them, hemophilia A or B, von Willebrand's disease, and such hemophiloid conditions as Factor V or Factor VII deficiency, circulating anticoagulants, afibrinogenemia, and fibrinolysis. The immunological aspects of thrombocytopenia, anemia, and granulocytopenia also are under investigation, and new approaches to therapy of acute and chronic idiopathic thrombocytopenic purpura (ITP) and of the thrombocytopenia of lupus erythematosus are being evaluated.

Among the more significant studies conducted by Institute scientists in the past year was one which led to the discovery of two previously unknown blood factors which are potent anti-coagulants and which may play a major role in several bleeding disorders. The two factors cause profound bleeding when infused into animals, simliar to that seen in patients with the rare blood disorders defibrination or fibrinolysis. This work suggests that these two previously undefined blood factors are the principal causes of hemorrhage in such patient.

The requested increase of $690,000 will provide $525,000 for modest increases in each of the disease areas described above, $42,000 for annualization of ten new positions authorized in 1968, $73,000 for annualization of the 1968 pay increase, $16,000 for one extra day of pay in 1969 and $34,000 for centrally furnished services from the National Institutes of Health management fund.

COLLABORATIVE RESEARCH AND DEVELOPMENT

| | 1968 estimate | | 1969 estimate | | Increase or decrease | |
|---|---|---|---|---|---|---|
| | Positions | Amount | Positions | Amount | Positions | Amount |
| Personnel compensation and benefits | 29 | $320,000 | 29 | $326,000 | ..... | +$6,000 |
| Other expenses | ..... | 7,267,000 | ..... | 7,273,000 | ..... | +6,000 |
| Total | 29 | 7,587,000 | 29 | 7,599,000 | ..... | 12,000 |

INTRODUCTION

The mission of the Institute and the versatile role it must play in pursuit of its goals have evolved modes of approach to problems which fall within the Institute's province of responsibility which cannot be met through either the intramural or the extramural system, both of which support projects essentially of the competent investigator's own choice. It is not easy to induce scientists to shift from studies in which they are effectually engaged to work on new problems. When Institute staff decide that it is essential to pursue a particular Institute project, and specific talents or resources are not available within the Institute, direct collaboration is sought with the necessary outside talent or resource to further accomplishment of the specific task. Thus, a type of Institute activity has been evolved which is financed by direct operations funds of the Institute and which makes use of the contract mechanism; this is the "collaborative" approach in pursuit of Institute goals.

This area of activities may be referred to as "developmental research" or "programmed research." Involved are usually structured, planned, mission-oriented, purposeful, Institute-directed efforts aimed at the achievement of a definite objective. Their need arises particularly in situations where preceding extensive fundamental laboratory and clinical research has advanced the state of knowledge of a particular field to the point where it is ripe for planned exploitation with specific targets in mind, such as the development of new diagnostic tests or of specific therapeutic modalities—a new vaccine, a new drug, a different approach to organ transplantation, or a new external prosthesis. Traditionally such programmed activities have also included specific activities aimed at providing investigators in a certain field with new tools of the trade, be they highly purified standard chemical substances or biologicals to aid ongoing research, or the development of new and complex laboratory equipment and instruments for the specific solution of a research problem or for use in clinical treatment of patients.

Also grouped in these activities is the important area of scientific communications, which includes the publication of current-awareness journals, the preparation of films and other communications media, and the organization, when needed, of specific scientific working conferences.

ARTIFICIAL KIDNEY PROGRAM

*Background*

In the United States today an estimated 50,000 individuals die each year as a result of irreversible kidney failure. The diseases which originally initiate the chain of events which terminates with advanced kidney failure vary considerably in nature. They may be primary kidney diseases like glomerulonephritis. In other instances, progressive kidney damage may be induced by longstanding hypertension or diabetes, or kidney infection and destruction may be initiated by obstructions such as kidney stones or hypertrophy of the prostate in aged males. Regardless of the original disease, the progressive kidney damage leads to a common final pathway, end-stage kidney disease, followed by fatal irreversible kidney failure.

Although artificial kidneys had been known for many years, until 1960 they could only be used a few times in each individual for lack of a practical method for repeatedly connecting the patient's bloodstream with the artificial kidney machine. In that year a group of Institute grantees at the University of Washington developed permanently indwelling plastic blood vessel connections ("cannuals") which made possible the repeated joining of patients with irreversible kidney failure to artificial kidneys for intermittent maintenance treatment. Subsequently, these investigators proved the feasibility of maintaining life in such patients for a number of years with the aid of artificial kidney treatments ("hemodialysis") given twice or three times each week. With increasing experience with this new treatment modality it soon became evident that existing artificial kidneys and dialysis methods were as yet not optimal, that maintenance treatment with artificial kidneys was extremely expensive and not within the reach of most individuals who needed it, and that rehabilitation of patients on chronic dialysis, using present methods and equipment, was not always optimal. It was estimated, based on recent experience, that about 8,000 patients of the yearly 50,000 individuals with end-stage kidney disease would possess the necessary medical and psychological prerequisites necessary for successful long-term dialysis treatment.

The emergence of this new lifesaving treatment encouraged the Congress, in the summer of 1965, to appropriate additional funds to this Institute for the pursuit of a planned and centrally directed program of research and development, utilizing predominantly a direct contract approach, aimed at the development of improved and less expensive dialysis hardware and methodologies and at optimal rehabilitation of chronic dialysis patients.

*The program*

The new Artificial Kidney Program was located in the National Institute of Arthritis and Metabolic Diseases (NIAMD), the Institute which has major responsibility for research in urology and renal diseases.

It was considered important to undertake such a program through the utilization of the best possible consultative talent from both outside and within the National Institutes of Health. Accordingly, outstanding authorities active in the field of chronic uremia and hemodialysis have been appointed as consultants. Among them are physicians who have led programs in artificial kidney centers, renal physiologists, physical chemists and membrane specialists, chemical and electronic engineers, and those rare, talented individuals who combine several of the above qualifications. These consultants are assisting in setting the trend of the program and are reviewing the scientific merit and feasibility of contract proposals.

It was also considered important that the program be undertaken in close cooperation with the activities of the Kidney Disease Control Program of the Bureau of Disease Prevention and Environmental Control of the Public Health Service. The latter activity is concerned largely with the actual demonstration of chronic dialysis in a community setting—both in specialized dialysis centers and, where feasible, in the homes of selected patients. Because of their closely interdigitating and interdependent nature both programs are in close and constant communication and work with a high degree of cooperation. There is a constant exchange of essential data between staffs of these programs, with particular emphasis on program planning activities. This close cooperation assures a maximum of benefit and prompt application of research and development advances in the artificial kidney field.

*Program plans*

A thorough study of the state of the art made it apparent that no single specific direction could be followed which would exclude others which might be relevant. Several different types of artificial kidneys are in use at the moment, and different methodologies are being advocated by the various workers in the field. Therefore, at this time, a variety of approaches in artificial kidney development are being supported. Once it becomes evident that one or more approaches show greater promise, efforts will be concentrated in these directions.

The following are considered problems of highest priority: (1) improvement of blood cannulas, (2) a search for possibly more suitable dialysis membranes, (3) development of better dialyzer design including disposable dialysis cartridges, (4) a decrease in requirement for expensive professional personnel, (5) acquisition of data which would permit a meaningful comparative evaluation of the effectiveness of the various dialysis methods and equipment currently in use, and (6) avoidance of the undesirable symptoms frequently found in patients maintained by repeated dialysis.

Following the 1965 Congressional appropriation, the Artificial Kidney Program was mounted in record time with the activation of carefully selected research and development contracts. These contracts were placed with universities, nonprofit research laboratories and industrial concerns, and constitute a broad spectrum approach to the problems of highest priority. These projects involve development of improved blood cannulas and filtration membranes; evaluation and development of new polymer surfaces for artificial kidneys, cannulas and membranes which do not induce blood coagulation; design of more efficient, compact, and less costly dialyzer systems; development of a new concept of artificial kidney dialysis ("hollow fiber" or "capillary" kidneys); research on and development of absorption cartridges for blood purification; research on the utilization of ultrasonics to speed up dialysis in artificial kidneys; development of inexpensive disposable dialysis units; improvement and design of new automated centralized artificial kidney systems; improvement and design of new dialysis units with automated fail-safe mechanisms; design and development of prototype for miniaturized or portable artificial kidneys, and many other related projects.

A substantial portion of the new contracts embody unique, new approaches to artificial kidney methodology such as diafiltration; development of new types of permanent arteriovenous shunts; introduction and evaluation of novel materials for cannulas; development of additional types of capillary (hollow fiber) artificial kidneys; evaluation of a special protein restricted diet in the maintenance of uremic patients for whom chronic dialysis is deemed not feasible or unobtainable; isolation from dialysates and identification of the as yet unknown compound(s) which is (are) specifically responsible for the toxic symptomatology in uremia, and many other projects related to improved dialysis methodology or pparatus.

A patient registry coupled with a medical, engineering and economic analysis of all patients on chronic dialysis has been instituted with the Research Triangle Institute as the contractor. The contract provides for a registry of all patients presently maintained with the aid of artificial kidneys or peritoneal dialysis, and will permit a truly comparative evaluation of the effectiveness of the equipment used and of the various methodologies of treatment. The patient registry project aims at a meaningful comparative evaluation of the various facets, steps and methodologies involved in chronic dialysis, from selection of the patient through his medical evaluation once he is being maintained with chronic dialysis. This overall systems analysis will be undertaken as a cooperative effort with the community service programs in dialysis of the Kidney Disease Control Program of the PHS: it will cover the various dialysis centers of the Veterans Administration Hospitals and all other centers or hospitals engaged in chronic dialysis and willing to cooperate.

In addition, there has already been an exchange of information with the personnel involved in the annual dialysis survey of the European Dialysis and Transplant Association concerning information obtained during its annual cross section survey of the patient population in Europe, which equals approximately the number of patients on dialysis in this country. Since a number of valuable innovations have originated in Europe and since the patient problems are similar, access to the European data and a mutual exchange of information will increase the value of both registries, particularly as to the medical, clinical, and technical aspets of dialysis.

In the process of instituting this registry it has become increasingly apparent that the medical and clinical aspects of chronic dialysis require detailed evalua-

tion, partiularly with regard to efficacy in controlling the various symptoms associated with uremia and with regard to the long-term deleterious effects on the nervous system, blood and bones.

The ideal diet for patients in dialysis is still a matter of controversy and disagreement among the experts. Some favor high protein diets with frequent dialyses, whereas others favor special selected low protein diets with infrequent or occasional dialyses. Also, some favor entering patients into dialysis programs on a preventive basis prior to terminal uremia, while the patient still has some kidney function, where as others adopt the opposite approach and attempt to delay as long as possible the time when dialysis must be instituted. In order to help resolve these matters various centers are being stimulated to study these problems in a detailed and organized way.

A working conference on the dietary management of chronic renal failure, cosponsored by the Artificial Kidney Program of the Institute and the Kidney Disease Control Program, BDPEC, PHS, was held October 2–3, 1967. The two-day session was designed to analyze and communicate certain aspects of current knowledge of dietary therapy in the managemnet of patients with chronic renal failure. Special emphasis was devoted to a comparative evaluation of a new type of diet, developed in Italy and England, which limits dietary nitrogen intake to minimal amounts of essential amino acids, and which has permitted limited survival and rehabilitation, in certain types of patients with chronic renal failure, without recourse to kidney transplantation or artificial kidneys.

As a result of the meeting a number of pertinent clinical studies will be undertaken by several participants, in addition to the work already currently supported by the Program in this area, with special emphasis on the use of variations of this diet coupled with occasional, infrequent dialyses, in many patients who cannot now obtain regular chronic dialysis treatment. The proceedings of the Conference will be published as a special supplement to the monthly American Journal of Clinical Nutrition and copies wil lbe made avaiabe subsequently to all workers in the leld of chronic renal failure.

As a result of the success of this Conference a similar conference on abnormal calcium metabolism and bone disease in uremia and dialysis patients is planned for the fall of 1968.

In 1967 the Program began publication of the quarterly Artificial Kidney Bibliography. This current-awareness publication provides information on the latest scientific articles published anywhere in the world concerning renal failure, dialysis, artificial kidneys, and kidney transplanation. It is made available, with out cost, to NIH grantees engaged in kidney disease research, to contractors of the Artificial Kidney Program and, upon request, to other qualified interested investigators and practitioners working in areas closely related to the artificial kidney. The laudatory response of the recipients of this new publication has been very gratifying.

The Program has also published and widely distributed the publication A Review of the Development and Performance of Hemodialyzers which was prepared by one of its contractors. Among other essential subject matter it contains tables which, for the first time, compile and compare performance data on the various existing dialyzers and dialysis membranes—an indispensable aid to anybody engaged in artificial kidney improvement.

*Accomplishments*

In the past year there have been a number of accomplishments and encouraging developments in the research and development contract program. A compact, high-efficiency dialyzer for artificial kidney machines has been developed which permits treatment of almost twice as many patients in a given dialysis center setting as with conventionally used dialyzers. The Babb-Grimsrud (B–G) dialyzer, named for its developers, measures only 20 by 50 centimeters and is constructed of plastic and a commercially available foam nickel support material. It requires a total blood volume of only 70 cc., thus decreasing the presently high blood priming requirement and the need for compensatory blood transfusions. It costs half as much as the conventionally used two-layer Kiil dialyzer, can be assembled in ten minutes and can be sterilized in an autoclave. Compared to the Kiil dialyzer, the B–G dialyzer has approximately one-third the membrane area, one-seventh the blood volume, and one-fourth the weight, with no decrease in urea clearance and only slight decreases in creatinine clearance. At the present time a series of these new dialyzers is being built for extensive testing under routine operating conditions.

The same clinicians involved in collaborating with the engineers on the Babb-Grimsrud dialyzer design at the University of Washington, Seattle, have devised a technique for storing and re-using artificial kidneys of the Kiil type and of the attached blood tubing, which reduces the cost and simplifies the work involved in performing hemodialysis in the home. The new procedure permits re-use of the artificial kidneys for at least three successive dialyses, requires assembling and disassembling of the unit only once instead of three times a week, and allows use of blood tubing sets at least nine times, for an estimated saving of $900.00 per year. The clinicians involved in developing this are involved also in other contracts of research and development in the dialysis area.

The new and unique hollow fiber capillary kidney, which is being developed under a contract with the Dow Chemical Company, is progressing according to schedule and has already been tried on one patient. A semi-automated facility has been set up under the contract in order to expand the production of prototype models which will be put into clinical testing shortly. The advantage of this design is that it is compact, disposable, and as efficient as dialyzers in current use, and lends itself to mass production. The design consists of small bundles of many hollow cellulosic fibers through which the blood is passed and which are washed by a blood-purifying dialyzing solution. In addition to the above-mentioned two new artificial kidney designs, other possible designs are being explored including other approaches to the hollow fiber dialyzer design.

Another contractor who is manufacturing the conventional Kiil dialyzer has been successful in the development of a new type of multiple minute pyramidal membrane supports which increase the effective dialysis area of the membrane in the Kiil dialyzer. Preliminary laboratory tests have shown that this new development has increased the dialyzing efficiency of these modified Kiil dialyzers by about 40%. A series of the new type of dialyzer is now being built for clinical testing with patients.

The activities of the Program have also resulted in an increase, in this country, in the use of a new type of diet, developed in Italy and England and heretofore used primarily abroad, which has permitted limited survival and definite rehabilitation in certain types of patients with chronic renal failure, where recourse to kidney transplantation or artificial kidneys is not possible or advisable.

*Current plans*

The Program will continue all promising current research and development efforts and will pursue any new ideas and approaches which appear feasible. Among these is a new method of detoxification of uremic blood with the aid of special selective absorbing agents (in contrast to the presently used purification with the aid of membrane dialysis). The complete success of such detoxification-by-adsorption hinges on the successful identification of all toxic substances which accumulate in the bloodstream in kidney failure. The Program is currently funding a number of studies aimed at the isolation and identification of such unknown toxic factors which may have to be removed from the patients' blood, in addition to metabolic wastes and other substances known to accumulate during kidney failure, such as urea, creatinine, uric acid, potassium, hydrogen ion, and water.

The Program will support further development of special diets (see above) for maintenance of uremic patients, to be used in conjunction with infrequent peritoneal dialysis or hemodialysis. For the latter type of regimen patients would be given surgically constructed, subcutaneous, natural arterio-venous blood vessel shunts (which are very adequate for infrequently administered hemodialysis). It is hoped that with the aid of such a special diet-infrequent-dialysis regimen patients would be maintained without the need for implantation of plastic shunts, and that a larger number of patients with renal failure may be accorded life-saving treatment in this fashion in the face of the great expense of conventional chronic dialysis therapy which is unavailable to most patients with end-stage kidney disease.

*Scientific communications*

A continuing problem confronting individual physicians and research scientists today is keeping abreast of current developments and advances in their respective areas of interest or field of work. To meet this communications gap, this Institute initiated several years ago a major program of monthly current-awareness publications in its principal fields of responsibility, designed to make available in concise form to interested physicians and scientists abstracts, citations and bibliographies of all current scientific papers and literature most relevant

to their particular spheres of interest, which have been published within recent weeks or months anywhere in the world and in any language.

The enthusiasm with which these publications were received and their acceptance and wide use by the scientific community more than bears out the need for such publications. Among the current-awareness journals now successfully meeting this challenge are Arthritis and Rheumatic Diseases Abstracts, Gastroenterology Abstracts and Citations, Diabetes Literature Index, and Artificial Kidney Bibliography. The three journals are expected to continue in the next year in much the same form. As a result of the Institute's experience and of responses from recipients, Artificial Kidney Bibliography, will see a needed change. Henceforth, this quarterly publication will appear on a monthly basis and a quarterly abstract publication will be added to this monthly bibliography. These changes are expected to permit more effective coverage of the latest developments and advances, as described in the world literature, in artificial kidney apparatus and technology, clinical dialysis methodology, kidney transplantation and fundamental and clinical knowledge concerning chronic kidney failure.

In the past year, a prototype of a new current-awareness journal has been developed in the field of endocrinology, to be known as the Endocrinology Index. At present, two experimental issues have been compiled for a limited distribution to interested professionals in the field, to evaluate the usefulness and format of this type of journal. It is expected that Endocrinology Index will cover the entire field of endocrinology, excepting pancreatic function (which is covered in Diabetes Literature Index), with regular publication hoped for in 1968.

The Institute, in collaboration with the National Institute of Child Health and Human Development, is engaged in the development of another journal to fill the existing communications gap in the field of nutrition.

In the past year, the Institute's Office of Scientific Communications in cooperation with the National Cystic Fibrosis Research Foundation produced a 16 mm. color medical teaching film, "Diagnosis and Management of Cystic Fibrosis", intended for physicians, medical students, nurses, physical therapists and others professionally concerned with this inborn metabolic disorder. The film has been received enthusiastically and will be made widely available through both sponsoring agencies.

### NATIONAL PITUITARY AGENCY

In December 1967 the NIAMD awarded a new contract in the amount of $287,500 to the University of Maryland School of Medicine to continue through the National Pituitary Agency the collection of human pituitary glands and the preparation distribution of human growth hormone (HGH) for research and clinical studies on problems of human growth by qualified investigators. Insufficient secretion of HGH by the pituitary gland results in a condition called hypopituitary dwarfism, treatable by administration of additional HGH.

Currently the main problem facing fundamental and clinical research related to HGH is the scarcity of the hormone, available presently only from the pituitary glands of the deceased. Research has shown that one human pituitary gland provides only enough HGH for about five days of treatment of a hypopituitary child. Unfortunately, extracts of growth hormone from animal pituitary glands have not proved active in man.

In an effort to alleviate the problem, the NPA is seeking to increase and improve collection of human pituitary glands and to provide for the distribution of purified HGH to qualified research scientists.

Extramural clinical studies are designed to determine HGH's metabolic effects and mechanism of action. Other biochemical studies are designed to elicit the molecular structure of HGH in order to make possible its laboratory synthesis and to eliminate reliance on the natural hormone. Presently, HGH can be administered only to patients in conjunction with clinical studies since it is not possible to collect enough human pituitary glands to obtain sufficient HGH for treating the estimated 5,000–10,000 children suffering from hypopituitary dwarfism in this country. To aid as many as possible, the NPA's Medical Advisory Board review applications submitted by research endocrinologists and determines the scientific merit of the proposals and the amount of hormone each investigator is to receive based upon the requirements of each proposed study and the available supply. Under this research program, about 400 children with various problems of growth are currently being given HGH in clinical studies.

In this connection, a scientist at the University of California at Berkeley who has received HGH from the NPA and whose research is supported by this Institute, recently identified the chemical structure of this hormone, a finding

that marks a major advance in understanding of the several modes of action of HGH and increases chances for its eventual synthesis. Meanwhile, other studies using HGH from the agency are attempting to modify chemically HGH from cattle to make it biologically effective in man. These scientists, at New York's Memorial Sloan-Kettering Cancer Center, whose research also is supported by the NIAMD, have demonstrated that bovine growth hormone modified by digestion with the enzyme trypsin elicits in man many of the characteristic metabolic responses of human growth hormone.

The increase in this activity will provide $6,000 for annualization of the 1968 pay increase and $6,000 for centrally furnished services from the National Institutes of Health management fund.

BIOMETRY, EPIDEMIOLOGY AND FIELD STUDIES

| | 1968 estimate | | 1969 estimate | | Increase or decrease | |
|---|---|---|---|---|---|---|
| | Positions | Amount | Positions | Amount | Positions | Amount |
| Personnel compensation and benefits | 27 | $196,000 | 27 | $203,000 | ---- | +$7,000 |
| Other expenses | ---- | 517,000 | ---- | 518,000 | ---- | +1,000 |
| Total | 27 | 713,000 | 27 | 721,000 | ---- | +8,000 |

Epidemiology research is recognized today as a science indispensable to the advance of biomedical knowledge. The Institute's Clinical Field Studies Unit has in a comparatively short time amply demonstrated the value and importance of research of an epidemiological and clinical nature. Investigators of this Unit are actively studying the genetic and environmental factors related to the occurrence of clinical diabetes and its complications and are evaluating possible therapeutic or preventive measures. A survey by this Unit, for example, demonstrated that the Pima Indians have by far the highest prevalence of diabetes ever reported in any population group.

Based in Phoenix, Arizona, the Unit now conducts its research studies at the portable clinical facility attached to the DIH hospital on the Pima Indian Reservation at Sacaton, about 40 miles south of Phoenix. So fruitful have the Pimas proved as research subjects that the Unit, in addition to continuing its studies in arthritis and diabetes, has expanded research activities to include the field of gastroenterology, specifically liver and gallbladder disease.

The original epidemiological study among more than 1100 Pima Indians in which a diagnosis of diabetes was made revealed a high prevalence of diabetes with a significant excess in each decade in females aged 45 years or over. In the past year, clinical investigators of the Unit have shown that the effects of childbearing do not account for the higher prevalence of diabetes among women. Of about 700 females studied, over half had borne four or more children and one-fifth had borne seven or more children. Since the Pimas have large families in addition to a high prevalence of diabetes, the data was analyzed to test the hypothesis that increasing parity is associated with an increased risk of diabetes. In spite of a high prevalence od diabetes and the frequent occurrence of large families, no evidence of any relation between increasing parity and the age specific prevalence of diabetes was found. Nor was the prevalence of diabetes in women aged 45 years and over who had borne seven or more children greater than in women who had borne none. Contrary to expectations, the prevalence of diabetes, especially in the younger age groups, was found somewhat higher in those Indian females who have borne no children than in those who have borne seven and more children.

Another significant study by this Unit this past year revealed an unusually high prevalence of gallbladder disease in this population. Studies are underway to document further the prevalence of gallbladder disease in the Pima Indians, to investigate associations between gallbladder disease and possible predisposing factors in this population, and to compare the gallbladder disease prevalance in this circumscribed population with that of the predominantly Caucasian community of Framingham, Massachusetts.

More recently information was compiled which showed that the Pima Indians also have a rate of gallbladder disease that is six times higher than that found in a similar gallbladder study done among Caucasians in Framingham, Massachusetts. Although no association could be found between diabetes and gallblad-

der disease in Pima females, 80 percent of Pima men over 45 with gallbladder disease also had diabetes. Precisely what influence this finding may have upon ongoing diabetes studies remains to be determined.

Another Unit of the Institute's Epidemiology and Field Studies Branch conducts iodine metabolism field studies, the long-term objectives of which are to examine closely the principal environmental factors associated with the prevalence of goiter and to study the nature of the metabolic defect responsible for this disorder. This study is part of an overall effort aimed at finding better means of preventing goiter and hyperthyroidism. The program include field studies of water supplies in areas where goiter is endemic, are carried out in Virginia in collaboration with State and local health departments to determine the principal anaerobic bacterial flora of the local water supply; experimental studies in animals in collaboration with the Institute's Laboratory of Nutrition and Endocrinology, to determine if changes in the intestinal flora of rats influences their thyroid status; and clinical studies in collaboration with the Institute's Clinical Endocrinology Branch involving qualitative and quantitative studes of the human fecal flora in normal control subjects, hyperthyroid subjects and one euthyroid patient.

The increase in this activity will provide $4,000 for annualization of two new positions authorized in 1968, $2,000 for annualization of the 1968 pay increase, $1,000 for one extra day of pay in 1969 and $1,000 for centrally furnished services from the National Institutes of Health management fund.

REVIEW AND APPROVAL OF GRANTS

| | 1968 estimate | | 1969 estimate | | Increase or decrease | |
|---|---|---|---|---|---|---|
| | Positions | Amount | Positions | Amount | Positions | Amount |
| Personnel compensation and benefits | 80 | $742,000 | 85 | $791,000 | +5 | +$49,000 |
| Other expenses | | 1,505,000 | | 1,520,000 | | +15,000 |
| Total | 80 | 2,247,000 | 85 | 2,311,000 | +5 | +64,000 |

INTRODUCTION

This activity is composed of professional and supporting personnel who are responsible for the administration of the Institute's several grants activities. This involves planning and development of programs in research, training, and fellowships that will best serve to accomplish the desired results in the areas of disease interest for which this Institute is responsible; review and evaluation of research and training grant applications for presentation to the National Advisory Arthritis Council; required Council staff assistance; liaison with applicants, grantees, other components of NIH and PHS, advisory bodies, and interested organizations, continuous surveillance of scientific activities and progress; and recording and reporting of fiscal and scientific information relevant to all transactions.

The increase requested will provide five new positions and $30,000 for additional grants management and professional analysis staff needed to administer the complex problems presented by the growing number of competitive grant applications and the rising cost of biomedical research. This increase will enable the staff to take the many complex administrative actions to negotiate the minimum obligation for each grant, thereby increasing the total number of grants, fellowships and training grants which can be awarded from the funds appropriated.

The increase will also provide $5,000 for annualization of two new positions in 1968, $11,000 for annualization of the 1968 pay increase, $3,000 for one extra day of pay in 1969 and $15,000 for centrally furnished services from the National Institutes of Health management fund.

PROGRAM DIRECTION

| | 1968 estimate | | 1969 estimate | | Increase or decrease | |
|---|---|---|---|---|---|---|
| | Positions | Amount | Positions | Amount | Positions | Amount |
| Personnel compensation and benefits | 23 | $227,000 | 25 | $260,000 | +2 | +$33,000 |
| Other expenses | | 144,000 | | 164,000 | | +20,000 |
| Total | 23 | 371,000 | 25, | 424,000 | +2 | +53,000 |

This activity is comprised of the Institute Director, his immediate staff and administrative management and service personnel who are responsible for the general direction, coordination and administration of the total Institute activities.

The requested increase will provide two positions and $20,000 for specialized professional assistance to the Institute Director and to provide for in-depth studies relating to the programming and budgeting systems in the Institute. The request also includes $9,000 for annualization of three new positions authorized in 1968, $3,000 for annualization of the 1968 pay increase, $1,000 for one extra day of pay in 1969, and $20,000 for centrally furnished services from the National Institutes of Health management fund.

NEW POSITIONS REQUESTED IN 1969

| | Grade | Annual salary |
|---|---|---|
| Laboratory and clinical research | | |
| Medical officer (4) | GS–15 | $76,078 |
| Scientist (2) | GS–14 | 31,682 |
| Medical officer (2) | GS–12 | 27,506 |
| Scientist (3) | GS–11 | 28,971 |
| Chemist (4) | GS–9 | 37,596 |
| Chemist (4) | GS–7 | 32,336 |
| Secretary | GS–6 | 6,137 |
| Research technician (6) | GS–5 | 33,390 |
| Clerk-steno (4) | GS–4 | 19,980 |
| Clerk-steno (3) | GS–3 | 13,398 |
| Total (33) | | 307,074 |
| Review and approval | | |
| Grants management specialist | GS–9 | 8,054 |
| Grants management specialist assistant (2) | GS–7 | 13,468 |
| Grants clerk (2) | GS–5 | 11,130 |
| Total (5) | | 32,652 |
| Program direction | | |
| Scientist | GS–16 | 20,982 |
| Secretary | GS–7 | 6,734 |
| Total (2) | | 27,716 |
| Total, new positions, all activities (40) | | 367,442 |

RESPONSIBILITIES

Senator Hill. Now, Dr. Whedon, Institute of Arthritis and Metabolic Diseases.

You may proceed, sir.

Dr. Whedon. Mr. Chairman and members of the committee, I am pleased to appear before you again to report on the progress of the National Institute of Arthritis and Metabolic Diseases and to discuss our needs for the fiscal year 1969. I would like to enumerate to you some of the encouraging developments in the large number of areas for which this institute bears responsibility, which include, among others, arthritis and connective tissue diseases, diabetes and other metabolic

disorders, diseases of the gastrointestinal tract, and diseases of the blood, bone, liver, kidney, and skin.

Senator HILL. You have a pretty broad area, don't you?

Dr. WHEDON. We have a very broad area, Senator.

SPECIAL PROGRESS REPORT

In order to present you with an adequate description of the research findings of Institute scientists and grantee investigators, we have prepared detailed special reports of progress in the Institute's major disease areas. In my present statement I shall mention briefly some of the highlights of the efforts of the previous year.

ARTHRITIS

First in arthritis. The sum total of recent experimental findings points to the likelihood that rheumatoid arthritis is the end result of a disturbance in the patient's defensive immune reactions which is directed against his own joint linings. Studies suggest that this disturbance may be induced by a previous infection by micro-organisms such as mycoplasma or certain viruses.

ARTHROSCOPE

A new instrument, called an arthroscope, has been developed which permits direct visual examination and biopsy of intrapoint structures, an extremely effective diagnostic procedure which obviates in many cases undesirable exploratory surgery and which is superior to previously used "blind" biopsy techniques.

Senator HILL. It's much better, isn't it?

Dr. WHEDON. Much better; it avoids the scarring that would occur from having to open up the joint and one can get a very clear look at the tissue that one is going to take with this new instrument so that we get better tissues for microscopic and biochemical tests.

Senator HILL. I quote my father, who was the surgeon, who always said the patient is on the wrong end of the knife.

You are getting that patient off of that wrong end of the knife; is that correct?

Dr. WHEDON. That is correct.

GOUT

In gout research an Institute scientist in Bethesda has discovered a specific enzyme defect in certain patients with a form of this painful joint disease.

Senator HILL. There's a lot to be done in this field of arthritis, isn't there?

RHEUMATOID ARTHRITIS

Dr. WHEDON. Yes, I think we are at a rather crucial time with respect to arthritis, particularly with respect to rheumatoid arthritis. Progress is being made all the time in understanding this disorder, and we are very hopeful that very substantial results will come out which will lead us to control this disorder much more effectively.

Senator HILL. You are hopeful?

Dr. WHEDON. In fact, Senator, I think that the committee might be very interested in the special report that we have on arthritis which would detail this information for you.

Senator HILL. We would like to have that. Will you please send it to us.

(The report follows:)

SPECIAL REPORT: ARTHRITIS AND RHEUMATISM

Arthritis and rheumatism, terms that refer respectively to inflammation and destruction of joints and disease affecting tissues surrounding the joints, head the list of chronic diseases in the United States today in terms of social and economic importance. In addition to inflicting much suffering and disability on over thirteen million citizens, this group of diseases is estimated to affect adversely the economy by more than two billion dollars a year.

The American Rheumatism Association, a professional society of arthritis specialists, divides the arthritic and rheumatic diseases into 13 different categories. Among the major ones are: arthritis of unknown cause (such as rheumatoid arthritis and ankylosing spondylitis); degenerative joint disease (osteoarthritis); connective tissue disorders such as systemic lupus erythematosus; infectious arthritis; traumatic arthritis; and arthritis associated with biochemical abnormalities, such as gout. Each disorder is a distinct disease entity, but all have one feature in common—symptoms (principally pain and swelling) in the joints or surrounding tissues.

An organized attack on arthritis and rheumatism is being waged by the National Institute of Arthritis and Metabolic Diseases (NIAMD), which conducts intramural research and support relevant projects at research centers throughout the country. The purpose of this report is to outline briefly some of the major research accomplishments reported by Institute investigators and grantees during the past year.

RHEUMATOID ARTHRITIS

Two theories regarding the cause of rheumatoid arthritis have received the most attention during the past few years. One is the concept of autoimmunity, which contends that the body, for some unknown reason, produces abnormal antibodies that are diretced against its own tissues (the joint lining) rather than against any foreign material, as is normally the case. Part of the evidence supporting this concept is the abnormally high level of gamma globulins (antibodies) in the blood of rheumatoid arthritis patients. The characteristic "rheumatoid factor", a complex protein found in the blood and joints of most patients with this disease, also closely resembles an antibody.

The other theory is that this disease may result from an infectious process. This might tie in with the autoimmunity concept, because it could be an infectious agent which induces pathological changes in joint tissues; these altered tissues, in turn, could stimulate the production of antibodies which are directed against them. Although no causative organism has yet been difinitely incriminated there is some evidence pointing towards at least two types of microorganisms.

Last year it was reported that grantee investigators at the University of California produced arthritis in monkeys by injecting them with Bedsonia viruses isolated from human patients with Reiter's syndrome, a disease related to rheumatoid arthritis. The Bedsoniae are large viruses which resemble bacteria in some respects. This promising lead is being pursued intensively to determine if these organisms do indeed contribute to the development of Reiter's syndrome. The studies have been expanded in an attempt to evaluate the incidence of infection with Bedsoniae in man. Specimens from every type of arthritis patient who undergoes surgery at the University of California Medical Center are being studied, along with autopsy specimens from patients who did not have arthritis. More extensive animal studies are also underway. This work may have long range application to a broad spectrum of diseases, including rheumatoid arthritis.

Mention was also made in last year's report of an Institute-sponsored conference to explore the possible relationship of the mycoplasma, another type of microorganism, to rheumatoid arthritis and related diseases. The conference pointed out the need to learn more about this organism itself, which lies somewhere between bacteria and viruses in size, in other properties, and in biological

behavior. Also identified as areas needing further investigation were the methods for identification and culture of mycoplasma, and the study of chronic animal infections with mycoplasma that may have bearing on the problem, particularly in primates other than man. Research in these areas has been intensified during the past year, and cooperation between investigators working in the field has been improved by the conference. Hopefully, further research will clarify what role, if any, the mycoplasma play in causing rheumatoid arthritis.

*Diagnosis of rheumatoid arthritis*

Examination of fluid in the joint cavity has aided greatly in diagnosing certain rheumatic conditions and has led to a better understanding of the development of some joint diseases. A grantee investigator at Georgetown University has reported finding particles of the complex genetic material, deoxyribonucleic acid (DNA), consistently in the synovial fluid of rheumatoid arthritis patients. This discovery may prove useful in confirming the diagnosis of rheumatoid arthritis. It is not known where the DNA particles originated, but further studies are being conducted to determine their origin, nature, and significance.

Another finding pertinent to the diagnosis of rheumatoid arthritis was reported by grantee investigators at the Mount Sinai Hospital and Medical School in New York. Since most patients with this disease have the rheumatoid factor in their blood, the identification of the factor is an important diagnostic measure. The tests most commonly used employ latex or bentonite particles suspended in a solution. The particles are coated with antigens which, in the presence of the antibody-like rheumatoid factor, cause a visible clumping phenomenon which can be quantitated. The investigators successfully substituted an activated charcoal for latex as the carrier particle. The advantages of charcoal over the previous carriers include its stability, low cost, ease of use, and lack of special storage needs. Since the charcoal adsorbs almost instantly in a wide variety of antigens or antibodies, it should also be useful in studying numerous other immunologic reactions, and, in fact, has already had wide application in this area.

*Arthroscopy found effective in joint disease examination*

An Institute-supported investigator at the University of Vermont has reported success with a new technique which may have important value in the diagnosis of rheumatoid arthritis and other joint diseases. Using an arthroscope, a slender, sharpened and hollow instrument which is inserted into the joint space through a small incision, they have achieved 100 percent success in obtaining adequate tissue for histologic examination of the intra-joint structure without resorting to extensive, and potentially dangerous, surgery.

Inasmuch as present methods of studying intra-joint structures have not been completely satisfactory, the investigator recommends adoption of arthroscopy since the technique requires only superficial surgery, provides adequate data for differential diagnosis, and may be used for assessing response to treatment. A completely flexible instrument is now being developed by the grantee scientist which, when perfected, will facilitate visualization and biopsy of the hip joint as well as of additional structures within the knee.

*A study of corticosteriod therapy*

The synthetic equivalents of certain hormones secreted by the adrenal gland have an important place in the treatment of properly selected cases of rheumatoid arthritis. Although corticosteriod drugs do not retard progression of the disease itself, they suppress its overt signs and improve the patient's functional capacity for long periods of time. These drugs, however, often have troublesome and potentially serious side effects such as peptic ulcer, the masking of infection or activation of certain types of infection, and psychoses. An Institute-supported investigator at Henry Ford Hospital has obtained concrete evidence from a study of rheumatoid arthritis patients treated with corticosteriod agents confirming the suspicion that these drugs favor the development of osteoporosis, or bone demineralizaion.

In this investigation, quantitative measurements were made of bone tissue and cell dynamics in 11 patients with rheumatoid arthritis who had received corticosteriod drugs continually for periods ranging from 2 months to 12 years. Compared with normal control subjects of the same age, the number of sites of new bone formation was reduced by one half, while bone resorption sites were about one and a half times normal. Since previous studies had shown the same types of alterations in nonarthritic patients receiving corticosteroid agents, the changes can be attributed to the drug, rather than to the disease. Findings such as this increase scientific knowledge of the long-term effects of corticosteriod administration, and lead to the formulation of sounder treatment principles.

GOUTY ARTHRITIS

Investigators at the Institute have made significant progress during the past year in clarifying the nature of gout, an inherited metabolic disease that results from deranged metabolism of purines, building blocks of the body's heredity mechanism. Uric acid, a breakdown product of purines, accumulates in the blood and body tissues of gouty individuals either because of overproduction of this potentially harmful metabolite or because of difficulty in excreting it via the urine. When uric acid accumulates in the form of urate crystals in the joints, in many cases and around the big toe, the result is often an excruciatingly painful attack of gouty arthritis.

Institute scientists have found that excessive production of uric acid in a number of gout patients is associated with an enzyme defect. This finding is closely related to results of studies of the Lesch-Nyhan syndrome, a tragic neurological disease of young males that in the past was frequently classed as a form of cerebral palsy. Children with this disorder appear normal at birth, but fail to achieve normal development, showing instead mental retardation, uncontrollable movements of the hands, and eventually compulsive self mutilation of the fingers and lips. The Institute-supported investigators who first identified this curious neurological and behavioral disorder associated it with a biochemical abnormality. They found that these children produced six times more uric acid than normal for their body weight and much more than any other human being. Then Institute scientists began to investigate this disorder with the hope that discovery of the biochemical basis for the excessive uric acid formation in these children might provide leads to the primary biochemical derangements responsible for excessive uric acid formation in gouty patients as well.

In nine months of investigation with Lesch-Nyhan patients, these Institute scientists identified the primary enzyme defect in these children. An enzyme normally found in red blood cells and in many other tissues which is involved in the metabolism of purines, hypoxanthine-guanine phosphoribosyltransferase (PRTase) is deficient in, or absent from their cells. When the activity of this enzyme is impaired, xanthine and hypoxanthine (forerunners of uric acid) are not metabolized in the normal fashion and tend to accumulate in toxic concentrations, as is uric acid. Ordinarily, this enzyme's highest activity is in the brain, especially in basal ganglia. Since the affected children's major neurological symptoms indicate dysfunction of basal ganglia, a cause and effect relationship is suggested.

As anticipated, discovery of the primary defect in the Lesch-Nyhan syndrome provided new insight into the metabolic derangement in some patients with gout as well. When the investigators determined PRTase activity in blood cells from gout patients who produce excessive quantities of uric acid, they found that there was a markedly diminished activity of this same enzyme in a surprising number of patients. Furthermore some of the gout patients (those with the least amount of enzyme activity) also showed evidences of a neurological disease that had not previously been recognized as being related in any way to their gout. These studies provide evidence that at least one type of gouty arthritis may be the end result of a specific enzyme defect which results in excessive amounts of uric acid in the blood.

*Action of colchicine clarified*

Colchicine, a drug derived from meadow saffron, has been used very effectively for centuries in the treatment of gouty arthritis. The patient's positive response to this drug is so clear-cut and dramatic, in fact, that it has diagnostic as well as therapeutic value. How colchicine acts to suppress gouty inflammation, however, has been one of the mysteries of medicine. Institute-supported investigators at Yale University School of Medicine recently conducted a study which may explain one aspect of its action. Their study showed that colchicine diminishes the increased oxygen intake usually associated with phagocytosis in white blood cells (the defensive engulfing of foreign particles by body cells) without interfering with phagocytosis itself. In addition, the formation of digestive vacuoles in these cells is impeded, and less acid phosphatase, an important enzyme with tissue-digesting potential, is released from cell granules where it is normally stored. The study indicated that the drug acts to maintain the integrity of lysosomes, intracellular particles which contain powerful, tissue-digesting enzymes which, when released from their "envelopes," flood surrounding tissues, triggering inflammatory reactions. The investigators suggest that these actions of colchicine may reduce tissue injury and subsequent inflammation when the gouty patient's

white blood cells engulf crystals of urate which are found in his joints, thus perhaps accounting for one anti-inflammatory effect of the drug in gouty arthritis.

### REITER'S SYNDROME

Reiter's syndrome, mentioned earlier in this report, consists of the triad of urethritis (inflammation of the urethra), arthritis and conjunctivitis (inflammation of the delicate membrane that lines the eyelids and eye socket). The diagnosis of this disease is fairly simple when all three are present, but in the absence of urethritis it is difficult to distinguish the disorder from rheumatoid arthritis. Investigators at Georgetown University who are receiving grant support from the Institute studied joint fluids from patients with Reiter's syndrome and discovered two distinctive features. The first was a level of hemolytic complement higher than that found in other types of join disease. Hemolytic complement is a complex protein substances which has the ability, in cooperation with other elements such as antibodies, to combine with and neutralize or destroy foreign materials. The elevated complement levels appeared to be directly related to the severity and duration of joint inflammation.

The other distinctive feature was the presence of macrophages (large wandering scavenger cells) containing intact white blood cells. The investigators suggest that these unique macrophages may represent an early response to the provocative factor, or factors, responsible for the acute arthritis of Reiter's syndrome. It is believed that these two unusual findings may clearly distinguish Reiter's syndrome from those arthritic disorders which it might mimic. Thus new, useful measures have been suggested as aids in the differential diagnosis of difficult cases of arthritis.

### SCLERODERMA

A chronic disease of connective tissue, scleroderma results in hardening and thickening of the skin and underlying tissue. Internal organs such as the heart and lungs may be involved in a similar manner. The skin changes may cause muscles to atrophy and contract, which limits joint motion, resulting in joint deformity and inflammation.

Although the cause of this disease remains unknown, grantee investigators at the University of Texas Southwestern Medical School have detected a distintinctive abnormality in sketal muscle capillaries of scleroderma patients which may play a role in its development. They obtained biopsies of thigh muscle tissue from eight scleroderma patients, from 48 patients with rehumatoid arthritis, systemic lupus erythematosus, and pulmonary tuberculosis, and from 18 normal individuals. The specimens were then examined with the electron microscope, and a minimum of 18 consecutive blood vessels from each specimen were photographed.

An abnormality consisting of a laminated appearance of the capillary basement membrane was found in all specimens obtained from the scleroderma patients, 65 percent of all capillaries being involved. In addition, in scleroderma patients the number of blood vessels of all sizes were decreased to about half of normal, their average diameter was increased, and the number of capillaries was markedly decreased. The investigators believe these variations reflect the loss of typical capillaries, leading to a relative increase in the size of intermediate sized blood vessels. It is still not known what caues these changes, but the findings suggest that scleroderma may develop as the result of underlying blood vessel abnormalities. The nature of the disease suggests that such abnormalities may indeed be responsible, but further studies of this phenomenon will be required to establish whether or not there is such a relationship.

### PSORIATIC ARTHRITIS

Arthritis affects 8 to 10 percent of patients with psoriasis, a fairly common skin disease characterized by white scaly areas overlying patches of thickened red skin. The arthritis associated with this disease generally becomes worse or improves depending upon changes in the psoriasis. There is no known cure for the skin disorder, and current methods of therapy-ointments, ultraviolet irradiation, corticosteroid agents, and anti-cancer drugs—are only variably and usually temporarily successful.

Preliminary studies by a grantee investigator at the Mt. Sinai Hospital and Medical School in New York have now shown that a diet low in tryptophan, an essential amino acid, might ameliorate this common skin disease. The diet, which

features white turkey meat twice daily (it is one of the few animal protein sources with a low tryptophan content), was given to four patients who had suffered from extensive psoriasis for one to 20 years. Within two weeks, all four patients showed moderate to striking improvement. When a regular diet was resumed in two of the patients, psoriasis recurred. Before the dietary treatment, skin biopsies in two patients showed characteristic psoriatic changes, but after 17 to 20 days on the diet, their biopsies were normal.

The investigator suggests that the low-tryptophan diet may control psoriasis in one or two ways. This amino acid or a closely related substance may play a causative role in the disease. Or, a more tenable explanation at present is based on the fact that psoriatic skin cells multiply much faster than normal skin cells, and consequently may require larger amounts of essential amino acids, such as tryptophan, to thrive. Tryptophan deprivation, therefore, could retard such rapid cell growth. Studies are underway to clarify the role of this amino acid in psoriasis and to continue evaluation of the low-tryptophan diet.

### POLYMYALGIA RHEUMATICA

Polymyalgia rheumatica is characterized by widespread pain in muscles and tissues surrounding the joints, stiffness and tenderness, fatigue and weight loss. The condition responds readily to treatment with corticosteroid drugs. After studying this disorder in two patients, grantee investigators at the University of California School of Medicine warn that it may be associated with the presence of giant-cell arteritis, a condition characterized by inflammation of the temporal artery, at times leading to sudden blindness. Before the correct diagnosis is established, such patients are usually studied exhaustively for the presence of other diseases, especially intracranial tumors which could explain the patient's eye symptoms. Both the blindness and the tedious diagnostic studies might be avoided, the investigators assert, if the possibility of this disease were considered and a biopsy of the temporal artery performed. If the characteristic inflammatory changes in the artery are found, prolonged therapy with large doses of corticosteroid drugs may be successful in averting blindness.

### SYNOVIAL FLUID IN RHEUMATIC DISORDERS

As evidenced in previous sections of this report, synovial fluid, the sticky lubricating substance present in joints, has been the subject of much fruitful study during recent years. Many chemical components of this fluid have been investigated, resulting in new information about various disorders that affect the joints.

An Institute-supported investigator at Albert Einstein College of Medicine recently detected a new component in human synovial fluid which is believed to be a degradation product of joint cartilage. The component appears to be heavily concentrated only in acutely inflamed joints, such as gouty and septic arthritis, lupus arythematosus, and acute rheumatic fever. This suggests that acute episodes of joint inflammation promote the release of this material from joint cartilage into synovial fluid. It is hoped that by comparing the amount, chemical composition, and turnover of this material in normal and inflammatory synovial fluids, insight might be gained into the effect of inflammation on the metabolism of human joint cartilage.

### OUTLOOK

Medical science's attack on the debilitating group of diseases known as arthritis and rheumatism is continuing with increased vigor. Recent research conducted or supported by the National Institute of Arthritis and Metabolic Diseases has yielded many new findings which are leading to better understanding and management of these conditions. The findings mentioned in this report do not indicate the total effort, but they summarize descriptively the variety and efficacy of the Institute's stimulus to rheumatological investigation.

### DIABETES

Dr. WHEDON. Important new findings in diabetes involve the mechanisms which trigger the normal release of insulin in the body. Whereas previously it was believed that insulin release from the pancreas was almost wholly dependent upon elevated blood sugar—glucose—levels,

it has now been demonstrated that three gastrointestinal hormones are normally involved in initiating insulin secretion by the pancreas after the ingestion of food.

Other findings involve the various as yet unclarified actions of insulin in the body and on the cellular level, and the effect of obesity on blood insulin levels in diabetic and normal individuals. A new type of diabetes in children has also been discovered which may be more common than has been recognized previously.

Senator HILL. You didn't recognize that in the past, did you?

Dr. WHEDON. Not this particular type. Juvenile diabetes is well known, that is the severe type, but this rather curious and interesting disorder, which is different from juvenile diabetes, apparently, has just been observed in very recent years. It is manifested chiefly by growth retardation and failure to thrive and is based on a defect in glucose transport by the cells of the intestine and kidneys.

### IMPROVEMENTS IN DETERMINING METABOLIC DISEASES

The term "metabolic diseases" encompasses a huge variety of disorders, ranging from diabetes which affects about 4 million Americans, to comparatively rare diseases such as maple syrup urine disease and sulfite oxidase deficiency. In many cases they have been found to be the basis of mental retardation and early death in children. During 1967, Institute scientists and grantees have identified the specific biochemical defect in four such diseases, named for the enzyme found to be lacking in each disorder.

Senator HILL. That was quite a step forward, wasn't it?

Dr. WHEDON. Yes, the field of molecular biology, enzyme biochemistry is advancing rapidly. The means have been found now to detect the presence or absence of enzymes in a gradually increasing number of disease. The techniques are available for determining whether an enzyme which is important in the various biochemical steps of a disease is actually lacking. We are hopeful, of course, that from this identification phase that we are in now, we will eventually be able actually to intrude more and more into the physical-chemical process and bring about correction. We are able to do a certain amount of adjustment or improvement in these molecular diseases already, but I think in the future, in the next 10 to 20 years, we shall be able to do much more.

New important research findings have been obtained in cystic fibrosis, another inherited metabolic disorder which appears in an estimated one of every 1,000 to 2,000 newborn infants. Of particular importance to eventual solution of this disease was the discovery that a substance in saliva and sweat of cystic fibrosis patients causes animals to produce saliva with a high salt content, the identification of this substance may point the way toward elucidation of the inherited molecular defect in this tragic disease.

### ACCOMPLISHMENTS IN GASTROENTEROLOGY

Probably the most significant recent accomplishment in gastroenterology was the successful transportation of livers into four young girls, all of whom were able to live for 3 to 6 months after the operation.

Senator HILL. You use that term "successful," they don't live but 4 to 6 months?

Dr. WHEDON. The intent of the sentence, Senator Hill, was that they were living up until the time that this report was made; now actually at the present time none of these four very young girls are still living but the surgeon has transplanted livers into four others, all still living, the longest survivor having been transplanted in July 1967.

The success of this grant-supported graft research is attributed to judicious use of the relatively new antilymphocyte serum, to improvements in organ storage, and to better tissue typing and operating techniques. Other important advances in gastroenterology include the development of a safe and valuable procedure for pinpointing the elusive site of gastrointestinal bleeding in certain patients, and the demonstration that delayed blood platelet aggregation may be an important causative factor in the bleeding disorders which often complicate alcoholic cirrhosis of the liver.

### PROGRESS IN ARTIFICIAL KIDNEY PROGRAM

The Institute's artificial kidney program has led to development of a technique for storing and reusing conventionally used artificial kidney equipment which reduces the cost and simplifies the work involved in performing hemodialysis in the home.

Senator HILL. You have made pretty definite progress in this?

Dr. WHEDON. We feel that we are definitely making progress in our artificial kidney program.

There are a number of developments I shall mention, but to state in general, we have been concentrating our efforts on the development of new techniques and devices which will make the cleansing of the blood, or hemodialysis, not only more efficient, but take hopefully less effort on the part of staff, hopefully, fewer professional people, although the period of training is long; hemodialysis, for example, is being used more widely than it was. I might mention that there was an interesting short program on a television news program last evening which presented an interview with a woman patient who had to be dialyzed in her home by her husband. Her husband and she had to take 2 months of training to be competent to handle this procedure and the apparatus by themselves, but I think this is indicative of real progress because as short a time as 2 years ago this woman would not have been able to live.

### COST REDUCTION

Senator HILL. What about the reduction in cost?

Dr. WHEDON. The reduction in cost is gradually being brought about in the development of new devices. I mentioned last year a type of artificial kidney which is smaller, requires less blood for filling, and is easier to take care of.

Now this year we have mentioned a system of cleaning artificial kidneys in a rather simple way which enables the apparatus to be reused for three or four times before it has to be taken apart and set up anew, and this cuts down on the technical time, and therefore, the cost.

Again, if I may mention a means by which I can amplify these remarks, we have a special report on the artificial kidney machine which we will be glad to give you.

Senator HILL. Will you do that?

Dr. WHEDON. We will be glad to do so.

(The special report follows:)

SPECIAL REPORT: KIDNEY DISEASE AND THE ARTIFICIAL KIDNEY PROGRAM

*Background*

During the last five years, diseases of the kidney, and especially end-stage kidney disease, have come to the forefront of attention for both Federal and non-Federal research and service efforts. Much of the impetus for this increasing interest in kidney diseases has come from the development of two dramatic yet expensive therapeutic approaches to end-stage disease—chronic hemodialysis (repeated treatment with an artificial kidney machine) and kidney transplantation. The successes of both techniques, coupled with other research advances leading to a better understanding of kidney diseases, have led to a proliferation of activities directed toward reducing the morbidity and mortality of those afflicted with chronic renal disease.

The magnitude of the kidney disease problem, made increasingly apparent by the dramatic advent of artificial kidney therapy, is underscored by the latest available estimates from the National Center for Health Statistics of the Public Health Service indicating that about 50,000 Americans die each year of irreversible kidney failure. Of those, only from 6,500 to about 9,000 may be *currently* considered suitable candidates for the two modes of treatment mentioned above.

While some patients in chronic kidney failure are being kept alive and productive through repeated hemodialyses treatments most candidates for such therapy are not receiving these benefits because of its complexity and extremely high cost.

There is general agreement, both by authorities from artificial kidney centers and by scientists and consultants of the National Institute of Arthritis and Metabolic Diseases, that development of optimal treatment modalities for end-stage kidney disease depends substantially on additional knowledge of the nature of uremia, the fatal end-stage of kidney failure and on additional fundamental advances in organ transplantation. In addition, research toward prevention or early more effective treatment of the primary kidney disorders which eventually lead to kidney failure is essential to any improvement in the health problem represented by kidney disease.

This past year, Institute-supported scientists have reported on a considerable number of research findings which shed new light on some of the causes and manifestations of chronic renal failure.

*Severe renal complications averted*

The development of peripheral neuropathy is a serious complication of chronic renal insufficiency and previously, chronic dialysis had been incriminated as a cause. Institute-supported scientists at the University of Washington, Seattle, however, have obtained evidence to indicate that intensive long-term intermittent dialysis may arrest or prevent development of peripheral neuropathy. The scientists discovered that dialysis should be instituted early in uremic patients who developed this complication, and that it should be intensified in those in whom neuropathy progresses. With earlier and more intensive dialysis therapy, it is believed that such neuropathy might be reduced to where it becomes a rare and mild complication of chronic renal failure.

*New therapy for bone disorders*

Another NIAMD grantee has obtained evidence to indicate that bone disorders, such as osteomalacia, which are frequently present in chronic renal disease may result from calcium loss associated with acidosis. These asseous abnormalities have been attributed variously to chronic metabolic acidosis, acquired vitamin D resistance, and secondary hyperparathyroidism. The present study has shown that chronic renal disease patients in metabolic acidosis have a negative calcium balance, and that correction of acidosis by alkali therapy stabilizes calcium turn-

over. This finding is consistent with the investigators' earlier suggestion that slow losses of calcium from the skeleton may occur in such patients when acidosis is present.

*Folic acid needed in diet*

The anemia in patients with chronic renal failure appears to be associated with a deficiency in folic acid, according to an investigator supported by the Institute. He has shown that this deficiency may be aggravated by chronic, long-term hemodialysis, and that abnormal changes in red blood cell and platelet precursors respond to folic acid supplementation. Chronic renal failure is often complicated by a type of anemia believed to result from failure of the bone marrow to form blood cells normally. Examinations by the investigators of many such marrows have shown a tendency for the developing blood cells to be large and disproportionately immature, suggesting that vitamin $B_{12}$ or folic acid deficiency may be a factor in the development of this anemia. The present study has established that patients in chronic renal failure, particularly those with anemia who are undergoing periodic hemodialysis, have low serum levels of folic acid, and that this vitamin is dialyzed out of the blood in a hemodialysis system. Since considerable folic acid is lost in this manner, the study indicates that this vitamin should be added to the diet of patients on long-term hemodialysis.

*Potassium supplements required*

Still another complication of chronic renal insufficiency under intensive study is that of abnormal glucose metabolism. A group of Institute-supported grantees has shown that potassium depletion, which may be present in the uremic patient, contributes to the observed abnormal glucose metabolism in such patients. With oral potassium supplementation the glucose tolerance tests returned toward normal and the response of endogenous insulin to a glucose challenge was more prompt and reached higher values than during control periods (before potassium supplementation). Delayed insulin release apparently contributes to the abnormal glucose tolerance in the uremic state. Prior to this report no study of the relationship between body potassium stores and carbohydrate abnormalities had been made in uremic patients.

*Penicillin G: Caution necessary in its usage*

Another group of Institute grantees report that massive doses of potassium penicillin G, administered to patients with renal failure, may cause coma, muscle spasms, seizures and fluctuating levels of consciousness. It is it known that penicillin can cause epileptic seizures if it is injected directly into the central nervous system, or reaches a high concentration in the cerebrospinal fluid. The present study indicates that impaired renal function favors this accumulation of penicillin in toxic concentrations and that extreme caution should be used in the use of large doses of this drug in uremic patients.

*Glomerulonephritis*

Acute glomerulonephritis, an inflammatory disease of the kidneys, usually follows a relatively benign course, although some patients do develop a progressive and serious form of the disease. An Institute grantee has now determined criteria which may be useful in predicting which patients will have the poorer prognosis. He found that these patients may be identified early in the course of their disease either by an antikidney antibody titer of 1:40 or more, or by persistence of the titer for more than 90 days. On the basis of his findings, the investigator speculates that in such patients an autoimmune phenomenon may result in continuing glomerular injury. If this conclusion stands the test of further study and experience, immunosuppressive therapy at an early stage of the disease in patients with very high antikidney antibody titers, or where the elevated titers persist for prolonged periods, might prevent the development of the progressive, and often fatal, form of glomerulonephritis.

*Kidney stones*

Kidney stones remain an important urologic problem since they usually cause severe pain and may often lead to recurrent infection and ultimate kidney destruction.

An Institute grantee reported this year that daily oral administration of magnesium and vitamin $B_6$ for prolonged periods of time may reduce the rate of stone formation in susceptible patients. In earlier studies the Institute-supported investigators had shown that experimental induction of renal stones in rats could be prevented completely or partially by high dietary levels

of the above substances. They now report that 30 of 36 patients on this regimen for at least five years have shown no recurrence, or decreased recurrence, of kidney stones. All of these patients had previously formed two or more stones per year for at least two years.

Two other Institute grant-supported scientists have been studying the processes concerning the genesis of kidney stone formation. Their observations in experimental animals using oxamide stones as a prototype, support a theory that this type of stone formation begins by simple intraductal crystallization and retention of the initial products of crystallization. The retained material then acts as a site for further crystallization and an encrusting "cap" is soon produced. Subsequently, fragments of this stone serve as nuclei for stone formation throughout the urinary system. It is hoped that a more thorough understanding of the mechanisms concerned in the origin of oxamide stone precipitation will lead to a broader understanding of the general problem of urinary calculogenesis.

*Advances in kidney transplantation*

Kidney transplantation is a technique whereby a functioning kidney from a living or recently deceased donor is transplanted into a patient who has lost his own kidney function. Although this procedure is at present still in an advanced experimental stage, it shows considerable promise. With continued research, it is hoped that kidney transplantation, supplemented by efficient methods of hemodialysis will make fatal chronic uremia a menace of the past.

The main obstacle to better permanent function of the transplanted kidney results from the body's determination to destroy any foreign invader, a life-threatening microbe as well as a potentially lifesaving grafted donor kidney. Unable to distinguish between helpful and detrimental foreign substances, the body's immunologic humoral and cellular defense mechanisms attack any and all intruders, including an implanted kidney. Transplanted kidneys, once attacked in this fashion, will eventually cease to function unless the host's defense response is blunted by special immunosuppressive drugs or sera.

With presently available methods of immunosuppressive therapy it is often possible to prevent or reverse the initial, acute rejection reaction to a kidney transplanted from one genetically nonidentical individual to another. This therapy, now relatively well standardized in most centers engaged in clinical transplantation, permits the survival for more than twelve months of 65 percent of renal allografts donated by a member of the recipient's immediate family and slightly less than half the kidneys donated by unrelated persons. This partial success in controlling early transplant rejection has now brought to light evidence of more subtle and chronic forms of immunologic attack upon the transplant that may occur despite long-term immunosuppressive treatment.

Institute grantees have found recently that *chronic* transplant rejection (in contrast to the well-known acute rejection crises), evidenced by proteinuria and nephrosis, occurs frequently in kidney transplant patients who have survived for more than three months and even years. The amount of proteinuria seems to be related to the degree of immunologic incompatibility between graft and recipient rather than to the original kidney disease. The present study has alerted investigators against complacency in cases of apparent success in kidney transplants where the postoperative course was not characterized by conspicuous acute rejection crises.

It has become increasingly apparent that improvement in success of kidney transplantation, and organ transplantation as a whole, will depend primarily on additional knowledge in the area of human tissue immunology and on the development of effective methods of donor tissue and organ preservation. Thus, sophisticated and reliable methods must be developed for immunologic matching of donor and recipient tissues with the same precision now available in blood transfusions; likewise, new methodology must be sought for preserving and banking donor tissues and organs for the varying and sometimes considerable time periods between their availability and the finding of a suitably matched recipient.

*The artificial kidney*

If and when kidney transplantation becomes a routine procedure, the artificial kidney will not be discarded. Many chronically uremic patients are not medically or psychologically suitable candidates for transplantation. Furthermore, patients who are suitable candidates will have to be sustained with an artificial kidney until they are well enough to have a transplantation operation and until a suitable, antigenically matching donor kidney can be found for them. Also they may

have to be placed on an artificial kidney after the operation if the donated kidney does not function properly for a time or is rejected.

The problem of perpetual maintenance of patients with artificial kidneys is complicated by the fact that the cost of currently available techniques is too high, both in terms of money and qualified manpower, to permit widespread patient treatment. Also, patients maintained with the aid of artificial kidneys continue to display a number of undesirable symptoms related either to the underlying disease or to the treatment.

The Institute's special Artificial Kidney Program has been created to deal with these problems. An up-to-date report of progress and future plans follows:

ARTIFICIAL KIDNEY PROGRAM

*Background*

In the United States today an estimated 50,000 individuals die each year as a result of irreversible kidney failure. The diseases which originally initiate the chain of events which terminates with advanced kidney failure vary considerably in nature. They may be primary kidney diseases like glomerulonephritis. In other instances progressive kidney damage may be induced by long-standing hypertension or diabetes, or kidney infection and destruction may be initiated by obstructions such as kidney stones or hypertrophy of the prostate in aged males. Regardless of the original disease, the progressive kidney damage leads to a common final pathway, end-stage kidney disease, followed by fatal irreversible kidney failure.

Although artificial kidneys had been known for many years, until 1960 they could only be used a few times in each indidivual for lack of a practical method for repeatedly connecting the patient's bloodstream with the artificial kidney machine. In that year a group of Institute grantees at the University of Washington developed permanently indwelling plastic blood vessel connections ("cannulas") which made possible the repeated joining of patients with irreversible kidney failure to artificial kidneys for intermittent maintenance treatment. Subsequently, these investigators proved the feasibility of maintaining life in such patients for a number of years with the aid of artificial kidney treatments ("hemodialysis") given twice or three time each week. With increasing experience with this new treatment modality it soon became evidence that existing artificial kidneys and dialysis methods were as yet not optimal, that maintenance treatment with artificial kidneys was extremely expensive and not within the reach of most individuals who needed it, and that rehabilitation of patients on chronic dialysis, using present methods and equipment, was not always optimal. It was estimated, based on recent experience, that about 8,000 patients of the yearly 50,000 individuals with end-stage kidney disease would possess the necessary medical and psychological prerequisites necessary for successful long-term dialysis treatment.

The emergency of this new lifesaving treatment encouraged the Congress in the summer of 1965, to appropriate funds to this Institute for the pursuit of a planned and centrally directed program of research and development, utilizing predominantly a direct contract approach, aimed at the development of improved and less expensive dialysis hardware and methodologies and at optimal rehabilitation of chronic dialysis patients.

*The program*

The new Artificial Kidney Program was located in the National Institute of Arthritis and Metabolic Diseases (NIAMD), the Institute which has major responsibility for research in urology and renal diseases.

It was considered important to undertake such a program through the utilization of the best possible consultative talent from both outside and within the National Institutes of Health. Accordingly, 23 oustanding authorities active in the field of chronic uremia and hemodialysis have been appointed as consultants. Among them are physicians who have led programs in artificial kidney centers, renal physiologists, physical chemists and membrane specialists, chemical and electronic engineers, and those rare, talented individuals who combine several of the above qualifications. These consultants are assisting in setting the trend of the program and are reviewing the scientific merit and feasibility of contract proposals.

It was also considered important that the program be undertaken in close cooperation with the activities of the Kidney Disease Control Program of the Bureau of Disease Prevention and Environmental Control (BDPEC), of the Public Health Service. The latter activity is concerned largely with the actual

demonstration of chronic dialysis in a community setting—both in specialized dialysis centers and, where feasible, in the homes of selected patients. Because of the closely interdigitating and interdependent nature of the NIH and BDPEC activities, both programs are in close and constant communication and work with a high degree of cooperation. There is a constant exchange of essential data between staffs of these programs, with a particular emphasis on program planning activities. This close cooperation assures a maximum of benefit and prompt application of research and development advances in the artificial kidney field.

*Outline of program plans*

A thorough study of the state of the art made it apparent that no single specific direction could be followed which would exclude others which might be relevant. Several different types of artificial kidneys are in use at the moment, and different methodologies are being advocated by the various workers in the field. Therefore, at this time, a variety of approaches in artificial kidney development are being supported. Once it becomes evident that one or more approaches show greater promise, efforts will be concentrated in these directions.

*Problems of highest priority*

The following are outstanding problems in dialysis toward which the Artificial Kidney Program is directing immediate efforts:

1. *Cannulas.*—The life and function of the permanently implanted cannulas are still limiting factors in successful dialysis.

2. *Dialysis membranes.*—Though effective, the cellophane membranes currently in use may not be optimal. The possibility of using other, perhaps more selective membranes, must be explored.

3. *Design of individual dialyzer units.*—Most dialyzers presently in use are cumbersome and costly to assemble and sterilize. A dialyzer exists which utilizes a disposable dialysis-ultrafiltration "cartridge"; this cartridge is as yet too expensive for maintenance of chronic patients.

4. *High requirement for professional personnel.*—This requirement is based on the medical nature of dialysis, but aggravated by problems 1, 2, and 3 above.

5. *Lack of effectiveness data.*—No objective information has been obtained through well-controlled studies which permits a meaningful evaluation of the comparative effectiveness of the various dialysis methods and equipment currently in use.

6. *Undesirable symptoms frequently found in patients maintained by repeated dialysis.*—

(a) *Anemia.*—On the average, one or more blood transfusions are needed per month per patient maintained in dialysis—with the attendant risk of transfusion hepatitis.

(b) *A significant incidence of peripheral neurological damage.*—This may be due to long-term effects of the semiuremic state in surviving patients on repeated dialysis, or due to the dialysis procedure *per se.*

(c) *Pseudo-gout, secondary hyperparathyroidism, skeletal demineralization, and calcium deposition in joints and in the tissues throughout the body.*—The most recent findings involve calcium deposition in the cornea of the eye. Simultaneously, there is a tendency to decalcification of bone with resultant fractures produced by minor stresses.

Problems 1 through 4 are primarily responsible for the current high cost of dialysis, which averages $14,000 per year in patients maintained by hospital center dialysis on a twice-weekly schedule.

*Current activities*

Following the 1965 Congressional appropriation, the Artificial Kidney Program was mounted in record time with the activation of 24 carefully selected research and development contracts. These contracts were placed with universities, nonprofit research laboratories and industrial concerns, and constitute a broad spectrum approach to the problems of highest priority. These projects involve development of improved blood cannulas and filtration membranes; evaluation and development of new polymer surfaces for artificial kidneys, cannulas and membranes which do not induce blood coagulation; design of more efficient, compact, and less costly dialyzer systems; development of a new concept of artificial kidney dialysis ("hollow fiber" or "capillary" kidneys); research on and development of absorption cartridges for blood purification; research on the utilization of ultrasonics to speed up dialysis in artificial kidneys; development of inexpensive disposable dialysis units; improvement and design of new auto-

mated centralized artificial kidney systems; improvement and design of new dialysis units with automated fail-safe mechanisms; design and development of prototypes for miniaturized or portable artificial kidneys, and many other related projects. In 1967 the Program awarded an additional group of new pertinent research and development contracts, totaling $2.6 million, to 19 institutions.

A substantial portion of the new contracts embody unique, new approaches to artificial kidney methodology such as diafiltration (a novel concept in artificial kidney design); development of new types of permanent arteriovenous shunts; introduction and evaluation of novel materials for cannulas; development of additional types of capillary (hollow fiber) artificial kidneys; evaluation of a special protein restricted diet in the maintenance of uremic patients for whom chronic dialysis is deemed not feasible or unobtainable; isolation from dialysates and identification of the as yet unknown compound(s) which is (are) specifically responsible for the toxic symptomatology in uremia, and many other projects related to improved dialysis methodology or apparatus. At the present time the Artificial Kidney Program has 49 active research and development contracts and agreements and will activate an estimated additional 20 contracts by the end of fiscal year 1968.

*Patient registry*

A patient registry coupled with a medical, engineering and economic analysis of all patients in chronic dialysis has been instituted with the Research Triangle Institute as the contractor. The contract provides for a registry of all patients presently maintained with the aid of artificial kidneys or peritoneal dialysis, and will permit a truly comparative evaluation of the effectiveness of the equipment used and of the various methodologies of treatment. The patient registry project aims at a meaningful comparative evaluation of the various facets, steps and methodologies involved in chronic dialysis, from selection of the patient through his medical evaluation once he is being maintained with chronc dialysis. This over-all systems analysis will be undertaken as a cooperative effort with the community service programs in dialysis of the Kidney Disease Control Program of the PHS; it will cover the various dialysis centers of the Veterans Administration Hospitals and all other centers or hospitals engaged in chronic dialysis and willing to cooperate.

In addition, there has already been an exchange of information with the personnel involved in the annual dialysis survey of the European Dialysis and Transplant Association concerning information obtained during its annual cross section survey of the patient population in Europe, which equals approximately the number of patients on dialysis in this country. Since a number of valuable innovations has originated in Europe and since the patient problems are similar, access to the European data and a mutual exchange of information will increase the value of both registries, particularly as to the medical, clinical, and technical aspects of dialysis.

In the process of instituting this registry it has become increasingly apparent that the medical and clinical aspects of chronic dialysis require detailed evaluation, particularly with regard to efficacy in controlling the various symptoms associated with uremia and with regard to the long-term deleterious effects on the nervous system, blood and bones.

The ideal diet for patients in dialysis is still a matter of controversy and disagreement among the experts. Some favor high protein diets with frequent dialyses, whereas others favor special selected low protein diets with infrequent or occasional dialyses. Also, some favor entering patients into dialysis programs on a preventive basis prior to terminal uremia, while the patient still has some kidney function, whereas others adopt the opposite approach and attempt to delay as long as possible the time when dialysis must be instituted. In order to help resolve these matters various centers are being stimulated to study these problems in a detailed and organized way.

*Conferences*

A working conference on the dietary management of chronic renal failure, co-sponsored by the Artificial Kidney Program of the Institute and the Kidney Disease Control Program, BDPEC, PHS, was held October 2–3, 1967. The two-day session entitled, "A Conference on the Nutritional Aspects of Uremia", was designed to analyze and communicate certain aspects of current knowledge of dietary therapy in the management of patients with chronic renal failure. Special emphasis was devoted to a comparative evaluation of a new type of diet, developed in Italy and England, which limits dietary nitrogen intake to minimal

amounts of essential amino acids, and which has permitted limited survival and rehabilitation, in certain types of patients with chronic renal failure, without recourse to kidney transplantation or artificial kidneys.

As a result of the meeting a number of pertinent clinical studies will be undertaken by several participants, in addition to the work already currently supported by the Program in this area, with special emphasis on the use of variations of this diet coupled with occasional, *infrequent* dialyses, in the many patients who cannot now obtain regular chronic dialysis treatment. The proceedings of the Conference will be published as a special supplement to the monthly *American Journal of Clinical Nutrition* and copies will be made available subsequently to all workers in the field of chronic renal failure.

As a result of the success of this Conference a similar conference on abnormal calcium metabolism and bone disease in uremia and dialysis patients is planned for later this year.

*Publications*

In 1967 the Program began publication of the quarterly Artificial Kidney Bibliography. The current awareness publication provides information on the latest scientific articles published anywhere in the world concerning renal failure, dialysis, artificial kidneys, and kidney transplantation. It is made available, without cost, to NIH grantees engaged in kidney disease research, to contractors of the Artificial Kidney Program and, upon request, to other qualified interested investigators and practitioners working in areas closely related to the artificial kidney. The laudatory response of the recipients of this new publication has been very gratifying.

The Program has also published and widely distributed the publication "A Review of the Development and Performance of Hemodialyzers" which was prepared under the auspices of one of its contractors. Among other essential subject matter it contains tables which, for the first time, compile and compare performance data on the various existing dialyzers and dialysis membranes—an indispensable aid to anybody engaged in artificial kidney improvement.

*Accomplishments*

In the past year there have been a number of accomplishments and encouraging developments in the research and development contract program. A compact, high-efficiency dialyzer for artificial kidney machines has been developed which permits treatment of almost twice as many patients in a given dialysis center setting as with conventionally used dialyzers. The Babb-Grimsrud (B-G) dialyzer, named for its developers, measures only 20 by 50 centimeters and is constructed of plastic and a commercially available foam nickel support material. It requires a total blood volume of only 70 cc, thus decreasing the presently high blood priming requirement and the need for compensatory blood transfusions. It costs half as much as the conventionally used two-layer Kiil dialyzer, can be assembled in ten minutes and can be sterilized in an autoclave. Compared to the Kiil dialyzer, the B-G dialyzer has approximately one-third the membrane area, one-seventh the blood volume, and one-fourth the weight, with no decrease in urea clearance and only slight decreases in creatinine clearance. At the present time a series of these new dialyzers is being built for extensive testing under routine operating conditions.

The same clinicians involved in collaborating with the engineers on the Babb-Grimsrud dialyzer design at the University of Washington, Seattle, have devised a technique for storing and re-using artificial kidneys of the Kiil type and of the attached blood tubing, which reduces the cost and simplifies the work involved in performing hemodialysis in the home. The new procedure permits re-use of the artificial kidneys for at least three successive dialyses, requires assembling and disassembling of the unit only once instead of three times a week, and allows use of blood tubing sets at least nine times, for an estimated saving of $800.00 per year. The clinicians involved in developing this are involved also in other contracts of research and development in the dialysis area.

The new and unique hollow fiber capillary kidney, which is being developed under a contract with the Dow Chemical Company, is progressing according to schedule and has already been tried on one patient. A semiautomated facility has been set up under the contract in order to expand the production of prototype models which will be put into clinical testing shortly. The advantage of this design is that it is compact, disposable, and as efficient as dialyzers in current use, and lends itself to mass production. The design consists of small bundles of many hollow cellulosic fibers through which the blood is passed, and which are

washed by a blood-purifying dialyzing solution. In addition to the above-mentioned two new artificial kidney designs, other possible designs are being explored including other approaches to the hollow fiber dialyzer design.

Another contractor who is manufacturing the conventional Kiil dialyzer has been successful in the development of a new type of multiple minute pyramidal membrane supports which increase the effective dialysis area of the membrane in the Kiil dialyzer. Preliminary laboratory tests has shown that this new development has increased the dialyzing efficiency of these modified Kiil dialyzers by about 40%. A series of the new type of dialyzer is now being built for clinical testing with patients.

The Program is believed to have had had undoubtedly will have other indirect salutary effects. The sudden vigorous activities in artificial kidney development (and possibly the specter of the new low-cost disposable capillary dialyzers which are being developed under Program contracts) are expected to exert a gradual effect on the price of commercially produced dialysis equipment. It may be coincidence. but such an effects has already been visible in the current price of the only commercially available disposable dialyzing cartridge. In the long run such developments are likely to result in distinct economies in dialysis treatment, particularly in home dialysis for which disposable types of dialyzers are well suited.

The activities of the Program have also resulted in an increase, in this country, in the use of a new type of diet, developed in Italy and England and heretofore used primarily abroad, which has permitted limited survival and definite rehabilitation in certain types of patients with chronic renal failure, without recourse to kidney transplantation or artificial kidneys.

*Plans for future activities*

The Program will continue all promising current research and development efforts and will pursue any new ideas and approaches which appear feasible. Among these is a new method of detoxification of uremic blood with the aid of special selective adbsorbing agents (in contrast to the presently used purification with the aid of membrane dialysis). The complete success of such detoxification-by-adsorption hinges on the successful identification of *all* toxic substances which accumulate in the bloodstream in kidney failure. The Program is currently funding a number of studies aimed at the isolation and identification of such unknown toxic factors which may have to be removed from the patients' blood, in addition to metabolic wastes and other substances known to accumulate during kidney failure, such as urea, creatinine, uric acid, potassium, hydrogen ion, and water.

The Program intends to follow very closely the clinical and technological developments abroad and, when promising, to enlarge upon them for the benefit of U.S. patients as well. For instance, reports have been received of the preliminary development, in Scotland, of a new miniaturized dialyzer which requires little or no blood priming and of new selective membranes characterized by increased permeability to urea, heat sealability, and improved water flux. Should these new developments prove indeed successful, the Program will be interested in fostering larger scale clinical trials, and placement of production of the new membranes and dialyzer in this country.

The Program will support further development of special diets (see above) for maintenance of uremic patients, to be used in conjunction with infrequent peritoneal dialysis or hemodialysis. For the latter type of regimen patients would be given surgically constructed, subcutaneous, natural arterio-venous blood vessel shunts (which are very adequate for infrequently administered hemodialysis). It is hoped that with the aid of such a special-diet-infrequent-dialysis regimen patients would be maintained without the need for implantation of plastic shunts, and that a larger number of patients with renal failure may be accorded life-saving treatment in this fashion in the face of the great expense of conventional chronic dialysis therapy which is unavailable to most patients with end-stage kidney disease.

Most of the Program's ongoing research and development contracts are systematically structured to yield specific goals according to a built-in time schedule. In many cases the attainment of targeted research and development goals in one contract is essential to the success of projects which are part of other contracts. Thus close communication of research results between all of the Programs' contractors is essential for maximum effectiveness of the overall effort. With this in mind, the Program is planning to have annual two-to-three day working conferences in which all the senior contractors' staff and the Program's consultants will participate. On such occasions each contract project will report

its negative and positive findings to all other active contractors in formal presentations to be followed by informal general brainstorming discussions. It is expected that such close communication and cross fertilization of ideas from a large number of active contractors and consultants coming from diverse biomedical and technological disciplines will go far toward attainment of the common goal of the Program—optimal artificial kidney technology, improved clinical methodology and patient rehabilitation—at an early time.

*Kidney disease: Outlook*

Research conducted and supported by the National Institute of Arthritis and Metabolic Diseases has added much to the understanding and treatment of chronic kidney disease. Investigations such as those discussed in this report have increased our ability to cope with the problems of kidney failure. Additional new research efforts are called for in order that a more widespread and permanent control of kidney diseases can be achieved. A meaningful program to reduce kidney disease must include all of the various components—research, prevention, treatment, education—available in our armamentarium. This combination, led by much-needed research, should yield maximal benefits in the number of lives saved today and deaths prevented in the years to come. Such a total program must be aimed at all the primary kidney diseases as well as at end-stage kidney failure.

Dr. WHEDON. To continue on the artificial kidney program, work on a new and unique hollow fiber capillary kidney is progressing according to schedule, and it has already been tried successfully on two patients. New special low-protein diets have been introduced which, in conjunction with infrequent peritioneal dialysis, permit survival and significant rehabilitation in certain types of patients with renal failure without recourse to kidney transplantation or artificial kidneys. The Institute has also initiated regular publication of a current-awareness publication, Artificial Kidney Bibliography, to facilitate communication and integration of research efforts in artificial kidney transplantation research.

Senator HILL. That will bring the information up to date for those who are interested.

Dr. WHEDON. This is primarily for investigators and physicians, so that they can pyramid their efforts toward more rapid progress.

## RESEARCH ACCOMPLISHMENTS IN ENDOCRINOLOGY

Research accomplishments in the field of endocrinology are led by elucidation of the role played by a new hormone, thyrocalcitonin, in the body's calcium metabolism and by a novel method of diagnosis which pinpoints the site of small adrenal tumors without recourse to exploratory surgery.

## SPECIAL PROGRESS REPORTS

My statement here today, Senator Hill, has only touched upon a few of the findings of the past year. These and many others are presented to you in greater detail in the special reports which I have already mentioned and have been prepared for the committee. It is my sincere belief that these achievements herald similar and perhaps even greater advances during the next 12 months.

## BUDGET REQUEST

Mr. Chairman, I am submitting a request for $146,489,000 for 1969, an increase of $4,145,000 over the 1968 operating level of $142,344,000. Included are increases of $2,769,000 for research grants, $549,000 for training grants and fellowships, $690,000 for laboratory and clinical

research, $12,000 for collaborative research and development, $8,000 for biometry, epidemiology, and field studies, $64,000 for review and approval of grants, and $53,000 for program direction.

Thank you. I would be happy to answer any questions.

### Department Reductions of Budget Request

Senator Hill. With these increases you have a reduction of some $10,750,000, don't you, from your original request for what you thought was needed?

Dr. Whedon. That is correct, Senator. Our request went forward from the Public Health Service to the Department, for example, was for $157,239,000; and the request then forwarded by the Department to the Bureau of the Budget was $154,089,000.

Senator Hill. Then the budget was only $146,489,000; is that right?

Dr. Whedon. That is correct, sir.

### Effect of Budget Reduction

Senator Hill. How much is this reduction going to affect you?

Dr. Whedon. Senator, this will affect us rather generally across our Institutes programs, but primarily in two areas: that of research grants; secondly, in research training, and I should mention a third, in our collaborative studies area where really no increase is available to us in relation to the artificial kidney program and to other contract-supported activities.

### Pending Legislation on Kidney Program

Senator Hill. We have some additional legislation, as you know, pending on this kidney business.

Dr. Whedon. Yes, sir; I am quite aware of that and I cannot help but feel rather strongly that with this legislation pending, the likelihood that something along this line will come forth at some time, that it is very important that we know as much more as we can about the function of artificial kidneys and more and more about chronic kidney disease itself.

We are continuing our efforts, Senator, not merely on the mechanical and training aspects of the artificial kidney, but also in trying to learn more about chronic kidney disease, because the way we will ultimately lick this problem, at least reduce it substantially, is in knowing how to prevent kidney disease or how to treat it at more earlier stages before the advanced or final stages which finally bring the patient to the point where he has to have artificial kidney treatment.

### Research Grants Hard Hit by Reductions

Senator Hill. How is this reduction of $11 million going to affect you most?

Dr. Whedon. Well, the area in which this hits us particularly is in the research grants area. We will actually be able to support 50 fewer research grants in 1969 than we will be supporting in this fiscal year. The number is actually 55, as I recall, by our best estimates.

Senator Hill. How many of these grants are you supporting now?

Dr. Whedon. We are supporting now about 2,400 research grants. We have a number of grant applications, of course, which have been approved by a study section which we are unable to pay.

MODEST EFFECT ON DIRECT OPERATIONS

Senator HILL. How much is this going to affect your direct operations, your laboratory and clinical research?

Dr. WHEDON. This will affect our direct operations relatively modestly. I cannot point to any specific programs that will be seriously affected, but I am sure that there will be certain research opportunities that will have to be delayed to a certain extent in our intramural operation.

Senator HILL. You just simply cannot go forward with them.

Dr. WHEDON. That's the situation at this time.

Dr. SHANNON. Senator Hill, the cuts will be distributed in such a way as not to impair the integrity of the programs, but rather to slow them down somewhat and we feel this is——

Senator HILL. So they will not advance as rapidly as you feel you could.

Dr. SHANNON. That's right; so it's very difficult to say that this, that, or the other program will be sharply curtailed; because we don't feel that is the way to distribute this fiscal constraint.

Senator HILL. Do you have anything else you would like to add, Doctor?

IMPORTANCE OF FELLOWSHIP IN STAFFING NEW SCHOOLS

Dr. SHANNON. No, sir; I would point out that one of the areas that was not mentioned as being quite short of funds is in the fellowship area.

Senator HILL. In what area?

Dr. SHANNON. Fellowship area.

Senator HILL. Tell us about that now.

Dr. SHANNON. The thing that keeps me awake at night is how we are supposed to staff these 25 new medical schools we are supposed to have underway in about 5 years. I don't know where the staff is coming from.

Senator HILL. You can't have the team if you don't have the players; is that right?

Dr. SHANNON. That's right.

Dr. WHEDON. I think we might mention that in the program of our particular Institute the major share of fellowships is in clinical departments. Thus, this is a very important device in training medical teachers, in departments of medicine, for example, primarily, but in all the various subdivisions of medicine that are among the areas of responsibility of this Institute. Therefore, fellowships are very important to staffing the new medical schools.

Senator HILL. We have to have them; don't we?

Dr. WHEDON. Yes, sir; we certainly do.

Senator HILL. We have to have this personnel if we are going to have these new medical schools. I am sure we have a need for these new medical schools?

Dr. WHEDON. That's absolutely true.

BAYNE-JONES REPORT

Senator HILL. And in my opinion we have been all too slow in starting to get these medical schools. When did we have the Bayne-Jones report?

Dr. WHEDON. About 1958.
Dr. STEWART. The Bane report was 1959; the legislation was in 1963.
Senator HILL. It has been pretty slow; is that right?
Dr. STEWART. That is correct, Mr. Chairman.

ANTICIPATED DELAY IN ENDOCRINE AND DIABETES HORMONE PROGRAM

Senator HILL. Anything you would like to add, Doctor?
Dr. WHEDON. I would very briefly like to say that there is a new program that we have in mind which we anticipate will be delayed, and that is called our Endocrine and Diabetes Hormone Developmental Research Program, in which we feel there are opportunities for advance now in a number of ways in which peptide hormone research will strengthen our understanding of many diseases. I shall mention particularly the areas related to human pituitary hormones and the problems of growth and fertility and sterility, gastrointestinal hormones which are related to the formation of ulcers and liver functions and gall bladder and also to diabetes, and then the diabetes-related hormones. We think the time is really virtually ripe for us to get into this area but we are not able to do so.
Senator HILL. These funds will not permit you to do so?
Dr. WHEDON. That is correct, sir.
Senator HILL. Isn't this an important area?
Dr. WHEDON. We feel it is an extremely important area and we are hopeful that the time will not be too far off when we can get underway.
Senator HILL. But you cannot get underway unless you have the money; is that right?
Dr. WHEDON. That is correct, sir.

ADDITIONAL SPECIAL PROGRESS REPORTS

The only other thing I would add, sir, is that there are three additional special reports that I think would be helpful to the committee.
Senator HILL. Will you send those to us? We shall include them in the record.
Dr. WHEDON. I will be happy to do so, sir.
(The reports follow:)

SPECIAL REPORT: CYSTIC FIBROSIS

Cystic fibrosis (CF) is an inherited generalized metabolic disorder characterized by an abnormality in the products of the body's glands which secrete fluid to body surfaces, particularly the skin and the gastrointestinal and respiratory mucosal linings. These glands secrete two major types of fluid, a watery substance produced primarily by the glands of the skin and a mucous fluid intended to lubricate the gastrointestinal tract and the bronchioles in the lung. The abnormalities which occur in both types of secretions are responsible for the major symptoms and signs in cystic fibrosis.

The basic metabolic disorder of exocrine secretion results in three principal clinical problems. The first of these is the production of sweat with a high salt content. Due to this defect many patients are unable to conserve salt, especially in hot weather, and are in constant danger of developing profound dehydration, which may lead to death. With the widespread use of the sweat test, the unique composition of the sweat in cystic fibrosis has become the primary basis for the diagnosis of this disorder.

A second, and considerably more serious facet of the disease, stems from the abnormal functioning of the mucus-secreting glands of the body. In cystic fibrosis, the mucus-producing glands fail to secrete normal, clear, free-flowing fluid.

Instead, they produce an abnormally thick, sticky mucus which tends to obstruct the ducts or openings of the glands. When the thick mucus accumulates in the ducts of the pancreas, it interferes with the ability of this gland to supply digestive enzymes to the intestinal tract. Depending on the severity of this complication the patient may suffer from malnutrition and its sequelae. The resultant malnutrition in children with cystic fibrosis is one of the major factors resulting in general underdevelopment, poor musculature, and retarded bone growth.

The third and most serious complication involves the lung. Nearly all cystic fibrosis patients develop progressive chronic lung disease. Thick mucus obstructs the smaller air passages in the lung, causing labored breathing and a chronic productive cough. In time, bacteria multiply in the accumulated secretions, and the child may fall victim to chronic bronchitis or even pneumonia. The latter infection is the leading cause of death in these patients. Chronic lung changes may also increase resistance in pulmonary blood flow and may lead to an increased blood pressure in the lung; this can result in chronic right heart strain, and, eventually, in heart failure.

Cystic fibrosis is the most common hereditary disease of children, and is often fatal. Its increasing frequency throughout the world has made it a public health problem of no mean proportions; estimates of its incidence in the population range as high as 1 in to 1,000 to 2,000 live births.

Although in the past cystic fibrosis was confined to the pediatric age group because of the high mortality in infancy and early childhood, the disease is now recognized with increasing frequency among adolescents and adults. Recent studies have shown that these older individuals carry a less fatal, partial genetic endowment for the disease. The studies also have suggested that these various expressions of cystic fibrosis may be responsible for some of the chronic lung and gastrointestinal disorders in adults usually attributed to other causes and not recognized as being due to cystic fibrosis.

The basic defest underlying cystic fibrosis, although subject to intensive investigation during the last decade, is as yet unknown, and much of the research carried on by scientists of the National Institute of Arthritis and Metabolic Diseases (NIAMD) in Bethesda and by the Institute grant-supported investigators is devoted to discovering its nature. Institute scientists in Bethesda are currently conducting laboratory and clinical studies in an attempt to delineate further the chemical and clinical manifiestations of cystic fibrosis and to uncover the fundamental defect causing abnormal secretion, as well as to develop new therapeutic and diagnostic techniques.

*Calcium and duct obstruction*

At present, no one hypothesis can link all the diverse and often conflicting observations which have been made concerning the widespread malfunction of exocrine glands in cystic fibrosis. In particular, it is not yet possible to give a unified and reasonable explanation of the abnormal behavior of mucus and sweat glands in this disorder. Recent observations, however, have helped to narrow the field for speculation and have helped to clarify some of the disease's mechanisms.

Institute scientists, in collaboration with scientists from the National Institute of Dental Research, have obtained evidence that excess calcium in the salivary glands of cystic fibrosis patients combines with a certain group of proteins to form an insoluble compound. It is possible that this precipitate may give rise to the widespread obstruction of various organ ducts and may eventually lead to many of the pathological and clinical findings in cystic fibrosis.

Saliva, normally a clear fluid high in grycoprotein content, has been found to be turbid in CF patients. This secretory product offers a unique opportunity for investigation because it is readily accessible for collection in relatively large quantities. Production of visibly turbid submaxillary saliva was noted in 12 cystic fibrosis patients while that of ten normal subjects of the same age group was clear. Chemical analysis demonstrated an abnormally high calcium content in the saliva from patients with CF, in contrast to saliva from normal control subjects. By decreasing the elevated calcium levels in cystic saliva, the clear gross appearance of normal saliva was reproduced. Conversely, by increasing the calcium levels in normal submaxillary saliva, its appearance and chemical characteristics became identical to that of cystic fibrosis saliva. Subsequent analysis of the calcium precipitate revealed that it was composed entirely of a particular group of glycoproteins. These glycoproteins apparently combine with the calcium, when the latter is present in high concentrations, to form the precipitate.

For many years cystic fibrosis was considered an inborn error of glycoprotein metabolism; the observation that abnormal ionic calcium concentration in cystic fibrosis may have an effect on the solubility of glycoproteins has important implications in the pathogenesis of this disorder. The precipitation of a relatively insoluble calcium glycoprotein complex in various organs throughout the body might indeed explain many of the pathological and clinical findings in cystic fibrosis.

*Induction of "cystic fibrosis" in animals*

A recent study by Institute grantees at the University of Wisconsin has shown that sweat and saliva from patients with cystic fibrosis can cause rats to excrete saliva with an abnormally high salt content (thus, resembling the characteristic saliva in cystic fibrosis). In these experiments the main excretory duct of parotid glands in anesthetized rats was cannulated and perfused in a retrograde fashion with saliva or sweat from normal children or children with cystic fibrosis. The glands were then stimulated (by intravenously administered pilocarpine) and saliva was collected.

It was shown that normal excretion of salivary sodium was not affected by retrograde perfusion of the gland with a control saline solution or with saliva or sweat from normal children. On the other hand, perfusion with sweat and saliva from patients with cystic fibrosis caused a large increase in sodium output of the glands. This effect could have resulted only from partial inhibition of sodium reabsorption by the striated ducts of the gland, which normally reduce the sodium concentration of the primary fluid secreted by the acini of the salivary gland by sodium reabsorption at a known rate.

The temporary abnormal behavior of the striated ducts is probably induced by an as-yet unidentified substance in the sweat and saliva of CF patients. The implication of this finding is significant: if there is some factor in the sweat and saliva of children with CF which causes rats to excrete very salty saliva, then that same factor may be responsible for the high salt content of the children's own sweat and saliva. This factor, once isolated, may point the way toward elucidation of the inherited molecular defect which causes the disease.

*Micropuncture studies of sweat glands*

Further evidence of the pathogenetic role of inhibition of normal sodium reabsorption in exocrine gland ducts of cystic fibrosis patients has been provided by applying micropuncture and microanalytical technics to the study of the function of normal and pathologic human sweat glands.

Institute scientists have employed these technics in cystic fibrosis patients to help clarify the genesis of salt depletion, a prominent clinical manifestation which has been thought due to either a disorder in formation of a hypothetical precursor solution in the coil of the sweat gland, or to impaired salt reabsorption from sweat gland tubules. Fluid from the sweat glands of cystic fibrosis patients was taken from the site of production (coil of sweat gland) and from the skin surface. Evaluation revealed elevated sodium and chloride concentrations only on the skin surface. These findings resolve an important area of controversy by showing for the first time that the abnormality in sweat in cystic fibrosis is not in the *formation* of the precursor solution but most likely in the reabsorptive capacity of the sweat duct (between the coil at the base of the gland, and the skin surface). These results are very consistent with the previously noted animal studies.

*Scientfiic communication and information*

The Institute has consistently made efforts to communicate, effectively and promptly, diagnostic and therapeutic developments to practicing physicians and research workers throughout the country. One particularly effective means of communication has been a comprehensive scientific exhibit on cystic fibrosis, which is currently being updated by the Institute to present new information on the disease. In the recent past this exhibit, along with detailed practical literature, has been brought to the attention of thousands of practitioners and scientists at medical meetings and conferences throughout the United States.

A new medical film, "Diagnosis and Management of Cystic Fibrosis", has been jointly produced by the Institute and the voluntary organization in the field, the National Cystic Fibrosis Research Foundation. The film is being shown to physicians, research workers, medical students, nurses, and physical therapists. In explaining the nature of cystic fibrosis. the film covers its transmission as a Mendelian recessive genetic trait, as well as diagnostic procedures, and methods of

treatment for afflicted children and adults. It also discusses diet, exercise, the role of parents in home care, surgical complications of cystic fibrosis, and childbearing by young women with the disease. Diagrams, charts, and slides are interspersed with live action sequences filmed in the NIH Clinical Center in Bethesda and in the Children's Hospital Medical Center, Boston. The 26 minute color film also reviews current research efforts to establish the etiology of cystic fibrosis and to pinpoint the underlying biochemical defect.

A newly-revised brochure on cystic fibrosis has been produced by the Institute in response to inquiries from the lay public. The illustrated publication explains in simple, non-technical language what is known about the disease, what can be done for patients with the disease, and what efforts are being made by the Institute in researching its cause and management.

*Outlook*

Cystic fibrosis is a complex disease. Its multifaceted nature has prompted and encouraged many scientists in diverse disciplines to study its metabolic, genetic, and clinical aspects. In recent years, scientists in Bethesda and investigators supported by the Institute have contributed largely to dispelling misconceptions concerning the disease. Two major misconceptions had been that cystic fibrosis is rare and that it is invariably fatal. Neither has been shown to be true. Promising findings in basic research, as well as new methods of diagnosis and treatment, have brought about a more optimistic outlook for patients with cystic fibrosis and it is hoped that ways and means to manage the disorder optimally will eventually be found.

TABLE OF OBLIGATIONS

| Cystic fibrosis and related areas | 1965 | 1966 | 1967 | 1968 | 1969 |
|---|---|---|---|---|---|
| Research grants | $899,000 | $950,000 | $1,200,000 | $1,825,000 | $1,825,000 |
| Intramural research | 100,000 | 182,000 | 185,000 | 190,000 | 200,000 |
| Collaborative studies | | 20,000 | | 4,000 | |
| Total | 999,000 | 1,152,000 | 1,385,000 | 2,019,000 | 2,025,000 |

## Special Report: Diabetes

During the last decade, diabetes research has passed through a phase in which important advances have been made in therapy, notably development of the oral drugs for better blood sugar control in older diabetic patients. Currently, investigators are placing emphasis upon studies of a more fundamental nature which should yield information leading to a better understanding of the underlying cause of the disease.

Dr. Rachmiel Levine, president of the International Diabetes Federation, recently singled out four major research areas which require thorough exploration by diabetes investigators: (1) The specific genetic factor that makes some individuals more susceptible to the disease than others, and the environmental and other as-yet-unknown factors that appear to bring out overt diabetes in predisposed individuals; (2) Epidemiologic data; comparative studies of various population groups in which metabolic deviations can be evaluated with other factors; (3) The mechanism of insulin secretion and action; its impairment as a result of physiologic, chemical, endogenous or exogenous inhibitors or antagonists, and (4) Obesity as a causal or contributory factor.

It is largely in these specific research areas that scientists of the National Institute of Arthritis and Metabolic Diseases (NIAMD) and Institute-supported investigators have made, and are continuing to make, the most significant progress. Adding impetus to ongoing diabetes research projects is the knowledge that there are about four million diabetic patients in this country, as well as an additional five million Americans now living who may develop the disease during their lifetime.

A complex disorder, for which there is no known cure, diabetes ranks seventh on the list of diseases that cause death in the United States. It affects individuals predisposed to the disorder by their hereditary background. As a result of the body's inability to metabolize carbohydrates normally, the diabetic is inefficient in converting carbohydrates into the stored form, glycogen, or into heat and energy required for normal body functions. The carbohydrates, converted into glucose, accumulate in the blood and are excreted in the urine. As the disease

progresses, abnormal carbohydrate metabolism becomes associated with a noticeable derangement in the metabolism of fats and proteins.

In its severe form, untreated diabetes rapidly progresses to a grave metabolic disorder, called keto-acidosis, which may result in coma and death unless controlled by insulin administration and general supportive therapy. In its less severe form, diabetes may also result in accelerated degeneration or "hardening" of the arteries, and, thus, in a greatly decreased life expectancy. Although the disease can be fatal unless properly treated, in most cases it can be well controlled. Today, with proper treatment, most diabetics can lead a normal life and live almost as long as their fellow human beings. Despite good control of clinical symptoms, however, and the usual ability to hold in check the abnormal blood sugar level, the long-term complications of diabetes, primarily those affecting blood vessels, peripheral nerves, kidneys, and the eyes, all-too-often develop relentlessly.

### EFFECT OF GASTROINTESTINAL HORMONES

Evolving knowledge of the nature of diabetes compels researchers today to recognize that they are dealing with a complex, multifaceted disease, and not with a presumably simple metabolic disturbance that Drs. Banting and Best attacked successfully with insulin in 1921. Dr. Best has recently predicted that the next breakthrough in the struggle to conquer diabetes will come when scientists learn the exact mechanism of insulin release from the pancreas and precisely how the hormone does its vital work in human tissue.

It is now known that a number of factors—notably glucose, amino acids, glucagon, growth hormone, and cortisone—influence insulin secretion by the pancreas. Despite the fact that it was first proposed in 1906 that gastrointestinal hormones might have an insulin-releasing effect, evidence for such an effect was obtained only during the past year. An Institute-supported scientist at the University of Texas demonstrated that three gastrointestinal hormones involved in regulation of digestive secretions in the gastrointestinal tract—secretin, pancreozymin, and gastron—are biologically capable of triggering insulin secretion in dogs, suggesting that these hormones may play an important role in the priming of insulin secretion following food ingestion. Thus, there may exist in the gastrointestinal tract a chain of hormones capable of stimulating the insulin-releasing cells of the pancreas as required for disposal of high blood glucose or amino acid levels.

The investigator has postulated that this proposed "gastrointestinal-pancreatic axis" may counteract excessive blood glucose or amino acid levels which would otherwise follow ingestion of large meals if pancreatic insulin release were entirely dependent upon elevated blood glucose concentrations.

In a subsequent study the same investigator has obtained evidence of the existence of an as-yet-unidentified intestinal factor, possibly a new hormone, which acts to augment insulin secretion response to glucose blood levels. This material, isolated from the intestinal tract of dogs, was found to be a molecule somewhat larger than the pancreatic hormone, glucagon, which it resembles most closely. The scientist is currently purifying the material and attempting to learn its molecular structure.

It would, of course, be premature to attempt to find a role for the newly discovered intestinal factor in the development of diabetes. It is quite possible, however, that an abnormality in the release of this factor may partially account for the sluggishness of pancreatic insulin response and the glucose tolerance differences observed in the milder forms of diabetes.

### POSSIBLE ROLE FOR RIBOSE

Another grantee-scientist at the University of Minnesota has shown that a naturally occurring body sugar, ribose, markedly stimulates pancreatic insulin secretion when administered either orally or intravenously to dogs. This response was greater when ribose was given intravenously. Direct exposure of the insulin-producing cells of the pancreas to the sugar was ineffective in stimulating insulin release.

These findings imply that insulin response to ribose is triggered by the arrival of the sugar at some site *outside* of the pancreas. The investigator has suggested that a subtance produced by ribose metabolism may lead to release of a second substance to which the insulin-producing cells of the pancrease are sentitive. Further exploration of the possible role played by ribose may shed some light on the fundamental question of the nature of insulin response to glucose.

## NEW TYPE OF DIABETES

Diabetes is loosely divided into two major clinical types—juvenile diabetes and maturity-onset diabetes—which have different prognoses, somewhat different treatment, and related, but possibly dissimilar, causative mechanisms. During the past year a new clinical entity in the diabetes family was described in eight children, and indications are that the condition may be more common than had been previously recognized.

A grantee-scientist at Children's Hospital Medical Center, Boston, reported the new clinical and biochemical abnormality which is characterized by defective kidney and intestinal glucose transport. Its manifestations include very small stature, failure to thrive, reddened cheeks, protruding abdomen, massively enlarged liver, extreme flexibility of joints, diminished skeletal calcification, and massive losses of glucose in the urine. Although growth is retarded in affected children, mental health appears to be normal. The disorder, termed "pseudophlorizin diabetes," appears to be hereditary, and the disease may be fatal if unrecognized and untreated.

These children apparently produce adequate amounts of insulin and, thus, do not require insulin injections. They appear to benefit from a diet high in protein, vitamin D, sodium fluoride, and salt. The major defect appears to be an impairment in glucose conservation by the kidney coupled with a defect in intestinal glucose absorption. Studies of the new type of diabetes are continuing in the hope that they will provide a better understanding of the genetic aspects of diabetes.

In two separate studies at the University of Florida and St. Luke's Hospital, New York City, other Institute-supported scientists have determined almost simultaneously that Ketosis—the excessive accumulation of ketone substances in the blood—can be induced experimentally with the aid of medium chain length fatty acids. The fact that this condition is quantitatively reproducible, and that the degree of ketosis produced in diabetic subjects is more than double that produced in normal individuals, may provide physicians with a method that is useful in classifying diabetic subjects according to their ketosis-prone tendencies. It may also be of value in the study of ketone body formation in diabetic patients, a subject which requires more exploration.

## EARLY RECOGNITION OF DIABETES

Last year an Institute-supported investigator described a metabolic disorder closely resembling human juvenile diabetes which had appeared as a new genetic mutation in inbred mice. The disease was readily reproducible and therefore it was anticipated that the new strain of mice would provide a much needed experimental animal model for research on juvenile diabetes.

Continuing studies of these animals have suggested that their diabetes may be demonstrable five days after birth, as opposed to the previously reported three week delay in diagnosis, at which time the disorder becomes clinically manifest. This is of potential significance in that it would permit, for the first time, study of the evolution of the syndrome from the asymptomatic, pre-clinical stage to the clinical stage and, thus, might lead as well to a better understanding of the pre-diabetic state in man.

Another relevant study in the same area was made by a grantee-scientist at the University of California, San Francisco, who demonstrated that the first five to ten minutes of the intravenous glucose tolerance test are the most important in detecting the "latent" diabetic. He found that while the 30 to 60 minute levels for insulin secretion were often normal in prediabetic subjects, the earlier values indcated an initial sluggishness of insulin release.

This finding is of particular value because recent research has made it possible to treat experimentally diabetes in its "latent" stage (before the patient has exhausted his own insulin reserves) with sulfonylurea and/or biguanide drugs in an effort to delay onset of the overt disease, as reported by Institute-supported investigators several years ago. As a result, it may conceivably be possible to reduce some of the disheartening consequences of a delayed approach to therapy through earlier diagnosis followed by prophylactic "delaying" treatment.

In this connection, another pertinent study should be mentioned. A grantee-scientist at the University of Missouri has apparently delayed, or perhaps even prevented, the onset of overt diabetes in two children genetically predisposed to the disease who exhibited early chemical signs of carbohydrate intolerance. By administering *very small* daily doses of insulin to the two

children, the investigator hopes to preserve their pancreatic function by providing exogenous insulin at the stage prior to serious failure of endogenous insulin secretion. His approach is, admittedly, highly experimental; however, early results have been "highly encouraging" and he is continuing his unique studies with a great deal of optimism.

### OBESITY AND DIABETES

There appears to be little doubt that there is a definite relationship between obesity and diabetes. Most persons who contact the disease after age 40, when diabetes most commonly becomes clincially manifest, are overweight. Moreover, a significant number of such patients can control their carbohydrate intolerance by weight reduction alone.

It has been known for some time that administration of glucose to persons with mild diabetes results in exaggerated blood vessels of insulin, an effect that has also been observed in obese nondiabetic individuals. This has led to the theory that insulin action in patients with mild diabetes is somehow inhibited, leading to impaired glucose metabolism and utilization, and that the exaggerated insulin response to glucose challenge in such patients is thus a compensatory effort. The nature of the insulin antagonism in such patients has been, and is being, investigated vigorously.

During the past year an Institute-supported scientist at the University of Washington, Seattle, questioned this theory of an insulin "block" in mild diabetes. He found that elevated blood levels of insulin in such patients are related *only* to co-existent obesity and *not* to carbohydrate intolerance. In his studies, obese diabetic subjects produced less insulin than nondiabetic subjects of identical weight and secreted less insulin in response to glucose administration.

This is a significant finding, inasmuch as most adult-onset diabetic patients are obese. It implies that maturity-onset diabetes, like juvenile diabetes, may result from a relative insulin deficiency (the original classical theory), and may not necessarily involved overproduction of insulin which is partially or wholly inactivated by an as-yet-undefined insulin "block". These concepts certainly warrant further exploration.

### COMPLICATIONS OF DIABETES

Many patients with long-term diabetes develop complications such as "hardening" of the arteries, heart disease, failing eyesight, and kidney failure. Progressive damage to the retina develops in many persons whose diabetes begins in childhood and who have had the disorder 20 years or more. This condition, known as diabetic retinopathy, is the third leading cause of blindness.

Three years ago an Institute-supported scientist at Massachusetts General Hospital, Boston, reported finding a low incidence of diabetic retinopathy in diabetic subjects who also suffered from rheumatoid arthritis *and* were taking large doses of salicylate drugs, such as aspirin. During the past year the same investigator showed that diabetic patients, particularly young patients with the characteristic proliferative diabetic retinopathy, have elevated levels of complement, an immunologically active blood protein, and that aspirin suppresses such high complement levels in the test tube.

Thus, a relationship between elevated blood complement levels and the development of diabetic retinopathy appears possible. Although progression of retinopathy apparently has been arrested in some diabetic patients who were treated with salicylate drugs over prolonged periods of time, it is most unikely that these agents could reverse any existing retinal damage. This study, however, points to a new direction for future evaluation of this serious complication of diabetes.

### PIMA INDIAN STUDY

In 1965 a team of Institute scientists discovered that the incidence of diabetes in the Pima Indians of Arizona (30%) is 15 times greater than that of the general American population (2%). This finding presented a unique opportunity to explore the possible precipitants of the diabetic state, as well as factors involved in delaying the onset or preventing the serious complications of the disease.

The same scientists subsequently unearthed evidence to refute the generally accepted theory that pregnancy precipitates diabetes. They found in studying the Pima Indian women that diabetes was actually more common among those

who had not borne children than it was among those who had borne seven or more.

More recently, in late 1967, the scientists discovered that the incidence of gallbladder disease in the Pimas is six times higher than that found in a similar gallbladder study done among Caucasians in Framingham, Massachusetts. Although no association could be found between diabetes and gallbladder disease in Pima females, 80 percent of Pima men over age 45 with gallbladder disease also had diabetes. Precisely what influence this finding may have upon ongoing diabetes studies remains to be determined.

Studies of the Pima Indians are continuing in order to evaluate the development and course of diabetes in this unique population group. Such studies include diabetic individuals, pre-diabetic individuals (individuals with two diabetic parents, but as yet devoid of signs and symptoms of the diseases), and others who are being observed and who may or may not develop the disease. Initial studies are also being made of the possibility of preventing or ameliorating the serious complications of diabetes.

### OUTLOOK

Although the basic defect that results in diabetes remains unknown, there has been much progress in recent years in elucidating some of its many mechanisms. The handicap is not a paucity but a plethora of clues. Institute scientists and grantees have broadened their fundamental studies of the pathology of diabetes, of the action of insulin, and of the many biochemical and physical changes which occur in body cells and fluids of diabetic patients. Hopefully, if diabetes research continues at its present highly productive rate, a means of preventing diabetes or of controlling its course better will be found in the not too distant future.

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## Special Report: Gastroenterology

Gastroenterology—the study of the gastrointestinal and biliary tracts, and associated glands—is as complex from the standpoint of the biomedical research investigator as it is from the point of view of the practicing physician. The diversity and magnitude of gastrointestinal disorders combine to place these diseases in a prominent position among the chronic and disabling afflictions occurring in man.

The National Institute of Arthritis and Metabolic Diseases (NIAMD) bears the responsibility for the Government's program of research in this field. A broad array of recurring ailments of the digestive tract is undergoing investigation; foremost among these are: peptic ulcer, ulcerative colitis, regional enteritis (ileitis), and such malabsorptive disorders as celiac disease. In addition to the numerous maladies of the gastrointestinal tract itself are the equally debilitating diseases which afflict related organs, such as the gallbladder, pancreas, and liver.

In a major, concerted effort to define relevant areas for further research and development, and to explore and foster collaborative efforts in this field, the NIAMD early this year co-sponsored, with the American Gastroenterological Association and the Digestive Disease Foundation, a conference in Bethesda on "Digestive Disease as a National Problem."

In addition to establishing guidelines and incentives for future research, the conference, attended by more than 70 prominent gastroenterologists and specialists in related areas from universities, government agencies, private practice and concerned industrial sectors, was equally instrumental in highlighting the impact of gastrointestinal diseases on the health and well-being of Americans. Data presented by the expert conferees documented the profound impact of these diseases on the American public, both in the number of people afflicted and the financial burden imposed as a result.

Figures presented at the conference by the Public Health Service's National Center for Health Statistics (NCHS), based upon an analysis of death certificates filed in 1964, for example, indicate that digestive disease was the primary cause of death in 163,000 Americans (9 percent) and a contributing cause in another 98,000 (6 percent). Interview surveys by the NCHS estimate that 3.4 million people were hospitalized in 1964 directly for digestive disease (a total of 29 million hospital days).

Chronic digestive conditions, according to the NCHS, affect 12.8 million people, with 245 million days per year of restricted activity, and 86 million days of bed confinement. Altogether, diseases of the digestive tract (including

cancer of these organs) are (1) the leading cause of hospitalization in the general population, (2) the second major cause of days lost from work, and (3) the third leading cause of death.

In the past year, investigators receiving financial support from the NIAMD contributed numerous important research findings. Of most far-reaching significance are the gradually developing progress in the field of liver transplants, as well as new diagnostic and therapeutic procedures for gastrointestinal hemorrhage and ulcerative colitis.

*Liver disease and transplantation*

The liver, largest single organ in the human body, performs a multitude of complex chemical tasks without which life cannot exist. The liver functions, for example, as a filter and clearing station for purification and detoxification of blood, as a storage house for certain nutrients (particularly sugars, certain minerals and vitamins), as a site of production of blood proteins and of antibodies, and as a secretory gland which aids both digestion and the removal of wastes. It is not surprising then that an organ of such complexity is also subject to a broad range of injuries and disease states. Prominent among these is the condition known as "cirrhosis", the end-stage of a progressive destructive process resulting from chronic alcoholism or repeated infections, but the liver is also the site of a host of other diseases of infectious, parasitic, nutritional, metabolic, obstructive, toxic, and malignant origin.

Previous research has demonstrated the surgical and anatomical feasibility of liver transplants. Survival time in these studies has been limited primarily by poor immediate postoperative liver function. The past year, however, has seen the first enduring liver transplants. NIAMD-supported scientists at the University of Colorado Medical Center reported successful liver transplantations in four children, two of the transplant recipients being alive as of this writing. Two of the transplants were performed last July, another in September, and the fourth, in October (1967). The investigators credited a combination of improved methods of immunosuppression, organ treatment and storage, tissue typing and organ: recipient matching, and operating technique for the new-found success.

To suppress tissue rejection, the investigators placed the patients on a regimen of antilymphocyte globulin (ALG) in combination with azathioprine and prednisone. Two of the donor livers were preserved prior to implanation with a newly devised hyperbaric storage technique combining the use of hypothermia (chilling) to 4° C., hyperbaric oxygenation at 4 atmospheres pressure, and low flow perfusion with diluted blood. Previous animal experimentation had shown that this type of liver preservation resulted in as good a graft after 8 hours as did immediate transplantation.

Although the long-term prognosis is unknown as yet, the fact that these liver transplants have continued to function long beyond that achieved in earlier transplants holds tremendous promise for the future.

*Treatment of hepatic coma*

Hepatic coma is a life-threatening stage in overwhelming acute liver disease, characterized by a shut-down of liver function, progressive intoxication by ammonia, coma, and death. A major problem faced by physicians is the maintenance of victims of hepatic coma until their own livers, disabled by an overwhelming infection or chemical insult, can be restored to normal function. NIAMD grantees at Marquette University reported success in the past year in therapy of patients in hepatic coma through use of an extracorporeal hepatic support system utilizing a cadaver liver. Dramatic results were achieved, the investigators reported, in three of four cases. The procedure involved cannulating the patient's femoral artery and saphenous vein. Blood flows in this system from the femoral artery to a heat exchanger to elevate its temperature slightly. The blood then enters the cadaver liver through its hepatic artery and portal vein and, after exiting through the hepatic veins, is pumped back into the patient's saphenous vein.

In three instances the comatose patients became conscious and their own livers began to function well following the perfusion therapy. However, all subsequently died of causes not *directly* related to hepatic failure. The success of this perfusion procedure could, in the future, prove particularly beneficial to hepatitis victims who develop hepatic failure and coma following only a single acute injury and whose livers may heal to resume normal function when inflammation, infection, and increased metabolic demands have subsided. The technique, the scientists suggested, also may aid patients suffering from chemical injury to their livers,

such as occurs in carbon tetrachloride poisoning; patients in liver failure following portacaval shunt operations; and, possibly, candidates for liver transplants—by improving their pre-operative condition, thereby improving the chances for a successive graft.

*Wilson's disease therapy*

D–penicillamine, a chelating agent which promotes urinary copper excretion, is generally accepted as effective therapy for Wilson's disease, an inherited disorder of copper metabolism causing progressive neurologic and hepatic disease. Studies by Institute-supported scientists at the Albert Einstein School of Medicine have now demonstrated that prolonged daily administration of this agent can delay or even prevent development of clinical manifestations of Wilson's disease in genetically and biochemically predisposed relatives of patients with this disorder.

In their investigation, the scientists employed a low copper diet and one gram of D–penicillamine orally per day to treat 42 of 53 asymptomatic subjects who had the chemical abnormalities associated with the disease or a positive family history. All of the subjects were followed from 3 to 10 years, after which overt manifestations of Wilson's disease were found in the 11 untreated subjects (all of whom were under care of other physicians), with death due to the disease occurring in five cases. No significant manifestations occurred in any of the 42 treated subjects. Moreover, studies based upon the natural history of 121 known Wilson's disease patients indicated that at least 8 of the treated subjects would have developed symptoms.

*Defect in "bronze diabetes" found*

Idiopathic hemochromatosis (or bronze diabetes) is an uncommon, chronic and progressive disorder characterized by excess deposition of iron in the liver and other tissues, increased pigmentation of the skin, cirrhosis of the liver and pancreatitis and, in most cases, diabetes mellitus. Cornell University scientists supported by the Institute have described for the first time a specific metabolic defect in this disorder. Their investigation demonstrated that afflicted patients with idiopathic hemochromatosis are deficient in hepatic xanthine oxidase, an enzyme which releases iron stored in the liver.

In his study, liver samples obtained from five patients with hemochromatosis, six with cirrhosis, and seven patients without liver disease were analyzed for xanthine oxidase activity. Activity of this enzyme in the liver samples from those with cirrhosis and hemochromatosis was found to be below that of the control groups and in a number of cases, there was no evidence of any xanthine oxidase activity at all. This finding has led the investigators to propose that hemochromatosis may be the result of a genetic defect characterized by failure to develop normal amounts of hepatic xanthine oxidase. Currently, the scientists are continuing their analysis of this enzyme activity on liver samples from siblings and children of patients with hemochromatosis.

*Diagnosis of gastrointestinal hemorrhage*

A major challenge confronting physicians constantly is the early diagnosis of the site of gastrointestinal bleeding. Recent studies have indicated that the source of such bleeding escapes detection in 15 to 40 percent of patients studied. Institute-supported investigators at the University of Pennsylvania have now found abdominal angiography to be a safe and valuable diagnostic procedure for pinpointing the site of gastrointestinal hemorrhage in patients who are actively bleeding at a rate of 0.5 cc/minute or more.

The technique involves use of a radio-opaque catheter (with a specially molded tip) that permits selective catheterization of almost any branch of the aorta. The catheter is introduced into the femoral artery and then, under fluoroscopic control, into the celiac axis and later into the superior mesenteric artery (two branches of the aorta which supply the gastrointestinal tract), accompanied by separate injections of a contrast material. After each injection, serial x-ray film exposures are made every second for 18 seconds, processed immediately, and compared for slight changes.

Using abdominal angiography, the investigators were able to find the source of gastrointestinal bleeding in 18 of 21 patients studied, identifying such sources of blood loss as a mucosal tear near the gastro-esophageal junction, benign stomach ulcers, "stress ulcers" in a post-surgical patient, rupture of the spleen and rupture of a splenic artery aneurysm (a balloon-like expansion of an artery).

The procedure also was found to be of particular value in studying patients with cirrhosis of the liver and in detecting or excluding the presence of bleeding esophageal varices (abnormally dilated veins at the gastro-esophageal junction). Additionally, the investigators found that the procedure, which requires only 30 to 40 minutes, does not interfere with other methods of examination or required surgery. In fact, the investigators suggest, the procedure may aid the surgeon greatly by localizing the bleeding area and thus should complement conventionally used techniques, such as "upper GI series" (serial x-ray pictures following the swallowing of a radio-opaque, barium-containing drink) which may demonstrate a lesion but will not indicate whether it is actively bleeding.

*Surgery for dumping syndrome*

A severe and disabling consequence of ulcer surgery is a condition known as the "dumping syndrome" which develops in approximately one third of those patients requiring partial stomach resection for peptic ulcer. This surgically-induced disturbance of pyloric function causes an inability to control the rate of stomach emptying and results in a painful sense of abdominal fullness, nausea, belching, profound weakness and trembling, profuse sweating, palpitations and at times sudden and massive diarrhea within a short time after the intake of most foods.

In the past year, Institute-supported scientists at the University of California College of Medicine at Los Angeles devised an effective remedial surgical procedure which should be considered for the patient in whom conventional diet and drug therapy has failed. In their study, the investigators observed four patients with symptoms so severe, following peptic ulcer surgery (vagotomy and pyloroplasty), that they could not continue in their usual occupations. Selecting two of the patients, the investigators interposed a 4 cc segment of small intestine in a reversed "tail-to-head" position between the stomach and duodenum. This segment simulated the function of the surgically-removed pylorus, the stomach's food outlet control valve, by slowing the downward movement of food. Although gastric retention was a problem in the immediate postoperative period, the dumping syndrome disappeared within a few days in both patients and has not recurred in 16 and 24 months, respectively.

Prior to attempting the technique on the two patients, the investigators conducted experimental trials in 10 dogs, who showed a marked reduction of symptoms following the surgical procedure. The scientists suggested that the jejunum interposition and reversal is an effective remedy for both the anatomical and physiological disturbances in the dumping syndrome after vagotomy and pyloroplasty.

*Cell replication and gastric ulcer*

In another important finding, an Institute grantee at Cornell University Medical College has shown that the failure of epithelial cell replication is of primary importance in the mechanism of stress ulcer formation in the stomach. Two years ago this same grantee made precise measurements of the life cycle of epithelial cells in the normal gastrointestinal tract, thereby providing a basis for comparing the kinetics of cell renewal in normal and disease states. In his recent study, he has now demonstrated that stress inhibits proliferation of young epithelial cells in the gastric mucosa, leading to a disproportionate loss of cells from the mucosa and to eventual local erosion and the phenomenon known as stress ulceration.

In this study, stress ulcers were induced in mice by placing them in restraint cages for 13 to 42 hours. Each animal was given an injection of radioactive thymidine sometime during this period, and one hour later, the rate of thymidine incorporation into new cells was determined. About 50 percent fewer cells became labeled with thymidine in the mucosa of animals under stress, compared to the mucosa of control animals, and slightly more than half of these were in metaphase, indicating a marked inhibition of new cell formation. Inhibition of cell proliferation occurred both *before* and during the appearance of the earliest pathologic abnormalities in the mucosa.

*Malabsorportion syndrome*

Celiac disease, or nontropical sprue, is characterized by fatty diarrhea, intestinal malabsorption, and dietary deficiency symptoms, all caused by an intestinal sensitivity to the protein fraction gliadin, or gluten, in the diet.

In the past year, Institute-supported researchers at Johns Hopkins University demonstrated in a study of 16 cases of adult celiac disease that intestinal ulcera-

tions—a severe, often fatal, and heretofore overlooked complication—must be added to the list of conditions which may interfere with the proper diagnosis. Their study described an adult celiac disease patient who, while on a gluten-free diet, developed intestinal ulcerations, stricture and perforation leading to death. Inquiry and literature review revealed 15 other such patients, 12 of whom died under similar circumstances, indicating that such complications may prevent the usual good response to a gluten-free diet and thus obscure the diagnosis of celiac disease. The 37-year-old male patient had been in complete remission on a gluten-free diet for more than six years when he developed acute jejunal and ileal ulcers and intestinal obstruction. The ulceration could not be attributed to a specific infection, direct toxic effect of drugs, or any of the usual causes, and no form of medical therapy was effective in inducing a remission. The patient died subsequently following perforation of an ucler.

In the 15 similar cases, it also appeared that such ulcerations were a complication of celiac disease, *per se*. Each of these patients had chronic diarrhea and intestinal malabsorption and, at surgery or autopsy, multiple ulcerations of the small intestine. Two improved after surgical resection of the multiple ulcerated areas and were alive and well two and six years later, respectively, indicating that early resection of the ulcers and obstructed areas may alter the subsequent course.

In the past year, grant-supported scientists at Harvard Medical School also have obtained evidence linking abnormal bile salt metabolism to the malabsorption seen in conditions characterized by unusual proliferation of the normal bacteria in the small intestine. In the past, several studies have implicated abnormal bile salt metabolism in the pathogenesis of such disorders, but the mechanism producing such malabsorportion heretofore has not been defined.

The Harvard researchers have now demonstrated the presence of *unconjugated* bile salts in the jejunal fluid of two patients with fatty stools and bacterial overgrowth of the small intestine. The normal colonic bacteria found proliferating in the gastrointestinal tracts of these patients were capable of unconjugating normally-produced conjugated bile salts secreted by the liver. *Conjugated* bile salts are a necessary component of normal intestinal absorption of fat and, therefore, the change induced by the bacteria caused malabsorption of fats and fat-soluble vitamins. Therapy with appropriate antibiotics was found beneficial because it eliminated the bacteria capable of producing this effect.

*Ulcerative colitis*

One of the commonest chronically debilitating disorders of the gastrointestinal tract is ulcerative colitis, a progressive, inflammatory disease of the colon or large bowel. Of unknown etiology, the disease is characterized by severe cramps, repeated bloody diarrhea, weight loss, anemia, and potentially fatal loss of body fluids and minerals. Although the disease continues to resist efforts to discover its cause, progress is being gradually achieved in therapy which is aimed primarily at correcting mineral and nutrient loss, controlling diarrhea, preventing infection, and ministering to the patients' psychologic needs.

During the past year, research performed by Institute grantees at the Yale University School of Medicine, suggested a possible link between milk intolerance and ulcerative colitis. Milk intolerance, a relatively common syndrome in certain otherwise normal adults and in patients with inflammatory bowel disease, is known to result in many cases from a deficiency of the intestinal enzyme lactase which converts lactose or "milk sugar" into glucose and galactose. In their investigation, 39 patients with ulcerative colitis or proctitis were studied to determine whether in any way lactose intolerance might be a factor which contributes to diarrhea in ulcerative colitis patients. Their study showed that 59 percent of the patients were found to have lactose intolerance. Follow-up evaluation 6 to 16 months after institution of a lactose-free diet showed that the only patient with lactose intolerance who did not have a major remission during the study had failed to follow the prescribed lactose-free diet. The results indicate that the inflamed, irritated bowel of ulcerative colitis patients cannot handle the osmotic load, and that lactose intolerance imposes an extra burden upon the inflamed bowel. On the basis of their study, the investigators advise a lactose-free diet in ulcerative colitis patients who also have lactose intolerance. Although this study does not necessarily implicate intestinal lactase deficiency as a causative factor in ulcerative colitis (this deficiency may be secondary to the underlying prime disorder, and, in fact, intestinal lactase deficiency is known to develop as an aftermath of a number of other primary debilitating diseases), this finding opens up a new, promising approach to better symptomatic treatment of patients with ulcerative colitis.

*Milk intolerance and lactase deficiency*

During the previous two years, Institute-supported researchers have traced the cause of milk intolerance in certain otherwise normal adults and in patients with inflammatory bowel disease to a deficiency in the intestinal enzyme lactase, which converts lactose or "milk sugar" into its simple sugar components glucose and galactose. Since then, increasing evidence has been found that intolerance to milk is a relatively common syndrome in adults.

Last year Institute grantees demonstrated that milk intolerance based on lactase deficiency is much more common in Negro adults than in the adult white population and suggested that intestinal lactase activity may be genetically controlled. Such studies have been expanded recently to cover children between the ages of 1 and 11. In one such study conducted by Institute grantees at Johns Hopkins University School of Medicine, 40 healthy children, 20 white and 20 Negro, randomly selected from a pediatric comprehensive care clinic were investigated. Lactose loading in this group produced abdominal discomfort in seven Negro children and two white, and 14 of the 20 Negro and 2 of the 20 white children had a family history of milk intolerance. It was also found that lactose-induced symptoms in Negro children and adults increased in frequency with advancing age, suggesting a gradual decrease in lactase activity after weaning. This was not as common in the white subjects studied.

Similar studies have also been carried out by Institute grantees at the University of Oklahoma Medical Center. Both the Johns Hopkins study and the Oklahoma studies indicate that there is a distinct racial difference in lactase activity and that a genetically determined intestinal lactase deficiency is responsible for the majority of instances of milk intolerance found in adults.

These studies have considerable diagnostic and therapeutic significance, with particular import for Negro patients presenting with a variety of gastro-intestinal symptoms, such as diarrhea, nausea, and abdominal pains, which do not appear to be related to any specifically manifest pathologic lesion. In view of these findings, it becomes necessary to rule out, in such patients, the presence of milk intolerance or lactase deficiency (a diagnosis not arrived at often in adults at present). Once this diagnosis is confirmed, dietary restriction of milk, milk products, and foods containing milk sugar (lactose) usually leads to the cessation of the distressing symptoms.

*Outlook*

This résumé of but several research investigations and progress in the broad field of gastroenterology illustrates the productivity and diversity of the numerous studies supported by the Institute. The significant accomplishments of the past year in the treatment and prevention of liver disease, peptic ulcer, and ulcerative colitis give renewed hope for improved therapeutic modalities in the foreseeable future.

PROGRESS IN FIELD OF CYSTIC FIBROSIS

Senator HILL. Good. What about your progress in the field of cystic fibrosis?

Dr. WHEDON. Cystic fibrosis, I would say for the first time in the last few years, is really beginning to look hopeful. There have been two developments in the last 2 years. We mentioned last year the finding of a factor in blood of cystic fibrosis patients that affects the sweeping action of the cilia in the respiratory tract, as has been studied in rabbits, and then this year the finding of a substance in the sweat and salivary secretion of patients which when injected into the parotid gland of rats will cause the saliva of the rats to have the same high-salt content that the patients have.

So it's suggested very strongly that there is some substance, some protein or other chemical substance that must be made rather uniquely by the cells of the patient with cystic fibrosis that brings this disordered metabolism about. Now the investigators whom we support are engaged in trying to characterize and define this material, and we feel

that if this can be done, we will have made a very positive step forward in understanding this disease.

Senator HILL. You think you will?

Dr. WHEDON. We think we will. It may take a few years to do this because the problem is not easy, but there is really for the first time some specific evidence that we are on the right road.

### AVAILABLE FUNDS

Senator HILL. So far as this budget is concerned, how do your funds relate to the progress that you might make?

Dr. WHEDON. Well, Senator, we have been gradually increasing our portion of the funds devoted to cystic fibrosis, and this past year we have apportioned more than $2 million toward our research in cystic fibrosis. There is obviously more that we can do in many of our fields, and we think that broad support on fundamental problems will help us ultimately to solve the very serious problem of this devastating disease and also help us, of course, with many other problems.

Senator HILL. In other words, there is real promise here if you can go forward; is that right?

Dr. WHEDON. Yes, sir.

### BROAD FUNDAMENTAL RESEARCH VERUS SPECIFIC RESEARCH

Dr. SHANNON. Could I comment on this, Senator Hill, because I think when you hear outside witnesses you will hear this program discussed at some length.

I would emphasize that the problem is one where there is no unifying biological concept that can be used to explain the multifaceted symptoms of the disease, whether they appear in the salivary gland, lung, intestine, or the like. It would appear that those organs that make secretions to the exterior, whether they be protein, salt and water solutions and the like, are disturbed.

The result is that the approach to this disease, at the present time, must deal with quite fundamental mechanisms that relate to how these organs handle salt, for example; how they form mucus, how they excrete these things.

Now the Cystic Fibrosis Foundation is one of the few national groups that we have had dealings with over the years that basically opposes this type of strategy and would prefer, as best I can interpret their talks with and their letters to me, a much more frontal assault on the disease. I would favor that, too, if I knew where the frontal assault could, with profit, be directed.

I point this out to indicate that our strategy is one of broad concern with those mechanisms that are overtly affected or manifestly affected in the development of disease. We see at this point in time no alternative other than to pursue this course. But I'm sure you will get contrary advice from some of the outside witnesses.

Senator HILL. What do you think, Doctor?

Dr. WHEDON. Well, I feel just as strongly as Dr. Shannon on this point. We have reviewed very carefully the various aspects of the disease which we think must have more fundamental information obtained. We have carefully analyzed our grants and we think we know exactly what we are doing along this line.

We do feel, for example, that the two findings I just mentioned are of a relatively fundamental nature and yet they clearly point the way toward eventual solution. These are findings, I think, that would not have been made by any direct attack upon the clinical problem in patients themselves.

I think we must have a coordinated attack, of course. We must continue our clinical studies with patients because they always do from time to time give us insight as to what the difficulties may be, or give us ideas for approaching in the laboratory or in work with animals how we may get at some of the specific defects. So we feel that a coordinated attack must be carried out, and I wish to support very strongly what Dr. Shannon has just described to you, I think, very clearly.

Senator Hill. Do you have anything you would like to add, Doctor?

Dr. Stewart. No, sir, Mr. Chairman.

Senator Hill. You mean you are not taking sides in this controversy?

Dr. Stewart. That is correct.

Senator Hill. Dr. Whedon, you, too, brought us some good testimony, most helpful testimony. We certainly appreciate it and want to thank you for it. Thank you, sir.

## National Institute of Neurological Diseases and Blindness

**STATEMENT OF DR. RICHARD L. MASLAND, DIRECTOR**

**ACCOMPANIED BY:**

**DR. JAMES A. SHANNON, DIRECTOR, NATIONAL INSTITUTES OF HEALTH**
**DR. ELDON L. EAGLES, ASSISTANT DIRECTOR, NINDB**
**ECKART WIPF, EXECUTIVE OFFICER, NINDB**
**ROBERT L. SITHENS, BUDGET OFFICER, NINDB**
**JAMES A. HICKEY, ACTING FINANCIAL MANAGEMENT OFFICER, NATIONAL INSTITUTES OF HEALTH**
**DR. WILLIAM H. STEWART, SURGEON GENERAL**
**CHARLES MILLER, CHIEF FINANCE OFFICER**
**JAMES B. CARDWELL, DEPUTY ASSISTANT SECRETARY, BUDGET**

### Appropriation Estimate

"NATIONAL INSTITUTE OF NEUROLOGICAL DISEASES AND BLINDNESS

"For expenses necessary to carry out the purposes of the Act relating to neurology and blindness, [$128,633,000] *$131,195,000*."

AMOUNTS AVAILABLE FOR OBLIGATION

| | 1968 | 1969 |
|---|---|---|
| Appropriation | $128,633,000 | $131,195,000 |
| Cutback from the 1968 President's budget required by H.J. Res. 888 | −2,578,000 | |
| Total currently authorized for obligation | 126,055,000 | 131,195,000 |
| Plus: Proposed release of reserves for increased pay costs | 497,000 | |
| Total available for obligation | 126,552,000 | 131,195,000 |
| Disposition of cutback: | | |
| To be used for pay costs in this account | 497,000 | |
| To be transferred to "Indian health activities" for pay and postal costs | 1,677,000 | |
| To be returned to the Treasury | 404,000 | |
| Total cutback | 2,578,000 | |

OBLIGATIONS BY ACTIVITY

| | 1968 estimate | | 1969 estimate | | Increase or decrease | |
|---|---|---|---|---|---|---|
| | Positions | Amount | Positions | Amount | Positions | Amount |
| Grants: | | | | | | |
| Research | | $77,346,000 | | $80,038,000 | | +$2,692,000 |
| General research support grants | | (8,094,000) | | (7,430,000) | | (−664,000) |
| Scientific evaluation and planning | | (155,000) | | (155,000) | | |
| Categorical clinical research centers | | (3,150,000) | | (3,150,000) | | |
| Specialized research centers | | (800,000) | | (900,000) | | (+100,000) |
| Fellowships | | 3,805,000 | | 3,889,000 | | +84,000 |
| Training | | 18,780,000 | | 19,262,000 | | +482,000 |
| Direct operations: | | | | | | |
| Laboratory and clinical research | 351 | 9,894,000 | 381 | 11,119,000 | +30 | +1,225,000 |
| Collaborative research and development | 194 | 10,190,000 | 194 | 10,206,000 | | +16,000 |
| Biometry, epidemiology, and field studies | 107 | 3,371,000 | 107 | 3,388,000 | | +17,000 |
| Training activities | 3 | 73,000 | 3 | 74,000 | | +1,000 |
| Review and approval of grants | 106 | 2,418,000 | 113 | 2,499,000 | +7 | +81,000 |
| Program direction | 32 | 675,000 | 32 | 720,000 | | +4,000 |
| Total obligations | 793 | 126,552,000 | 830 | 131,195,000 | +37 | +4,643,000 |

## OBLIGATIONS BY OBJECT

| | 1968 estimate | 1969 estimate | Increase or decrease |
|---|---|---|---|
| Total number of permanent positions | 793 | 830 | +37 |
| Full-time equivalent of all other positions | 60 | 60 | |
| Average number of all employees | 801 | 850 | +49 |
| Personnel compensation: | | | |
| Permanent positions | $7,074,000 | $7,496,000 | +$422,000 |
| Positions other than permanent | 263,000 | 278,000 | +15,000 |
| Other personnel compensation | 88,000 | 92,000 | +4,000 |
| Total personnel compensation | 7,425,000 | 7,866,000 | +441,000 |
| Personnel benefits | 717,000 | 740,000 | +23,000 |
| Travel and transportation of persons | 453,000 | 560,000 | +107,000 |
| Transportation of things | 80,000 | 109,000 | +29,000 |
| Rent, communications, and utilities | 220,000 | 250,000 | +30,000 |
| Printing and reproduction | 50,000 | 80,000 | +30,000 |
| Other services | 737,000 | 775,000 | +38,000 |
| Project contracts | 9,050,000 | 9,235,000 | +185,000 |
| Payment to "National Institutes of Health management fund" | 6,106,000 | 6,413,000 | +307,000 |
| Supplies and materials | 1,085,000 | 1,090,000 | +5,000 |
| Equipment | 700,000 | 890,000 | +190,000 |
| Grants, subsidies, and contributions | 99,931,000 | 103,189,000 | +3,258,000 |
| Subtotal | 126,554,000 | 131,197,000 | +4,643,000 |
| Deduct quarters and subsistence charges | 2,000 | 2,000 | |
| Total obligations by object | 126,552,000 | 131,195,000 | +4,643,000 |

## SUMMARY OF CHANGES

| | |
|---|---|
| 1968 enacted appropriation | $128,633,000 |
| Cutback required by H.J. Res. 888 | −2,578,000 |
| Proposed release of reserves for increased pay costs | 497,000 |
| 1968 estimated obligations | 126,552,000 |
| 1969 estimated obligations | 131,195,000 |
| Total change | +4,643,000 |

| Increases | Base | | Change from base | |
|---|---|---|---|---|
| | Positions | Amount | Positions | Amount |
| A. Built in: | | | | |
| 1. Annualization of new positions authorized in 1968 | | | | $34,000 |
| 2. Annualization of the 1968 pay raise (in 1969) | | | | 111,000 |
| 3. 1 additional day of pay in 1969 | | | | 14,000 |
| Subtotal built in | | | | 159,000 |
| B. Program: | | | | |
| 1. Research grants | | $77,346,000 | | 2,692,000 |
| 2. Fellowships | | 3,805,000 | | 84,000 |
| 3. Training | | 18,780,000 | | 482,000 |
| 4. Laboratory and clinical research | 351 | 5,592,000 | 30 | 875,000 |
| 5. Review and approval | 106 | 1,332,000 | 7 | 25,000 |
| 6. Program direction | 32 | 411,000 | | 19,000 |
| Subtotal program increases | | | 37 | 4,177,000 |
| C. Payment to National Institutes of Health management fund for centrally furnished services: | | | | |
| 1. Laboratory and clinical research | | 4,302,000 | | 255,000 |
| 2. Collaborative research and development | | 334,000 | | −11,000 |
| 3. Biometry, epidemiology, and field studies | | 116,000 | | 2,000 |
| 4. Review and approval | | 1,086,000 | | 40,000 |
| 5. Program direction | | 264,000 | | 21,000 |
| Subtotal payment to management fund | | | | 307,000 |
| Total program increases | | | 37 | 4,643,000 |

EXPLANATION OF CHANGES

*Research grants.*—The net increase of $2,692,000 includes $3,256,000 for support of the regular programs, a decrease of $664,000 for general research support grants and a $100,000 increase for specialized research centers.

*Fellowships.*—The increase of $84,000 will provide for increased stipend costs and an increase of nine post doctoral awards and one career development award.

*Training grants.*—The increase of $482,000 will sustain the graduate training grants program in the various fields of neurological and sensory disorders.

*Laboratory and clinical research.*—The program increase of $875,000 will provide funds in the new facility for the support of 30 new positions required for the expanded programs of intramural research and for new equipment and supplies.

*Review and approval of grants.*—The inceaase of $25,000 and seven positions will provide continued support required for the review and analysis of the grant programs of this Institute.

*Program direction.*—The increase of $19,000 will provide additional support for the administrative staff in the Office of the Director.

EXPLANATION OF TRANSFERS

| | 1968 estimate | 1969 estimate | Purpose |
|---|---|---|---|
| Proposed transfer to: "Indian health activities." | $1,677,000 | ---------- | To provide for increased pay costs in 1968. |

JUSTIFICATION—NATIONAL INSTITUTE OF NEUROLOGICAL DISEASES AND BLINDNESS

| | 1968 estimate | | 1969 estimate | | Increase or decrease | |
|---|---|---|---|---|---|---|
| | Positions | Amount | Positions | Amount | Positions | Amount |
| Personnel compensation and benefits | 793 | $8,142,000 | 830 | $8,606,000 | +37 | +$464,000 |
| Other expenses | ---------- | 118,410,000 | ---------- | 122,589,000 | ---------- | +4,179,000 |
| Total | 793 | 126,552,000 | 830 | 131,195,000 | +37 | +4,643,000 |

GENERAL STATEMENT

This Institute is concerned with a variety of diseases which afflict the brain and the sense organs. Long-term disability is the result of disorders such as cerebral palsy, epilepsy, multiple sclerosis, muscular dystrophy, parkinsonism, deafness, and blindness, while cerebrovascular disease (stroke) is the third largest cause of death in this country as well as invaliding many others. Progress against these inadequately understood diseases would relieve mankind of some of its heaviest disease burdens.

These neurological and sensory disorders fall into 14 major program areas, each subject of a specifically focused research effort. The research effort in each of these areas is carried out through extramural project research grants, center or program project research grants, intramural research projects, collaborative and field research projects and contract research projects.

The program areas and the distribution of the research effort for each category in 1967 was as follows:

The chronic neurological disorders of childhood include all those diseases of the nervous system which occur in early life whether they are acute or chronic. This is being pursued through some 263 projects, 117 of which are research grants, 33 are intramural projects, 108 are collaborative and field projects, and 5 are contracts.

The chronic neurological disorders of aging are those diseases of the nervous system which manifest themselves late in life, but are chronic and debilitating. In this area we have 66 projects, 55 of which are extramural grants, 2 centers, 5 intramural projects, 1 collaborative and field project, and 2 contracts.

The cerebrovascular diseases include all those disorders of the central nervous system related to blood circulation including stroke. Here, there are 119 projects,

89 in grants, 16 in centers, 10 intramural, 2 collaborative and field, and 3 contracts.

Epilepsy and convulsive disorders are those conditions in which recurrent seizures require constant medication or treatment. There are some 97 projects in this area, 25 of which are grants, 2 intramural projects, 4 collaborative and field projects, and 3 centers.

Sclerosing disorders include such diseases as multiple sclerosis, amyotrophic lateral sclerosis, and others which are chronic and incapacitating but for which there is no certain cause or treatment. There are 88 projects of which 81 are grants, 2 intramural, 4 collaborative and field, and 1 contract.

Neuromuscular and muscular disorders of the nervous system are those diseases which involve both nerves and muscles in their interactions. These may occur at different periods of life, but are chronic and, again, incapacitating. There are some 124 projects here, 108 as research grants, 2 centers, and 14 intramural projects.

Infections of the nervous system are all those diseases caused by known infectious agents whether bacterial, virus, rickettsial, fungus, or other. There are some 23 projects in this area, 18 extramural grants, 2 intramural projects, and 3 collaborative and field projects.

Accident and injury of the nervous system includes all those physical agents which can accidentally cause injury to the nervous system. In this area there are some 53 projects of which 39 are extramural grants, 5 centers, 4 intramural, 1 collaborative and field, and 5 contract projects.

Tumors of the nervous system include all the neoplastic growths which occur within the confines of the nervous system and include the metastatic tumors of the nervous system which originate elsewhere in the body. There are 55 projects, 36 grants, 19 intramural projects.

Other neurological disorders and neurological sciences include all kinds of research which may relate to several of these disease categories or all of them. This is basic research on the nervous system which has wide application in many problems. There are 483 projects, 423 of which are extramural grants, 5 are centers, 36 are intramural projects, 1 collaborative and field, and there are 3 contract projects.

Vision and diseases of the eye include various factors relative to vision. There are 420 projects, 324 of which are extramural grants, 21 centers, 36 intramural projects, 9 collaborative and field, and 11 contracts.

Hearing, equilibrium, and problems of the ear are being investigated in 174 projects, as 160 grants, 9 centers, 4 intramural projects, 2 collaborative and field projects, and 1 contract.

Speech and higher nervous activity include 42 research projects of which 35 are grants, 1 center, 4 intramural, 1 collaborative and field project, and 1 contract.

Other sensory disorders (taste, smell, touch, etc.) encompass 86 research projects, 82 of which are grants, 3 intramural, 1 collaborative and field project, and no contracts.

The Institute maintains an overview of each of these areas through special task forces, Advisory Council Subcommittees, and its scientific information network now centered in four of the Nation's strongest university libraries and research laboratories. These facilities have been developed to advise the Institute staff of research needs and current progress.

From the outset, the use of focused and directed research efforts has been a major part of the Institute's program. For example, the cooperative study of retrolental fibroplasia, completed in 1955 at a cost of approximately $50,000, provided the answer to the cause of this form of blindness in infants and ultimately saved the country over $100 million for each year that this discovery was advanced by the study. The longest Institute study of this type is the Collaborative Perinatal Project, which is now in its eighth year. Other cooperative and collaborative studies are now in progress, and a major segment of direct research is devoted to the direction and coordination of these investigations, frequently using the contract mechanism.

Faced from the outset with a critical shortage of the highly specialized scientists required for neurological and sensory research, the Institute has devoted approximately 25 percent of its grant funds to the training of personnel. Former trainees form an important segment of developing programs, such as the newly established stroke centers. The expanding number and size of medical schools and specialty training programs are increasing the manpower demands from our training programs. These must grow to meet these needs.

The research supported by the Institute in these major program areas is discussed further in the following sections.

RESEARCH GRANTS

| | 1968 estimate | 1969 estimate | Increase or decrease |
|---|---|---|---|
| Research projects | $65,147,000 | $68,403,000 | +$3,256,000 |
| Special programs | 12,199,000 | 11,635,000 | −564,000 |
| Total, research grants | 77,346,000 | 80,038,000 | +2,692,000 |

INTRODUCTION

For the development and implementation of its attack on disorders of the brain and sense organs, the National Institute of Neurological Diseases and Blindness utilizes several methods of research support. The method most generally used is that of the regular research grant to support the *independent* investigator. In some instances, a number of extramural scientists work together as a group on *cooperative* projects requiring massive data and broad geographical and scientific discipline representation. Institute scientists themselves may actually participate in a *collaborative* project with non-governmental groups. The more difficult problems, such as research on stroke or on head injuries, require that there be assembled within a single institution a multi-disciplinary attack on a problem area. For this, a *program project* or *clinical research center* is established. Planning grants are frequently necessary to aid in the initial development of such complex centers. For some types of research, for example blindness, clinical investigations can be carried out without the necessity of hospitalization. For this, outpatient clinical research units are being provided.

PROGRAM PLANS FOR 1968 AND 1969

In 1968, approximately 1,605 regular research projects totalling $65,147,000 will be awarded by the Institute. With the funds requested for 1969, the Institute will award approximately 1,612 regular research projects totalling $68,403,000.

The budgets for 1968 and 1969 continue to reflect an anticipated requirement for additional funds as a result of the recently authorized cost sharing arrangements for new and renewal research grants. This plan considers the full direct and indirect costs of the project in arriving at the federal and non-federal share.

Of the increase, $3,256,000 will be used to meet the rising costs of ongoing or non-competing research projects. This research will continue the emphasis in fields of epilepsy, parkinsonism, disorders of vision, brain injury, disorders of speech and hearing, and stroke. New programs will be initiated as described below.

REGULAR RESEARCH PROJECTS

Although a program of approximately 1,612 regular research projects is difficult to summarize in a few sentences and the immediate results may be less readily defined than is the case with some other types of support, their importance to the mission of NINDB cannot be overemphaszied. They constitute the major portion of the extramural research program. Support for individual projects varies from a few thousand to hundreds of thousands of dollars per year. They represent the ideas and approaches of the individual, independent scientist. Some are largely clinical. Others represent an excellent combination of clinical and basic research. The majority of them are fundamental studies, however, not only on the causes, treatment, and prevention of all of the health problems mentioned below, but on the very mechanisms by which cells, genes, viruses, protein molecules, and other basic biological entities reproduce and function. From experience in the past, it has been research such as this that has opened up new frontiers in science and which has provided much of the information that is subsequently helpful to the patient. Building upon this broad base of independent research, the Institute is establishing special projects and programs directed toward specific categorical objectives. A well rounded program for each of the institutes' disease problems is thus being created.

## DISORDERS OF VISION

In November 1964 an *ad hoc* Subcommittee on Vision and Its Disorders was established on the recommendation of NANDB Council. The Subcommittee and its task forces spent two years in an effort to "review the present status of knowledge about the major causes of blindness and visual disability and to summarize the most pressing problems for investigation as well as the most promising research leads." The report of that expert panel includes 24 specific recommendations and provides a basis for the development of additional national activities in this important area to be carried out with the advice of a permanent Subcommittee on Vision and Its Disorders. Volume II of the Report, containing scientific status papers, provides a comprehensive scientific review of the fields of vision and blindness, and is now being made available to the scientific community.

In addition to the program of support for regular research projects in the field of blindness, support is now being provided for 9 clinical research centers for blindness and visual disorders, each concentrating primarily on special clinical problems such as cataract, glaucoma, disorders of the cornea, infections of the eye, and disturbances of eye movement, but retaining a broad approach to the overall problem of blindness. An additional 3 centers are providing information about the fundamental mechanisms by which light impulses are converted to nervous energy and transmitted to the brain for interpretation. Thus, they are broadly concerned with sensory and perceptual disorders.

The program of vision outpatient clinical research centers initiated on a pilot basis in 1967 and 1968 is proving highly successful and will be expanded. Heretofore, the participation of the large outpatient population with visual disorders in research has been limited by inadequate facilities. The outpatient center program is now rectifying this problem. Approximately 12 outpatient centers will be in operation in 1968.

In accordance with recommendations of the *ad hoc* Committee, a series of working and planning conferences are being supported. The problems of refractive errors of vision (near-sightedness) have been reviewed. A workshop on the effects on the eye of drugs and toxins has been organized, and a center for such studies is being established.

## HEAD INJURY

The Institute has been progressively increasing its program of fundamental research on the basic mechanisms of brain injury. However, for initiation and strengthening of clinical studies, head injury centers are needed. Following an important planning conference, a program of planning grants for Head Injury Clinical Research Centers was initiated in 1967. This program, which now includes 6 such grants, will be expanded in 1969 and will result in the development and implementation of proposals for the establishment of a full-scale Head Injury Clinical Research Centers program. These Centers will concentrate on epidemiology; the physical forces involved in causing head injury; improved diagnostic and therapeutic procedures; the physiological consequences of head injury; the structure and function of the blood-brain barrier; and the problems of brain swelling after injury.

## STROKE

Stroke is one of the leading causes of death and commonly strikes at a time when the individual is at his most productive stage. For those who survive, the disease usually entails lifelong physical disability and mental incapacity. Aphasia, paralysis and incontinence are too often the tragic consequences of stroke.

Among the needs for more effective treatment of stroke are the development of tests and methods to anticipate and prevent complete obstruction of brain blood vessels. Ways to reopen obstructed cerebral vessels and to replace or supplement vessels which are diseased beyond repair must be devised and improved.

Sixteen clinical research centers for stroke research are presently being supported. It is proposed to support an additional seven such centers. By means of planning grants, development of stroke clinical research centers will be encouraged in additional geographic areas and in institutions which have clinical material that otherwise would not be utilized for lack of the necessary extensive financial resources. In addition, support for outpatient clinical research centers in this area was initiated in 1967, and will be extended in 1968 and 1969. This provides important access to ambulatory patients who frequently are the best source

of information regarding early diagnosis of stroke and mechanisms concerned with restoration of an adequate functional state.

The main thrust of the Institute's attack on the stroke problem is by means of these clinical research centers. Support of much basic laboratory research is still clearly necessary to complement the clinical research center program which is providing the means to translate laboratory findings about the causes, the treatment, and the prevention of stroke into clinically effective measures. Additional contributions are being brought to bear on these problems through support of cooperative studies in the surgical and medical treatment of aneurysms and in the value of drugs to reduce hypertension for the prevention of stroke.

### DISORDERS OF HUMAN COMMUNICATION (HEARING, LANGUAGE AND SPEECH)

An ad hoc Task Force on Disorders of Human Communications which has been organized by the Institute is reviewing the present state of research and the problems of communicative disorders. Early detection and proper management before these disorders become firmly established is essential. The urgency of early detection emphasized the importance of the participation of medical research and public health personnel.

For this reason, clinical research centers are being established to provide for research on diagnosis and treatment and for the training of professional personnel. These centers are multidisciplinary and include investigators in many aspects of human communication. The Institute looks primarily to these centers for the major developments in the detection, diagnosis, therapy, and natural history of communicative disorders. To a greater degree than in almost any other field, the individual with a communicative disorder is likely to be an outpatient so that this is one of the areas to which the concept of outpatient clinical research units is being applied. In order that full advantage be taken of the geographic diversity of clinical material, this activity is being gradually expanded in all regions of the country.

### MUSCULAR DYSTROPHY

Muscular dystrophy is one of a group of diseases characterized by gradual wasting of muscles which is prone to occur in children of early school age. Available treatments are poor or nonexistent, and the occurrence of spontaneous temporary remissions make accurate evaluation of therapy very difficult. A number of individual projects have advanced our knowledge of the basic biochemical and structural defects in muscular dystrophy patients. Within two Institute-supported clinical centers, multidisciplinary attacks on this problem have been developed.

### EPILEPSY AND PARKINSONISM

In the important areas of the paroxysmal disorders, notably epilepsy, and of the chronic neurological disorders of aging, notably Parkinsonism, the Institute is engaged in attacks along a broad front. The relatively modest support via regular research grants is being bolstered by current support of three epilepsy centers and two centers for Parkinsonism and allied disorders. In addition support of a number of program projects in relevant basic disciplines, such as neuropharmacology and neurochemistry, has been undertaken and will be expanded. In the cases of both epilepsy and Parkinsonism, recent emphasis on development of new drugs will shortly require availability of extensive clinical facilities for testing and evaluation. The expansion of center programs, including the possibility of those of the outpatient type for epilepsy and Parkinsonism, is planned for 1969.

### NEUROVIRUSES AND SCLEROSING DISORDERS

It has been well known for many years that some types of viruses, such as the poliomyelitis virus, have a special affinity for the nervous system. Recently a growing interest and concern has developed within the scientific community with regard to the presence and effects of so-called "slow" or "latent" viruses which apparently lie dormant for many years.

For the past several years, the Institute has been developing a program to search for viruses as a cause of such chronic neurological diseases as multiple sclerosis, amyotrophic lateral sclerosis, Parkinsonism and the encephalitides of childhood.

In view of the very great potential importance of this field, support for research in this field should be expanded as rapidly as competent investigators can be found who are willing to undertake such a difficult and long-range problem. In 1969, two additional laboratories can be established in this potentially fruitful area of investigation.

Whether or not other sclerosing disorders, notably multiple sclerosis and amyotrophic lateral sclerosis, prove to be caused by "slow" viruses, there is very great need for a more concerted attack on these currently hopeless clinical problems. In 1969 one or two program projects or centers for research on multiple sclerosis can be established.

RESEARCH GRANTS PROGRAM ANALYSIS (IN THOUSANDS OF DOLLARS)

| Fields | 1968 estimate | 1969 estimate | Increase or decrease |
|---|---|---|---|
| Chronic neurological disorders of childhood | 3,400 | 3,530 | +130 |
| Chronic neurological disorders of aging | 1,879 | 1,973 | +94 |
| Cerebrovascular disorders | 4,887 | 5,281 | +394 |
| Epilepsy and related paroxysmal disorders | 2,592 | 2,772 | +180 |
| Sclerosing disorders | 2,983 | 3,133 | +150 |
| Muscular and neuromuscular disorders | 3,730 | 3,865 | +135 |
| Infectious diseases | 529 | 555 | +26 |
| Accident and injury | 1,555 | 1,783 | +228 |
| Tumors of nervous system | 757 | 846 | +89 |
| General | 13,890 | 14,408 | +518 |
| Disorders of vision | 15,954 | 16,619 | +665 |
| Disorders of hearing and equilibrium | 6,984 | 7,332 | +348 |
| Disorders of speech and other higher CNS functions | 1,863 | 2,007 | +144 |
| Disorders of other senses | 2,365 | 2,432 | +67 |
| Noncategorical | 1,779 | 1,867 | +88 |
| Total, regular research grants | 65,147 | 68,403 | +3,256 |

DISTRIBUTION OF RESEARCH GRANTS

| | 1968 estimate | | 1969 estimate | | Increase or decrease | |
|---|---|---|---|---|---|---|
| | Number | Amount | Number | Amount | Number | Amount |
| Noncompeting | 1,080 | $42,813,000 | 1,175 | $46,069,000 | +95 | +$3,256,000 |
| Competing | 525 | 20,784,000 | 437 | 19,834,000 | −88 | −950,000 |
| Supplementals | (180) | 1,550,000 | (240) | 2,500,000 | (+60) | +950,000 |
| Subtotal, regular program | 1,650 | 65,147,000 | 1,612 | 68,403,000 | +7 | +3,256,000 |
| General research support grants | | 8,094,000 | | 7,430,000 | | −664,000 |
| Scientific evaluation | | 155,000 | | 155,000 | | |
| Categorical clinical research centers | | 3,150,000 | | 3,150,000 | | |
| Specialized research centers | | 800,000 | | 900,000 | | +100,000 |
| Total, research grants | 1,605 | 77,346,000 | 1,612 | 80,038,000 | +7 | +2,692,000 |

FELLOWSHIPS

| | 1968 estimate | 1969 estimate | Increase or decrease |
|---|---|---|---|
| Total fellowships | $3,805,000 | $3,889,000 | +$84,000 |

INTRODUCTION

The research fellowship programs of the National Institute of Neurological Diseases and Blindness are designed primarily to encourage specialized advanced research training. They provide the financial support necessary for clinicians and laboratory scientists to become qualified for research on problems of disease and disorder of the nervous system, vision, hearing, and human communication. A group of scientists highly skilled in diversified fields such as neuroanatomy, neurophysiology, neuropathology, neurochemistry, audiology, speech pathology, biophysics, ophthalmology, otolaryngology, and pharmacology is essential for the needed advances in solving these problems. This research group must become skilled in the use of the most up-to-date techniques and instrumentation and in

their application to medical research. The fellowship programs have proven effective in meeting these objectives. A significant proportion of the research scientists whose projects are now being supported by NIH are men who received training under this program.

PROGRAM PLANS FOR 1968 AND 1969

*Postdoctoral Fellowships*

Postdoctoral fellowships provide financial support for the continuing study of scientists who have just completed doctoral training. Because of a PHS-wide increase last year in the amounts of postdoctoral fellowships stipends and in research allowances, the estimated proportion of fellowships that can be funded in 1969 will be fewer than in 1968. Emphasis will continue on training in scientific fields relevant to basic and clinical research on problems of epilepsy, head injury, cerebrovascular disease, vision, human communication, and other neurological and sensory disorders.

CAREER DEVELOPMENT AWARDS PROGRAM

Career Development Awards assure salary support over a 5–8 year period for selected scientists who have completed their formal research training but who require additional specialized experience. It provides them with an opportunity to develop a chosen line of research and to become established as independent investigators. These awards are particularly important for the well-trained research-clinician, who is thus enabled to devote himself completely to the development of the academic career for which he has had long years of clinical and research training. Many individuals are needed, who combine first-hand knowledge of neurological and sensory disease with extensive knowledge in one or more of the basic science areas. Of the total increase requested for the Fellowships program, 12 percent or $10,000 will be applied to the career development program.

DISTRIBUTION OF FELLOWSHIPS

| | 1968 estimate | | 1969 estimate | | Increase or decrease | |
|---|---|---|---|---|---|---|
| | Number | Amount | Number | Amount | Number | Amount |
| 1. Continuations: | | | | | | |
| (a) Noncompeting | 98 | $2,263,000 | 101 | $2,324,00 | +3 | +$61,000 |
| (b) Competing | 72 | 860,000 | 79 | 940,000 | +7 | +80,000 |
| 2. Supplementals | (97) | 91,000 | (69) | 75,000 | −(28) | −16,000 |
| 3. New grants | 49 | 591,000 | 49 | 550,000 | | −41,000 |
| 4. Total fellowships | 219 | 3,805,000 | 229 | 3,889,000 | +10 | +84,000 |

FELLOWSHIPS (BY TYPE OF PROGRAM)

| | | | | | | |
|---|---|---|---|---|---|---|
| 1. Postdoctoral | 91 | 900,000 | 100 | 960,000 | +9 | +60,000 |
| 2. Research career: | | | | | | |
| (a) Career | 14 | 390,000 | 14 | 404,000 | | +14,000 |
| (b) Development | 114 | 2,515,000 | 115 | 2,525,000 | +1 | +10,000 |
| 3. Total fellowships | 219 | 3,805,000 | 229 | 3,889,000 | +10 | +84,000 |

TRAINING GRANTS

| | 1968 estimate | 1969 estimate | Increase or decrease |
|---|---|---|---|
| Total training grants | $18,780,000 | $19,262,000 | $482,000 |

INTRODUCTION

The Training Grants program of the National Institute of Neurological Diseases and Blindness provides support to institutions for establishing, improving, or expanding training programs designed to prepare clinical and laboratory scientists for research and academic careers, and for careers in organized commu-

nity service and public health in the disciplines relevant to the nervous system, the neuromuscular system, vision, hearing, and human communication. The responsibility for future advances in understanding, preventing, and treating successfully the neurological and sensory disorders rests essentially with this group of clinical and laboratory scientists who are trained as leaders in teaching and research.

In 1968 the Institute expects to support approximately 301 training programs, and through these programs provide training for about 1,640 trainees and special fellows.

The impact of the training programs to date has resulted in nearly tripling the number of scientists and scientist-clinicians devoted to teaching and research in these critical areas. In terms of meeting even a minimum level of national needs, however the program is just beginning to achieve its objectives. During 1968, surveys are being planned or have been undertaken to assess in depth the effectiveness of certain training programs, such as those in ophthalmology, or the needs for certain other programs, such as clinical neurochemistry and molecular biology. On the basis of population forecasts, the opening of a score or more new medical schools in the next decade, and the increasing demands of community and regional medical programs, the need for highly trained clinicians, teachers and researchers in the areas of neurological and sensory disorders will continue to be most pressing and acute. Present projections suggest that we may in fact not be able to keep pace with the growing needs. In 1968 the available funds permitted the maintenance of a number of ongoing training programs. Others were terminated in order to provide funds for the establishment of a few new projects in the most critical areas. In 1969, because of some increase in costs, the additional funds will be used simply to maintain the present level of activity.

PROGRAM ANALYSIS

| Fields | 1968 estimate | 1969 estimate | Increase or decrease |
|---|---|---|---|
| 1. Neurology | $5,026,000 | $5,179,000 | +$153,000 |
| 2. Ophthalmology | 3,057,000 | 3,149,000 | +92,000 |
| 3. Otolaryngology | 2,457,000 | 2,531,000 | +74,000 |
| 4. Communicative disorders | 183,000 | 188,000 | +5,000 |
| 5. Medical audiology | 382,000 | 393,000 | +11,000 |
| 6. Neuroanatomy | 263,000 | 271,000 | +8,000 |
| 7. Neurochemistry | 163,000 | 168,000 | +5,000 |
| 8. Neuropathology | 654,000 | 673,000 | +19,000 |
| 9. Neuropharmacology | 232,000 | 239,000 | +7,000 |
| 10. Neurophysiology | 705,000 | 726,000 | +21,000 |
| 11. Neuroradiology | 250,000 | 257,000 | +7,000 |
| 12. Neurosurgery | 598,000 | 616,000 | +18,000 |
| 13. Experimental neurosurgery | 111,000 | 114,000 | +3,000 |
| 14. Neurological basic science | 101,000 | 104,000 | +3,000 |
| 15. Ophthalmic basic science | 53,000 | 54,000 | +1,000 |
| 16. Ophthalmic pathology | 124,000 | 127,000 | +3,000 |
| 17. Otolaryngology and audiology | 264,000 | 271,000 | +7,000 |
| 18. Otological pathology | 117,000 | 120,000 | +3,000 |
| 19. Pediatric neurology | 557,000 | 573,000 | +16,000 |
| 20. Medical neurology and public health | 28,000 | 29,000 | +1,000 |
| 21. Sensory physiology | 121,000 | 124,000 | +3,000 |
| 22. Speech pathology | 184,000 | 189,000 | +5,000 |
| 23. Speech pathology and audiology | 145,000 | 149,000 | +4,000 |
| 24. Vision psychophysiology | 10,000 | 11,000 | +1,000 |
| 25. Cerebrovascular | 420,000 | 432,000 | +12,000 |
| 26. Scientific evaluation and planning | 175,000 | 175,000 | ---------- |
| Total, graduate training grant program | 16,380,000 | 16,862,000 | +482,000 |

TRAINEESHIPS—PROGRAM ANALYSIS

| Fields | 1968 estimate | 1969 estimate | Increase or decrease |
|---|---|---|---|
| 1. Neurology | 16 | 16 | |
| 2. Ophthalmology | 23 | 23 | |
| 3. Otolaryngology | 4 | 4 | |
| 4. Audiology-speech pathology | 5 | 5 | |
| 5. Biochemistry | 3 | 3 | |
| 6. Biophysics | 3 | 3 | |
| 7. Neuroanatomy | 4 | 4 | |
| 8. Neurochemistry | 8 | 8 | |
| 9. Neurocytology | 2 | 2 | |
| 10. Neuroendocrinology | 3 | 3 | |
| 11. Neuropathology | 24 | 24 | |
| 12. Neuropharmacology | 3 | 3 | |
| 13. Neurophysiology | 14 | 14 | |
| 14. Neuroradiobiology | 15 | 15 | |
| 15. Neurosurgery | 7 | 7 | |
| 16. Ophthalmic pathology | 10 | 10 | |
| 17. Pediatric neurology | 45 | 45 | |
| 18. Physiological psychology | 2 | 2 | |
| 19. Sens. Physiology-Pathology: | | | |
| (Vision) | 3 | 3 | |
| (Otolaryngology) | 3 | 3 | |
| 20. Speech and hearing mech | 2 | 2 | |
| 21. Virology-immunology | 5 | 5 | |
| 22. Cerebrovascular | 14 | 14 | |
| Total | 218 | 218 | |

DISTRIBUTION OF TRAINING GRANTS

| | 1968 estimate | | 1969 estimate | | Increase or decrease | |
|---|---|---|---|---|---|---|
| | Number | Amount | Number | Amount | Number | Amount |
| 1. Continuations: | | | | | | |
| (a) Noncompeting | 223 | $12,400,000 | 225 | $12,900,000 | +2 | +$500,000 |
| (b) Competing | 139 | 4,000,000 | 152 | 4,487,000 | +13 | +487,000 |
| 2. Supplementals | (70) | 235,000 | (70) | 230,000 | | −5,000 |
| 3. New grants | 157 | 1,970,000 | 139 | 1,470,000 | −18 | −500,000 |
| 4. Scientific evaluation and planning | (5) | 175,000 | (5) | 175,000 | | |
| 5. Total, training grants | 519 | 18,780,000 | 516 | 19,262,000 | −3 | +482,000 |

TRAINING GRANTS (BY TYPE OF PROGRAM)

| | | | | | | |
|---|---|---|---|---|---|---|
| 1. Graduate | 301 | $16,205,000 | 298 | $16,687,000 | −3 | +482,000 |
| 2. Traineeships | 218 | 2,400,000 | 218 | 2,400,000 | | |
| 3. Scientific evaluation and planning | (5) | 175,000 | (5) | 175,000 | | |
| 4. Total, training grants | 519 | 18,780,000 | 516 | 19,262,000 | −3 | +482,000 |

LABORATORY AND CLINICAL RESEARCH

| | 1968 estimate | | 1969 estimate | | Increase or decrease | |
|---|---|---|---|---|---|---|
| | Positions | Amount | Positions | Amount | Positions | Amount |
| Personnel compensation and benefits | 351 | $3,885,000 | 381 | $4,260,000 | +30 | +$375,000 |
| Other expenses | | 6,009,000 | | 6,859,000 | | +850,000 |
| Total | 351 | 9,894,000 | 381 | 11,119,000 | +30 | +1,225,000 |

*Program Plans for Fiscal Years 1968 and 1969*

CLINICAL RESEARCH

*Medical Neurology*

Clinical investigations in this Intramural Branch are concentrated on neuromuscular diseases and degenerative diseases of the nervous system. They involve application directly to the patient of the newest aspects of basic research techniques in histochemistry, biochemistry, immunology, electron microscopy, tissue

culture, autoradiography and electromyography. Two new neuromuscular diseases, focal loss of muscle fiber cross-straitions and hypotrophy of Type I muscle fibers with internal nuclei, and a new form of recurrent neuropathy, a lipoprotein deficiency or Tangier disease, have been described.

Neuroradiologic studies have produced new techniques in angiography of the brain and spinal cord, and in brain scanning with radioisotopes injected both intravenously as well as into the cerebrospinal fluid to follow its movements.

Neuropharmacologic studies have further clarified the chemistry of relaxation and contraction of slow striated muscle, the mechanical characteristics of active twitch muscle, the effects of several snake venoms on the blood brain barrier and the neuromuscular junction. The last is in collaboration with Ein Shams University, Cairo, Egypt (PL–480 program).

This Branch has continued to train investigators and technicians in the methods of clinical research in neuromuscular disease and served as referral center for the histochemical analyses of muscle biopsies.

*Surgical Neurology*

The Surgical Neurology Branch is applying surgical and laboratory techniques to problems of head injury, epilepsy, cerebral palsy, and mental retardation. Surgical techniques are also being developed and refined.

Head injury and its accompanying brain damage are important causes of death and disability. Through means of high-speed photography, X-ray, and various physiological recording devices, the immediate effects of brain injury are being observed and analyzed. In addition, histochemical and electron microscopy studies of the injured brain are being made. A system of classifying and coding patients with head injury has been developed and is being used, while a few highly selected patients with severe injury to the brain stem are being studied directly.

Cerebral edema is an important complication of head injury and brain disease. The occurrence of brain swelling within the closed cerebral cavity greatly aggravates the results of injury. Investigations of the disturbed permeability of the blood brain barrier through the use of radioactive tracers and other specialized techniques are directed toward determining a method to modify this reaction.

The effect of cold and drugs on epilepsy and drugs on brain tumors are being studied. Using a new technique, the brain is cooled while anticonvulsant drugs are given by vein. Similarly, for the treatment of brain tumor, anticarcinogenic drugs are instilled directly into the brain cavities of the afflicted patient.

Children with inborn and acquired brain lesions as well as those suffering from mental retardation are being studied by clinical, laboratory, chromosomal, and biochemical techniques in an attempt to ascertain the nature and cause of these defects and afford better management and prevention.

*Ophthalmology*

This Branch is studying the mechanisms through which the visual image is converted to coded messages within the eye and then interpreted within the central nervous system. These investigations have produced a new theory of the basic mechanisms whereby light falling upon the retina generates nerve activity. Investigation of the electrical responses of the eye (electro-retinogram and electro-oculogram) have been used for the diagnosis of diseases leading to blindness, such as retinitis pigmentosa, for the early recognition of degeneration of the retina produced by drugs, specifically chloroquine, and for the differentiation of various forms of night blindness.

Glaucoma investigations are concentrating on the mechanisms producing the increased intraocular pressure characteristic of that disorder, and on the development, animal testing, and clinical evaluation of new drugs.

The treatment of inflammations of the eye also is being studied with particular attention to compounds suppressing toxoplasma infection and the use of antimetabolites in diseases in which an immunologic mechanism is suspected. The lens epithelium has proven an excellent experimental system to analyze the effect of anticancer drugs on a cellular level.

*Electroencephalography and Clinical Neurophysiology*

This Branch maintains a diagnostic service in electroencephalography widely called upon by the entire Clinical Center.

Investigations are centering on an understanding of the essential brain mechanisms underlying epilepsy and related brain abnormalities in both human and experimental situations. The electrical activity of the brain cells is being recorded under normal and abnormal conditions by means of fine needle electrodes

(micro-electrodes). Such knowledge is essential to an understanding of the deviations of electrical activity underlying the epileptic seizure.

Other interests relate to mechanisms of abnormal movements such as those occurring in Parkinson's disease and related disorders.

*Laboratory of Neuropathology and Neuroanatomical Sciences*

The understanding of neurological disorders requires a precise knowledge of the normal structures of the nervous system and of the demonstrable changes which occur in these structures as a result of disease.

Normal structures are being studied at several levels. The electron microscope is used to investigate intimate details of the individual cells and of their intercellular connections, the synapses. The response of these individual units to physiological and pathological conditions is also being observed.

Through a study of the organizational patterns of these neural elements, their nature and function in the overall complex organization of the brain is being elucidated. This laboratory is especially emphasizing the study of the brain structures involved in hearing.

An important destructive process which is under intensive investigation is brain swelling (edema) which occurs subsequent to a variety of noxious conditions such as asphyxia, head injury, or over-exposure to ionizing radiation.

*Neurophysiology*

The work of this laboratory is directed toward our understanding of fundmental information-carrying functions of the nervous systems, and the mechanisms through which the various neural elements interact to produce appropriate responses to sensory experiences. Investigations include studies of sense endings, synaptic (interneural) reactions and the organization of sensory systems as well as the responses of single neural elements (cells). Many studies are on mammals, but others involve the less complicated neural structures of lower forms of life within which fundamental processes are more clearly elucidated.

*Laboratory of biophysics*

This laboratory is studying the basic mechanism of activity in nerve and other excitable tissues. The principal objective is to determine the physical and chemical processes which underlie the ability of the nerve axon to transmit an information-carrying impulse. The approach combines laboratory investigations on single axons, artificial membranes, and membrane models using mathematical analysis with the aid of computers.

*Neurochemistry*

The Laboratory of Neurochemistry is involved in studies of the chemical constitution of the brain and peripheral nervous system, the biochemistry of nerve activity and excitability, ion transport across membranes, and alterations of protein, lipid, and amino acid components of the brain in various diseases. These basic studies apply to a host of neurological disorders including seizure states, concussion, cerebral edema, multiple sclerosis, virus encephalitides, amyotrophic lateral sclerosis, Tay-Sachs disease and similar lipoidoses, disorders of muscle and genetically determined neurological diseases. Recent investigations have detected the essential biochemical defect in three of these devastating neurological disorders—Gaucher's disease, Niemann-Pick disease, and Fabry's disease. Newly developed techniques in this laboratory have been extensively used in diagnostic and analytical studies throughout the world.

*Molecular biology*

Many disorders of the brain and sense organs are caused by abnormal biochemical reactions and/or cellular structure. New discoveries demonstrate that most of these deviations result from mutations of the genetic material, which consists of large complex molecules (DNA) that are the essence of the chromosomes in a living cell. It is important to determine the mechanisms through which the genetic material may be damaged, and the processes whereby modifications of this material lead to developmental alterations of the body. Molecular biology is concerned with an explanation of these basic biological problems in molecular terms. Working primarily with bacteria and with isolated DNA, the mutagenic and chromosomal breaking alterations of DNA produced by various chemical and physical agents are studied. The mutant organisms are then examined for their alterations in protein synthesis and function and the

resultant developmental malformations are analyzed. These studies are essential to the basic understanding of the mechanisms of the inborn errors of metabolism and other genetically determined disorders.

*Laboratory of neural control*

The purpose of this laboratory is to study the mechanisms through which the nervous system responds to external stimuli and accomplishes the control of voluntary and involuntary movement. In addition, it will study ways in which the effectiveness of the normal or damaged control mechanisms can be increased by supplementation with or supplanting by artificial elements. There will be three facets to this program: research leading to development of neural control of external devices, i.e., outward information transfer; to the development of external control of the nervous system, i.e., inward information transfer; and the development of neural modeling to study the central information-processing mechanisms.

*Neuro-Otology*

In 1969 the Institute plans to establish a new Neuro-Otology Branch within the Intramural Program of the Institute. The Institute has developed a strong extramural program in the communicative disorders; however, one limitation of this program is that it tends towards compartmentalization because of the scarcity of trained investigators in many of the pertinent disciplines. Human communication is a multifaceted product of complex neurological processes. Consequently, the scientific evaluation of both normal and abnormal communicative processes requires a multidisciplinary approach to research which is not possible in most academic situations. A Neuro-Otology Branch will have two missions: (1) to conduct long-range research on the normal processes of the sensory, central, and efferent mechanisms which are used for human communication, and (2) to study the identification, manifestations, and amelioration of aberrations in these mechanisms.

In addition to research and training, the Neuro-Otology Branch will provide a consultation service, particularly in otolaryngology and audiology both within this Institute and the Clinical Center at Bethesda, generally.

*Perinatal Physiology*

Many neurological disorders such as cerebral palsy and mental retardation have their origin around or before the time of birth. To investigate the mechanisms of such damage and to study the processes of growth and development of the nervous system, the Laboratory of Perinatal Physiology utilizes a colony of rhesus monkeys, whose reproductive processes have considerable similarity to those of the human.

Within the monkeys of this colony it has proven possible to reproduce patterns of brain damage and malfunction similar to those occurring naturally in man. Studies now in progress are investigating the biochemical and physical changes associated with such brain damage in an effort to develop compensatory procedures.

The facilities of the laboratory include a main laboratory at the U.S. Public Health Service Outpatient Clinic in San Juan, Puerto Rico, and four islands on which free-ranging primate colonies are established. A new research facility, in conjunction with the National Institute of Child Health and Human Development, is being developed on the grounds of the Puerto Rico Medical Center, with completion anticipated in 1970. In addition, an experimental primate compound facility is being developed complementary to the new facility at the Medical Center.

SUMMARY OF INCREASES

Included in the net increase of $1,225,000 is a program increase of $875,000 which will provide for the new facility for new equipment and supplies and support for 30 new positions required for the expanded programs of intramural research. Also included is $95,000 for mandatory costs and $255,000 for centrally furnished services from the "National Institutes of Health Management Fund."

COLLABORATIVE RESEARCH AND DEVELOPMENT

| | 1968 estimate | | 1969 estimate | | Increase or decrease | |
|---|---|---|---|---|---|---|
| | Positions | Amount | Positions | Amount | Positions | Amount |
| Personnel compensation and benefits | 194 | $1,929,000 | 194 | $1,956,000 | ---- | +$27,000 |
| Other expenses | ---- | 8,261,000 | ---- | 8,250,000 | ---- | −11,000 |
| Total | 194 | 10,190,000 | 194 | 10,206,000 | ---- | +16,000 |

HEAD INJURY

During 1967, the planning phase of an expanded program for acute head injury research was completed and the program begun. A conference on craniocerebral trauma, sponsored by the American Neurological Association, the American Physiological Society, the Society of Neurological Surgeons, and the National Institute of Neurological Diseases and Blindness was held in Chicago in February, 1966. Clinical and basic scientists from seven countries participated in the conference and identified the following areas as warranting immediate attention: more precise information regarding incidence and prevalence; classification of injuries, and development of standards of measurement for use in clinical and research activities; prevention or reduction in incidence and severity of injuries; establishment of specialized facilities with integrated services for the treatment and investigation of head injuries—including sequential studies, rehabilitation, multidisciplinary research programs—and the participation of engineers and physical scientists in these efforts; utilization of other clinical and experimental laboratories; support of career scientists; study of data acquired by military experience; and education and dissemination of information.

The Congress, in its 1967 Report, stated that "a substantial research and training program on accidental head injuries and consequent brain damage should be launched without delay, "and designated $1.5 million for this effort, thus allowing the implementation during 1967 of some of the plans formulated at the Chicago conference.

A study of the incidence and prevalence of accidental head injury from all causes has been initiated in 1968. This pilot study is taking place in the Buffalo, New York, metropolitan area (Erie County), and involves a limited population. Additional research projects involving larger, smaller, and more diverse population groups are planned for 1969 using the survey design and methodology to be developed in the Buffalo study.

Six planning grants for head injury clinical research centers have been awarded, and applications for operating grants are expected in 1969.

Contracts have been let for the development of physical and mathematical models simulating the human and animal brain and skull. These models will be used to test the mechanical forces of injury and head response for better understanding of the physical forces of head injury. This study will increase in size and scope as preliminary studies are completed.

Longitudinal studies of the effects of head injuries occurring during combat are being carried out. These studies include statistical evaluation of retrospective data on 1100 casualties from World War I. Comparative studies of data from World Wars I and II and the Korean campaign are planned. In addition pilot efforts have been undertaken, with the Department of Defense, to gather comparable data concerning the acute phase of combat head injuries incurred in Vietnam.

EPILEPSY

During the pilot phase of the Institute-supported Collaborative Study of Epilepsy, tests are being conducted at four clinical research centers to develop a protocol for collecting data on all aspects of epilepsy. When this pilot phase is completed, in 1969, the study will be broadened to include additional centers and data on a larger population of patients. Investigators hope to compile previously unavailable data concerning the natural history of epilepsy and related paroxysmal disorders, and the effectiveness of present treatment methods.

There is an urgent need for more effective anticonvulsants. Current drugs are only effective in controlling seizures in about 60 percent of epilepsy patients. With funds made available in 1967, a program of support for anticonvulsant drug development was initiated. In 1968, this program has been continued and strength-

ened and includes support for field trials and tests of new anticonvulsant compounds. In 1969, the Institute plans toxicity studies of new drugs having anticonvulsant properties, drug testing studies at two state hospitals, and two symposia (one on anticonvulsant drug development and one on the basic psysiology of epilepsy).

Although a great deal of indirectly related but important research has been done in the past several years on the problem of the epilepsies, there has been insufficient information exchange. The publication of a journal entitled "Epilepsy Abstracts" is underway. A compilation of abstracts of articles published from 1948 through 1967 is also in preparation. The Institute hopes this effort will be complemented by the establishment of an information center to review, store, and disseminate scientific and technical information on epilepsy and on basic research studies related to this problem.

COLLABORATIVE PERINATAL PROJECT

The objective of the Collaborative Perinatal Project is to determine those factors operating during pregnancy, labor and the early years of life which interfere with the normal, healthy development of the nervous system and sense organs. Fourteen institutions are collaborating in gathering comprehensive data from pregnant women and their children.

Conceived and supported by NINDB, this project was initiated nine years ago in collaboration with 14 hospitals and university medical schools. Basic objectives are to learn why more than a million pregnancies in the United States every year fail to produce living children, why 126,000 babies born every year will be mentally retarded, and why thousands of others are born with neurological and other physical defects.

Institutions participating are: Buffalo Children's Hospital, Boston Lying-in Hospital, Brown University and Associated Hospitals, Charity Hospital of Louisiana at New Orleans, Children's Hospital of Philadelphia, Children's Medical Center of Boston, Columbia University, Johns Hopkins University, Medical College of Virginia, New York Medical College, Pennsylvania Hospital, University of Minnesota, University of Oregon Medical School, and University of Tennessee College of Medicine.

Data have been collected on about 60,000 pregnancies and resultant babies over the past eight years. The accumulated data pertain to infections and illnesses experienced by each mother during her pregnancy, obstetrical complications arising around the time of birth, drug intake, accidents she may have suffered, and other health circumstances. Extensive information has been collected on the social background of the parents and on the environment in which each Project child grows up. A recorded history of accidents, other traumatic experiences, and severe infections of the central nervous system occurring during the early years in the life of each child also is available. Data on the mother is nearly complete and extensive analyses are in progress in respect to obstetric aspects, perinatal mortality and events in the first year of life of the children.

Completed data are now available on several thousand children, now seven or eight years old, born to mothers during the first year of the Project. Final analysis of the entire data cannot begin until 1974 when the total information goal of the Project is complete for all study children. However, many preliminary analyses have been completed and the results made available for the improvement of maternal and child care.

Data analysis this past year has opened up a number of promising leads to further research. A number of specific studies are planned to investigate in greater depth those promising leads which have developed during the past year. Research areas to receive particular attention include the study of pathological changes in cerebral palsy, the evaluation of the role of infectious agents in neurological disorders of infancy and childhood, and the exploration of specific biochemical disturbances underlying certain nutritional and metabolic disorders of pregnancy which contribute to mental retardation.

Included in the net increase of $16,000 is an increase of $27,000 for mandatory costs offset by a decrease of $11,000 in the National Institutes of Health Management Fund.

BIOMETRY, EPIDEMIOLOGY, AND FIELD STUDIES

| | 1968 estimate | | 1969 estimate | | Increase or decrease | |
|---|---|---|---|---|---|---|
| | Positions | Amount | Positions | Amount | Positions | Amount |
| Personnel compensation and benefits | 107 | $990,000 | 107 | $1,005,000 | ---- | +$15,000 |
| Other expenses | ---- | 2,381,000 | ---- | 2,383,000 | ---- | +2,000 |
| Total | 197 | 3,371,000 | 107 | 3,388,000 | ---- | +17,000 |

## BIOMETRY

The Office of Biometry has been established to centralize the statistical, mathematical, and data processing services within the Institute. It brought together statisticians and mathematicians formerly assigned throughout the Institute's program areas. This organizational change has made possible a more efficient utilization of mathematicians and statisticians, and greater organizational flexibility in meeting all the Institute's program needs.

The new office has fixed or continuing responsibilities in providing consultation and assistance to the Institute's staff on mathematical and statistical matters, data processing and computer technology, and the formulation of programs wherein biometry is a vital part. Other continuing programs include the development of mathematical and statistical methodology, the collection, analysis and reporting statistical data required in the research on diseases leading to blindness, epilepsy, cerebral palsy, mental retardation, and other neurological and sensory disorders. Statistically reliable data for this research effort is obtained by collaborative agreements, contracts, or independent sources which include national and international organizations.

In addition to these continuing programs, the Office of Biometry will undertake, with the Office of Program Analysis, the study of a management information retrieval system for the Institute, the development of an ADP system for analyses of data for the Perinatal Physiology Laboratory, collaborative effort on the epidemiological research into blindness disorders, and development of mathematical systems for neurological phenomena. The above are part of the projected workload for the Office of Biometry and are illustrations of the scope of its program activities.

## EPIDEMIOLOGY

During 1967, a new investigation into the epidemiology of stroke was launched. Prospective studies of stroke epidemiology during 1968 and 1969 will be based on preliminary results of this study.

Studies of the epidemiology of epilepsy are underway on Guam, in Washington, D.C., and in Hagerstown, Maryland. Investigators hope through these studies to obtain accurate information on the frequency of epilepsy, and to further delineate the relationship between epilepsy, related forms of episodic disorders, and febrile convulsions.

A study of the natural history of unilateral Parkinsonism and the effect of surgery on this condition is underway, in collaboration with the Department of Neurological Surgery, St. Barnabas Hospital, Bronx, New York, and the Brain Wave Laboratory, Massachusetts General Hospital, Boston, Massachusetts. This study will include examinations of 50 to 100 surgical cases and approximately the same number of matched control subjects.

The relationship between toxoplasmosis and astrocytoma is being explored, following the recent publication of a paper suggesting a high incidence of antibody to toxoplasmosis among patients with this form of brain tumor. Blood specimens from approximately 100 individuals with astrocytoma are being collected.

A study is underway at St. Elizabeth's Hospital, Washington, D.C., of Parkinsonism and related disorders among demented patients. Its purpose is to define these disorders and, if possible, to relate them to the Parkinsonism-dementia syndrome on Guam. Approximately 200 patients will be followed neurologically, and arrangements for neuropathologic studies will be made through resources either at St. Elizabeth's or at NINDB facilities in Bethesda, Maryland.

The significance of peripheral neuritis and other apparently unrelated disorders of the central nervous system which occur as a complication of lung

cancer are being investigated. Researchers plan to study 100 cancer patients and control subjects suffering from chronic lung diseases. These investigations will be extended when analyses of findings from this pilot study are complete.

The unique resources available on the island of Guam are furthering investigations of amyotrophic lateral sclerosis (ALS) and other neurological and sensory disorders—especially Parkinsonism and dementia, which show an unusually high incidence in this isolated environment. Efforts are in progress to determine whether these disorders on Guam result from inherited predisposition of the Chomorro native of Guam, or whether they result from some evironmental factor unique to that island. To test the genetic hypothesis, a large screening program for ALS in military personnel and other non-Chomorros who have lived on Guam has begun. Also, Institute reserachers have developed a major follow-up study of Chomorros who have emigrated to California, to determine whether they continue to develop these disorders in that new environment. Almost 2,000 persons are under observation.

In the search for environmental factors, the investigators have made studies of the Guamanian diet, toxic substances in soil and plants, and deviations of glucose and uric acid levels in the population. A possible virus cause is being studied by inoculating into animals preparations from presumably infected brains of patients dying with ALS and Parkinsonism.

As one facet of the Institute's attack on multiple sclerosis (MS), lymphocytes from patients with MS and other degenerative neurological diseases are being studied for indications of an anti-immune process in this disorder. These studies are being conducted at the Institute's Bethesda laboratories.

Dystonia musculorum deformans continue to be a major research target of the Section on Genetics in Epidemiology. A roster of over 400 families with this disorder has been compiled. Genetic studies so far have demonstrated that there are at least two hereditary forms of dystonia. Further efforts are aimed at delineating genetic and clinical variance within the study of families. Researchers in contact with the individuals suffering from the recessive form of dystonia are impressed by the fact that these patients are unusually bright. To test whether the gene for dystonia also confers intellectual advantages, a study is underway with the Board of Education of New York City, to compare intellectual performance of patients, normal sibs and a control group of students.

An intensive investigation of eye disease among twins is now underway and will be expanded. This study is utilizing a registry of over 450 pairs of twins, all located in the Washington, D.C., area. The examination of these identical and nonidentical twins will provide important information regarding the role of inheritance in glaucoma, myopia, and other eye disorders.

Observations of the visible blood vessels in the fundus of the eye have great value in large scale studies of cerebral arteriosclerosis. However, for such observations to be meaningful, precise methods of evaluating and measuring these vessels must be developed. The use of television scanning devices and advanced television technology presents a promising avenue of research and development in this area. Television ophthalmoscopy might also provide an improved method of studying certain disorders of the optic nerve and internal layers of the eye.

A study of malignant tumors of the eye among residents of the United States is nearing completion. These data, based on review of death certificates, will provide the first description of mortality in the United States due to specific ocular tumors.

The frequency of eye disorders has been studied among two native populations in South Pacific islands. Analyses of data during the past year show a low disease rate for some chronic disorders commonly found among Western populations. This information raises further questions regarding the influence of acculturation on the incidence of chronic diseases of the eye. For example, myopia appears to be relatively rare among simple societies.

### SLOW AND LATENT VIRUSES IN NEUROLOGICAL AND SENSORY DISEASES

For the past several years, the Institute has been developing a program to search for viruses as a cause of such chronic neurological diseases as multiple sclerosis (MS), amyotrophic lateral sclerosis (ALS), Parkinsonism and the encephalitides of childhood. The project of Slow, Latent, and Temperate Virus Infections was established in 1961–62 as part of the Study on Child Growth and Development and Disease patterns in primitive cultures.

The Institute has long recognized the need for a laboratory to attempt the transmission of chronic and sub-acute degenerative diseases of the central nervous system of man to experimental hosts, and, in so doing, establish an infectious etiology for the specific diseases under study. The long term nature of the studies was manifest in the epidemiological and neurohistological similarities between Kuru, a disease in humans, and scrapie, a disease in sheep, which has been established to be an experimentally transmissible disease caused by an extremely small filterable agent with an associated incubation period of three to five years in natural infections, and whose expression of disease was shown to be genetically determined.

Because of the occurrence of this type of disease in wildlife, a collaborative program was established with the Bureau of Sport Fisheries and Wildlife, U.S. Department of Interior. Facilities at the Patuxent Research Center, Laurel, Maryland, were provided and augmented by the Institute's construction of a temporary primate holding facility.

The scope of the program initiated in 1962 included inoculation of several species of apes and smaller primates and small experimental animals, such as mice, guinea pig, hamsters, rabbits and birds. The program also included study of tissue culture cell lines. Such experimentally inoculated hosts are being held for a period of five to ten years. The diseases under study are kuru, scrapie, amyotropic lateral sclerosis, the amyotrophic lateral sclerosis—Parkinsonism dementia syndrome observed in Guamanians, encephalitis, multifocal leuco-encephalopathy, Shilder's Disease, acute necrotizing leuco-encephalopathy, the hemmorrhagic fevers and sub-acute sclerosing panencephalitis.

Since 1965, a total of 21 chimpanzees have experimentally developed Kuro disease. In the first transmission of the disease, eight of eight Kuru patients' brains (100% tested) have induced disease in all 12 animals inoculated, with the incubation periods ranging from 18 months to 38 months before the appearance of clinical signs. In a second transmission, eight chimpanzees (the agent has been passed in a third transmission to one chimpanzee) have developed the Kuru syndrome with a reduction of 7–8 months in incumbation period.

No other experimental host system has as yet become affected, nor has disease developed in other animals following their inoculation with suspension of human tissues from patients affected with other diseases under study. The transmission of Kuru, restricted for the time to chimpanzees, is the first time a human degenerative central nervous system disease has been passed to an experimental host with perhaps a genetically influenced disease expression.

During the past year, significant data have been collected in our laboratory that provides a better understanding of the possible infectious etiology of subacute sclerosing panencephalitis. In all, 26 cases from the United States and 35 cases from several central European countries have been studied serologically. In every instance these cases have demonstrated a hyperimmune antibody status to measles virus. In several cases myxovirus-like virus particles have been observed by electronic microscopic examination of the intra nuclear inclusion bodies found in surgical biopsy and autopside brain specimens. Intensive attempts are being made to experimentally transmit the disease to myxovirus antibody free primates, ferrets, other mammalian hosts, and to cell cultures.

These developments have required an expansion in the number of experimental animals to be inoculated. They have also required an increase in the number of species of apes, monkeys, and domestic animals to broaden the host susceptibility range and to find more readily available and substantially less expensive animals than the chimpanzee. There is a need to enlarge and improve laboratory and animal holding facilities to insure protection of individual investigators and technicians, and long term program animals in well-controlled isolation. In order to move rapidly in the follow up of the program developments, the Institute is developing an increase in animal holding space, largely through the use of contracts.

INFORMATION CENTERS

The Institute has developed a National Neurological Information Network to facilitate the prompt exchange of information within the medical and scientific community through the establishment of research and information centers in four universities having outstanding library facilities. The network is coordinated by the Office of Program Analysis, NINDB, and operates in close collaboration with the National Library of Medicine. It is engaged in a review of scientific

reports, indexing for the MEDLARS system, publication of bibliographies, special searches, symposia, and a review of articles on topics of special interest.

Included in the net increase of $17,000 is an increase of $15,000 for mandatory costs and an increase of $2,000 for centrally furnished services from the "National Institutes of Health Management Fund."

TRAINING ACTIVITIES

| | 1968 estimate | | 1969 estimate | | Increase or decrease | |
|---|---|---|---|---|---|---|
| | Positions | Amount | Positions | Amount | Positions | Amount |
| Personnel compensation and benefits | 3 | $45,000 | 3 | $46,000 | | +$1,000 |
| Other expenses | | 28,000 | | 28,000 | | |
| Total | 3 | 73,000 | 3 | 74,000 | | +1,000 |

This activity supports the Institute's training programs for professional, technical, administrative, and clerical personnel, including job-related training at both government and non-government facilities.

The primary objective of the program is to train scientists in particular skills which are needed to carry on various Institute research projects. Long term training is provided by the establishment of agreements and contracts with appropriate schools or institutions.

Program plans provide for training in otolaryngology, neurology, epidemiology, and neurosurgery. A net increase of $1,000 is included for mandatory costs in 1969.

REVIEW AND APPROVAL OF GRANTS

| | 1968 estimate | | 1969 estimate | | Increase or decrease | |
|---|---|---|---|---|---|---|
| | Positions | Amount | Positions | Amount | Positions | Amount |
| Personnel compensation and benefits | 106 | $982,000 | 113 | $1,023,000 | +7 | +$41,000 |
| Other expenses | | 1,436,000 | | 1,476,000 | | +40,000 |
| Total | 106 | 2,418,000 | 113 | 2,499,000 | +7 | +81,000 |

*Extramural Programs*

Within the extramural program office of this acitivity, all grants and awards, such as research grants, program project grants, training grants and fellowship awards are programed, examined, processed and continued followed up by the professional, administrative, and clerical staff. Formal reviews are performed by several organized and *ad hoc* bodies of non-governmental authorities in the health and science fields, including the National Advisory Council on Neurological Diseases and Blindness, training review committees and study sections of this Institute and Division of Research Grants, National Institutes of Health. The magnitude of the managerial and review processes in terms of number of grants, dollar volume, and programming complexities are imposing greater demands in terms of data for and advice on programming. Two mechanisms are being resorted to more frequently: advisory groups or task forces expert in critical fields and gradual introduction of greater sophistication and capabilities in the retrieval and analysis of data regarding grants and programming. Both these types of activities are funded out of the Review and Approval activity, and the latter is directly coordinated and interdigitated with activities of the program analysis function in the Office of the Director, NINDB. During 1968, steps will be taken to concentrate the major institute facilities for information and data storage and retrieval in the extramural program office, where the vast majority of the data originates, and to design the facility so that it can be tied into central NIH computing facilities for analytical studies in the future.

Included in the net increase of $81,000 is a program increase of $25,000 and 7

positions for additional requirements in the review and analysis of the grant programs of the Institute. Also included is an increase of $16,000 for mandatory costs, and an increase of $40,000 for centrally furnished services from the "National Institutes of Health Management Fund."

PROGRAM DIRECTION

| | 1968 estimate | | 1969 estimate | | Increase or decrease | |
|---|---|---|---|---|---|---|
| | Positions | Amount | Positions | Amount | Positions | Amount |
| Personnel compensation and benefits | 32 | $311,000 | 32 | $316,000 | ..... | +$5,000 |
| Other expenses | | 364,000 | ..... | 404,000 | ..... | +40,000 |
| Total | 32 | 675,000 | 32 | 720,000 | ..... | +45,000 |

This activity supports the professional direction and the administrative and clerical services required for the Institute's programs and activities. The Office of the Director provides for the centralized supervision, coordination and review of these programs, as well as for the direction of the administrative functions of finance, personnel, supply, travel, space utilization and management analysis. Also included as part of the Office of the Director is the Office of Program Analysis, which is responsible for developing for the Institute a computerized central management information system, as well as workshops, training programs and general scientific information activities.

Included in the net increase of $45,000 is a program increase of $19,000 which will provide services support of the administrative staff in the Office of the Director. Also included is $5,000 for mandatory costs and $21,000 for centrally furnished services from the "National Institutes of Health Management Fund."

NEW POSITIONS REQUESTED FISCAL YEAR 1969

| | Grade | Number | Annual salary |
|---|---|---|---|
| Laboratory and clinical research: | | | |
| Research chemist | GS–13 | 3 | $45,921 |
| Chemist | GS–12 | 1 | 12,371 |
| Chemist | GS–11 | 5 | 48,285 |
| Biologist | GS–7 | 10 | 67,340 |
| Biological lab technician | GS–5 | 4 | 22,260 |
| Clerk-typist | GS–4 | 4 | 19,980 |
| File clerk | GS–3 | 2 | 8,932 |
| Biological laboratory aid | GS–3 | 1 | 4,466 |
| | | 30 | 229,555 |
| Review and approval of grants: | | | |
| Staff scientist | GS–13 | 2 | 30,614 |
| Grants supervisor clerk | GS–9 | 2 | 16,108 |
| Secretary | GS–5 | 2 | 11,130 |
| Grants clerk | GS–4 | 1 | 4,995 |
| Subtotal | | 7 | 62,847 |
| Total new positions, all activities | | 37 | 292,402 |

AREAS OF SERIOUS CONCERN

Senator HILL. Now, Dr. Masland, National Institute of Neurological Diseases and Blindness. You may proceed, Doctor.

Dr. MASLAND. Mr. Chairman and members of the committee, it is my privilege to appear before you in behalf of the National Institute of Neurological Diseases and Blindness, created by act of Congress in 1950.

### Very Young and Over 65 Age Group

As reflected in the President's state of the Union message, we have a serious concern for the health of two groups of our citizens—the very young and the over-65 age group. Neurological and sensory disorders represent a major cause of disability among these segments of our population. For the very young, these diseases include cerebral palsy, epilepsy, and sensory disorders, particularly disorders of language. For the over-65 age group, stroke, parkinsonism, and the sensory disorders, particularly blindness, are high on the list. For the in-between age groups we have concern for the neuromuscular and sclerosing disorders; and for all age groups, brain tumors, and both head and spinal cord injuries.

### Brain Tumors

Senator Hill. These brain tumors are just about a death warrant, aren't they?

Dr. Masland. There are certain types of tumors which can be cured completely, but the more malignant tumors are not affected by surgery at all.

Senator Hill. There is nothing you can do there. They go in there but it doesn't do any good.

Dr. Masland. There has been recently a review of certain tumors of childhood of the cerebellum, removal of which has led to very remarkable recovery.

Senator Hill. That is only with this type?

Dr. Masland. Certain special types. There are certain types of tumors which are curable; the others, the more malignant type, are not helped.

Senator Hill. They are hopeless today, aren't they?

Dr. Masland. At the present time.

Because of research accomplishments of the past 20 years, many of these disorders can now be prevented and others can be effectively treated if diagnosed early. Increasing knowledge in the perinatal field is saving children from a lifetime of disability. Increasing numbers of our senior citizens can now live useful lives.

Senator Hill. We have certainly made progress in this perinatal field.

### Jaundice in New Born

Dr. Masland. There are certain conditions which have almost disappeared, the kernicterus; that is, the jaundice of the newborn, used to account for about 1 percent of our institutionalized mentally defective individuals, and now that is almost completely eliminated as a cause of cerebral palsy and there are other similar advances like that.

### Areas of National Need

In spite of these advances thousands of Americans still are developing neurological and sensory disorders for which the cause is unknown and no effective treatment is available. I should like to refer especially to several areas of great national need toward which the Institute desires to focus an increasing allocation of the resources made available to us.

### Collaborative Perinatal Project

The Institute's collaborative perinatal project, which has been underway since 1959, is proceeding on schedule and is now concentrating increasing emphasis on the interpretation of the accumulated data. Only the most preliminary analyses are yet available, but already many new facts are emerging and other long-suspected factors are being confirmed.

Premature children have been shown to have a high percentage of neurological abnormalities, and birth weight itself is the best predictor of the child's chance for survival after birth.

Senator Hill. The weight of the child?

Dr. Masland. The weight. The small premature has a very bad outlook. We recently reviewed 120 cases of cerebral palsy, born in the study. About a third of them had been premature babies, so evidently prematurity is a major cause of cerebral palsy.

New knowledge has been gained on the relationship of unfavorable pregnancy outcome to such factors as nutrition, maternal age, metabolic imbalance, toxins, and radiation.

Senator Hill. That radiation, how would that come about?

Dr. Masland. That is under much more careful control than it used to be. I think it is quite generally recognized now that a pregnant woman should not have her abdomen radiated. The child is very susceptible to X-ray.

Much more is now known about infections during pregnancy.

### Head Injury Program

Recently the Nation has become aware of the tremendous loss of life and productivity from accidents involving head injury. Four medical centers now have Institute grants to establish head injury clinical research centers, and several other centers are ready to participate. The Institute also has a contract program studying the physical effects of various forms of head injury. The extent and causes of the problem are the subject of a scientific survey.

### Epilepsy Research Program

Epilepsy receives a major emphasis of the Institute's research program. The Institute is now supporting four clinical epilepsy research centers. Additionally, a group of four collaborating units are studying the methodology for the evaluation of various epileptic states and the testing of drugs for the control of epilepsy. An abstract service is bringing the newest advances promptly to the attention of the scientific community.

Senator Hill. You have a lot of progress to make in this field; haven't you?

### Anticonvulsant Drugs

Dr. Masland. The anticonvulsant drugs are remarkably effective at the present time; probably 50 to 75 percent of patients with seizures can have their seizures controlled. Within the last several years two new drugs have come out and there are some very important advances. The development of anticonvulsant drugs is probably one of the most important measures for this.

Senator Hill. We have not had those too many years, have we?

Dr. Masland. The anticonvulsants really started their development

in the 1930's with the development of Dilantin. We are making steady progress. Each year a few new and better agents come out. We have a special report on epilepsy——

Senator HILL. Will you send us a copy of that? We shall include it in the record.

Dr. MASLAND. Yes.

(The report follows:)

SPECIAL REPORT: EPILEPSY

A major emphasis of the Institute's research program since its founding has been epilepsy. Epilepsy not only affects one to two million Americans, but usually begins in childhood or adolescence and is usually long-term or chronic. The annual cost of care is more than $750 million, and the annual loss to the economy is estimated at more than a billion dollars.

Although new drugs and surgical procedures make it possible to eliminate seizures in about half the cases and control seizures in another 25 percent, effective treatment still has not been found for many persons. Also, the long-term social stigma attached to the disease, while much less a problem than formerly, continues to be a problem in relation to schooling and employment. Discrimination also continues under many State laws.

To give new emphasis to the Government's program relating to epilepsy, the Surgeon General established the Public Health Service Advisory Committee on the Epilepsies in 1966. The Committee meets periodically to assess the overall research and service program and to identify and plan to fulfill unmet needs in epilepsy. The Committee has two subcommittees: one on research advises NINDB; one on service advises the PHS Neurological and Sensory Disease Control Program. The research subcommittee has sponsored extensive surveys of the state of the art in four fields by established neuroscientists: chemistry, pharmacology, neurophysiology, and clinical physiology. Other surveys are planned.

The Institute's research program in epilepsy includes individual research grants, a research program at the Institute's Bethesda laboratories, its more recent targeted program of clinical epilepsy research centers, and a new collaborative study.

The Institute's programs in epilepsy are attacking the problem through approaches designed to elucidate the basic chemical, structural, or functional mechanisms which are disturbed in the disorder; the factors that precipitate seizures; and the basis for effective treatment of epilepsy.

Under the individual research grants, a broadly representative group of individual scientists are supported in basic studies of the anatomy, chemistry, physiology, and pharmacology of the brain.

At the Institute's laboratories in Bethesda, advanced surgical techniques and instrumentation for the treatment of temporal lobe epilepsy have been developed and evaluated, and the relationship of head injury to epilepsy is being studied.

The clinical epilepsy research centers, sponsored by the Institute, are focusing the many talents of a variety of experts on the problem of epilepsy. Using the team approach, these groups of 15 to 20 physicians and scientists explore major aspects of epilepsy at the University of Wisconsin, University of California at Los Angeles, University of Washington, and Yale University. In addition, the Institute supports the Neuropharmacology Research Center of the University of Utah, which is primarily concerned with the mode of action of anticonvulsant drugs.

In the recently developed Institute Collaborative Study of Epilepsy, the initial goal is to establish a therapeutic baseline, or frame of reference, for seizure control. Four medical centers participate: Marquette University, the University of Virginia, Montreal Children's Hospital, and the New England Medical Center. A fifth, Emory University, will soon be included. For the baseline, only one anticonvulsant (ethosuximide) is used, and only one type of epilepsy (petit mal or loss-of-consciousness seizures) is being studied.

The leading investigators in the Collaborative Study meet periodically to work toward a tighter standard nomenclature of the epilepsies, improve methods of quality control in the Study, and exchange information. Use of television tape monitoring systems for quality control and to capture the seizure phenomena in a permanent visual record is a significant innovation of the Study. With the successful completion of its 2-year initial effort, the Institute expects to expand

the Collaborative Study to provide a more extensive review of anticonvulsant drugs.

Basic research on the mechanism of seizure-causation has led to several new findings. For example, this year Institute grantees demonstrated in cats a possible control for seizures. They found that the brain cells around a focus of epileptic activity are inactive. This interaction, known as "surround inhibition," persists in the cat brain during an artificially induced seizure, preventing the spread of convulsive activity to other areas of the brain. The scientists interpreted their findings as indicative of a basic control mechanism in the brain. Further study of this phenomenon promises to lead eventually to improved treatment of epilepsy.

An Institute grantee reported this year that specific electroencephalorgraphic (EEG) abnormalities occur in each decade of life in epilepsy patients. Analyzing EEG records from 1,355 epilepsy patients, he found evidence that brain maturation significantly influences seizure phenomena. The finding lends support to theories of a changing epileptic activity pattern throughout life.

The investigator noted that for all EEG abnormalities considered together, there is a predominance of left-sided foci, especially in the slow-wave type of epilepsy. In explaining this finding, he cited earlier studies which relate the left-sided predominance of epileptic foci to a left-sided occurrence of factors known to cause epilepsy (emboli, thrombi, aneurysms, hemorrhage, and maximum pressure to the left side of the infant's head during delivery).

Seizures may be precipitated in some persons by certain forms of light or sound. An example is the patient who experiences seizures after prolonged viewing of the television screen. At one of the Institute's clinical epilepsy research centers, scientists have developed an effective "deconditioning" technique which ameliorates this form of seizure susceptibility. Computer automation has been employed to simplify the application of the method.

The leading investigator on this project this year reported that desensitization is not permanent, but must be reinforced by periodic repetition of the deconditioning stimulus. He has devised methods for the epilepsy patient to carry this out at home.

A team of scientists at the Institute's Bethesda facilities is examining the relationship between brain temperature and a certain form of seizures. Using a temperture-telemetering device implanted on the surface of the patient's brain membranes, they have found that temperature elevation is associated with increased frequency of seizures. Study of this principle had led to development of a new therapeutic approach. By cooling the patient's head while anticonvulsant medication is administered, it was shown that seizures in such patients can be completely controlled. These studies are being expanded to elucidate the seizure-temperature relationship.

Another Institute study of children with frequent seizures who do not respond to anticonvulsant drugs confirmed the previously reported finding that a high-fat diet can control seizures. While more study of this diet is under way to pinpoint the chemical basis of its effectiveness, it is clear that high levels of fats in the patient's blood plasma are closely associated with cessation of seizures.

Anticonvulsant drugs remain the major weapon that neurologists use to attack seizures. New drugs are being evaluated by several Institute-supported studies. Rapid and sustained control of seizures has been obtained, for example, with the tranquilizer, diazepam (Valium), without the serious side effects of other drugs. Controlled clinical trials must still be conducted before this and other promising new drugs can be considered for use as anticonvulsants. The Institute is also gathering information on new anticonvulsant drugs. At least four major pharmaceutical manufacturers have promising anticonvulsant drugs in various stages of development.

Surgical treatment of temporal lobe epilepsy at the Institute's Bethesda laboratories has brought freedom from seizures for a significant number of patients, one group of which has been followed in detail for 7 years.

Institute grantees in two medical centers are employing a combination of implanted thin wires (electrodes) deep in brain structures, and analysis of electrical burst activity from these electrodes with a computer, to locate with precision the exact focus of a seizure in the brain. From the computer data, surgeons can determine which areas of the brain must be removed to completely halt seizures, thereby avoiding unnecessary loss of healthy brain function.

Recognizing the need for better communication of research knowledge in epilepsy, the Institute has developed a new service, *Epilepsy Abstracts*. Each monthly issue digests approximately 200 articles related to epilepsy from the

world's biomedical literature. This publication is made available to interested investigators and physicians without charge. In addiiton, the Institute is preparing an annotated bibliography of epilepsy articles appearing during the past 25 years.

The communication process is also stimulated through meetings. Two symposia are planned for 1968: "Laboratory Evaluation of Anti-epileptic Drugs," and "Basic Mechanisms of the Epilepsies."

MOVEMENT AND SENSATION IN NORMAL AND NEUROLOGICALLY PARALYZED

Last year the Institute launched a program for the study of control of movement and sensation in the normal and the neurologically paralyzed. All feeling, thought, and movement depend upon nerve activity—activity now capable of being recorded by advanced electronic equipment and analyzed by computers. Full understanding of the functions of sensation, hearing, and vision, and the control of voluntary movement requires an intimate knowledge of the neutral processes which underlie these functions.

With such knowledge it may ultimately be possible to bypass or replace damaged organs for hearing or sight, or to compensate for disorders in the control of voluntary movement. Conceivably, for certain types of man-machine interaction, direct contact of machine to nervous system might be effective. The Institute is now exploring these possibilities in a broad new approach to the study of neurological control processes.

BUDGET REDUCTIONS

Senator HILL. How much will the reduction in your budget affect this?

Dr. MASLAND. The reduction in our budget is a hold-the-line budget which will permit us to maintain our present programs and develop some exploratory studies along these lines.

Senator HILL. But you lost some $20 million that you asked for?

Dr. MASLAND. Yes, sir; I think it is around 17.

Senator HILL. Quite a bit; $17,824,000 from the Bureau of the Budget offset by an increase of $2,581,000 from the Department.

Dr. MASLAND. Yes, sir. A net decrease of $15,243,000.

Senator HILL. Which is quite a sum of money.

Dr. MASLAND. Yes, sir.

VIRUSES IN BRAIN DISEASES

The cause of multiple sclerosis, parkinsonism, and amotrophic lateral sclerosis continue to remain an enigma. Lacking an understanding of the causes, the treatment of these disorders is distressingly futile. New discoveries regarding the role of viruses in brain diseases suggest the possibility that these agents may be responsible for many chronic disorders previously spoken of merely as "degenerative."

CONSTRUCTION FUNDS FOR SPECIALTY DESIGNED FACILITIES

The Institute has mounted a major program for the study of viruses. Their sinister nature requires that a specially designed facility be made available to provide a safe environment for the dedicated scientists devoted to such studies. Included in the PHS construction appropriation are planning funds for such a building.

Senator HILL. Are those funds in this budget?

Dr. MASLAND. Those funds are in the building construction budget. The planning money for the construction——

Senator HILL. But they are in the budget. Not in your budget particularly, but in the——

Dr. MASLAND. They are in the Department's budget; yes, sir.

### BUDGET REQUEST INCREASES

The request for the National Institute of Neurological Diseases and Blindness for 1969 is $131,195,000, compared to the 1968 operating level of $126,552,000. The 1969 budget request contains increases of $4,643,000 including $2,692,000 for research grants; $84,000 for research fellowships; $482,000 for training grants; $1,225,000 for laboratory and clinical research; $16,000 for collaborative research and development; $17,000 for biometry, epidemiology, and field studies; $1,000 for direct training; $81,000 for review and approval of grants; and $45,000 for program direction.

I shall be happy to answer any questions.

### REASONABLE INCREASE

Senator HILL. When you consider the increased cost of personnel, increased cost of drugs, the increased cost of equipment, this is not much increase, is it?

Dr. MASLAND. No, sir, this will permit us to maintain our present program.

Senator HILL. Just about what you are doing now; is that right?

Dr. MASLAND. Yes, sir.

Senator HILL. Without any advanced research; is that right?

Dr. MASLAND. Yes, sir.

### SERIOUS CUTS IN TRAINING FUNDS

Senator HILL. This nearly $20 million cut that you received from the Budget Bureau largely, where will that go mostly?

Dr. MASLAND. Mr. Chairman, our most serious concern has to do with training.

Senator HILL. Training?

Dr. MASLAND. Yes. We have this year applications for over $3 million of training activities that we are not able to support and we will certainly have more than that next year.

Our concern relative to training stems from the fact that a delay in our training program will have long-term repercussions. The training program is an investment for the future. It is the output which we will depend on 5 and 10 years from now for the new medical schools, for the needs of the country.

Our field is having increasing demands put on it, because of very high-priority programs in stroke and in mental retardation.

These are the fields in which the competency of the neurologist is needed. The shortage of personnel in this field is becoming increasingly devastating.

Senator HILL. As I said, you cannot have your team unless you have the fellows to play on your team.

Dr. MASLAND. That's right.

Senator HILL. Anything you would like to add, Dr. Shannon?

Dr. SHANNON. No, sir; I agree completely with Dr. Masland's appraisal.

FAREWELL TO DR. MASLAND

Senator HILL. Well, Dr. Stewart has his pipe now. Anything you would like to add, sir?

Dr. STEWART. Mr. Chairman, this is Dr. Masland's last time before this committee. He is retiring and has made quite a contribution to the field of neurology. He is the Director of the Institute. We regret to see him go; we are glad he is going to be remaining in the field, though.

Dr. MASLAND. I would like to take this opportunity to express my appreciation for the patience and understanding of this committee and the care with which our program has been reviewed.

Senator HILL. I think the Institute has been most fortunate to have you and I think you have done a magnificent job out there. I certainly warmly commend and congratulate you, sir, for the fine work you have done.

How long have you been there, Doctor?

Dr. MASLAND. About 10 years.

Senator HILL. That isn't such a long period of time, is it?

Dr. MASLAND. It doesn't seem it.

Senator HILL. Are you going with the College of Physicians and Surgeons at Columbia University?

Dr. MASLAND. Yes, sir; that's right.

Senator HILL. Where were you before you came to the Institute?

Dr. MASLAND. I was in North Carolina at the Bowman-Gray School of Medicine in Winston-Salem.

Senator HILL. In the Triangle?

Dr. MASLAND. No, sir; west of the Triangle, that's in the foothills.

Senator HILL. Well, you have done a mighty fine job. You have done a wonderful job and I warmly and heartily congratulate you, sir, and express our thanks and appreciation to you.

Thank you.

STROKE CENTERS

Dr. SHANNON. There is one thing I might say for the record before the closing. It may be of some importance for people who read these proceedings to take note that Dr. Masland's stroke centers have really evolved out of a committee run into conjunction with the Heart Institute for how many years?

Dr. MASLAND. About five.

Dr. SHANNON. About 5 years, and will in addition be integrated within the regional network of the regional medical program so that you see here one building block of a much more complex structure. I think that ought to be brought out.

Dr. MASLAND. We have now, I think, 17 stroke centers which have been developed under the direction of this committee over the past 4 or 5 years. They provide a very strong component which is being built into the regional medical program.

This is a research component.

Senator HILL. And right into the program?

Dr. MASLAND. That's right.

Senator HILL. Well, again we want to thank you, sir, and express our deep appreciation for the magnificent work you have done, sir. Mighty fine. Magnificent.

## Environmental Health Sciences

**STATEMENT OF DR. PAUL KOTIN, DIRECTOR**
**ACCOMPANIED BY:**
**DR. JAMES A. SHANNON, DIRECTOR, NATIONAL INSTITUTES OF HEALTH**
**GEORGE M. KINGMAN, EXECUTIVE OFFICER, ENVIRONMENTAL HEALTH SCIENCES**
**ROBERT H. BRAMLET, BUDGET OFFICER, ENVIRONMENTAL HEALTH SCIENCES**
**JAMES A. HICKEY, ACTING FINANCIAL MANAGEMENT OFFICER, NATIONAL INSTITUTES OF HEALTH**
**DR. WILLIAM H. STEWART, SURGEON GENERAL**
**CHARLES MILLER, CHIEF FINANCE OFFICER**
**JAMES B. CARDWELL, DEPUTY ASSISTANT SECRETARY, BUDGET**

### Appropriation Estimate

"ENVIRONMENTAL HEALTH SCIENCES"

"To carry out, except as otherwise provided for, sections 301 and 311 of the Act with respect to environmental health activities, [$17,289,000] *$18,099,000.*"

AMOUNTS AVAILABLE FOR OBLIGATION

| | 1968 | 1969 |
|---|---|---|
| Appropriation | $17,289,000 | $18,099,000 |
| Cutback from the 1968 President's budget required by H.J. Res. 888 | −357,500 | |
| Total currently authorized for obligation | 16,931,500 | 18,099,000 |
| Plus proposed release of reserves for increased pay costs | 93,000 | |
| Total available for obligation | 17,024,500 | 18,099,000 |
| Disposition of cutback: | | |
| To be used for pay costs in this account | 93,000 | |
| To be returned to the Treasury | 264,500 | |
| Total cutback | 357,500 | |

OBLIGATIONS BY ACTIVITY

| | 1968 estimate | | 1969 estimate | | Increase or decrease | |
|---|---|---|---|---|---|---|
| | Positions | Amount | Positions | Amount | Positions | Amount |
| Grants: | | | | | | |
| Research | | $8,611,000 | | $8,622,000 | | +$11,000 |
| General research support grants | | (547,000) | | (551,000) | | (+4,000) |
| Environmental Health Sciences Institute | | (3,000,000) | | (3,000,000) | | |
| Fellowships | | 100,000 | | 200,000 | | +100,000 |
| Training | | 3,795,000 | | 3,892,000 | | +97,000 |
| Direct operations: | | | | | | |
| Laboratory and clinical research | 128 | 3,749,500 | 182 | 4,538,000 | +54 | +788,500 |
| Review and approval of grants | 23 | 420,000 | 26 | 449,000 | +3 | +29,000 |
| Program direction | 20 | 349,000 | 24 | 398,000 | +4 | +49,000 |
| Total obligations | 171 | 17,024,500 | 232 | 18,099,000 | +61 | +1,074,500 |

OBLIGATIONS BY OBJECT

| | 1968 estimate | 1969 estimate | Increase or decrease |
|---|---|---|---|
| Total number of permanent positions | 171 | 232 | +61 |
| Full-time equivalent of all other positions | 3 | 3 | |
| Average number of all employees | 135 | 205 | +70 |
| 11 Personnel compensation: | | | |
| Permanent positions | $1,111,000 | $1,992,000 | +$881,000 |
| Positions other than permanent | 33,000 | 22,000 | −11,000 |
| Other personnel compensation | 7,000 | 6,000 | −1,000 |
| Total personnel compensation | 1,151,000 | 2,020,000 | +869,000 |
| 12 Personnel benefits | 116,000 | 208,000 | +92,000 |
| 21 Travel and transportation of persons | 116,000 | 160,000 | +44,000 |
| 22 Transportation of things | 51,000 | 75,000 | +24,000 |
| 23 Rent, communications, and utilities | 277,000 | 350,000 | +73,000 |
| 24 Printing and reproduction | 13,000 | 20,000 | +7,000 |
| 25 Other services | 462,500 | 173,000 | −289,500 |
| Project contracts | 700,000 | 400,000 | −300,000 |
| Services of other agencies | | | |
| Payment to "National Institutes of Health management fund" | 1,057,000 | 1,351,000 | +294,000 |
| 26 Supplies and materials | 330,000 | 328,000 | −2,000 |
| 31 Equipment | 245,000 | 300,000 | +55,000 |
| 41 Grants, subsidies, and contributions | 12,506,000 | 12,714,000 | +208,000 |
| Total obligations by object | 17,024,500 | 18,099,000 | +1,074,500 |

*Summary of changes*

| | |
|---|---|
| 1968 enacted appropriation | $17,289,000 |
| Cutback required by H.J. Res. 888 | −357,500 |
| Proposed release of reserves for increased pay costs | 93,000 |
| 1968 estimated obligations | 17,024,500 |
| 1969 estimated obligations | 18,099,000 |
| Total change | +1,074,500 |

| | Base | | Changes from base | |
|---|---|---|---|---|
| | Positions | Amount | Positions | Amount |
| Increases: | | | | |
| A. Built-in: | | | | |
| 1. Annualization of 1968 pay raise cost | | | | $37,000 |
| 2. Annualization of new positions authorized in 1968 | | | | 587,000 |
| 3. One additional day's pay in 1969 | | | | 9,000 |
| B. Program: | | | | |
| 1. Research grants | | $8,611,000 | | 11,000 |
| 2. Fellowships | | 100,000 | | 100,000 |
| 3. Training grants | | 3,795,000 | | 97,000 |
| 4. Laboratory and clinical research | 128 | 2,869,500 | 54 | 489,000 |
| 5. Review and approval of grants | 23 | 311,000 | 3 | 19,000 |
| 6. Program direction | 20 | 281,000 | 4 | 23,000 |
| Total program increases | | | 61 | 739,000 |
| C. Payment to the National Institutes of Health management fund for centrally furnished services: | | | | |
| 1. Laboratory and clinical research | | 880,000 | | 267,000 |
| 2. Review and approval | | 109,000 | | 5,000 |
| 3. Program direction | | 68,000 | | 22,000 |
| Subtotal, management fund increases | | | | 294,000 |
| Total increases | | | 61 | 1,666,000 |
| Decreases: | | | | |
| A. Built-in: | | | | |
| 1. Non-recurring other services | | | | −289,500 |
| 2. Non-recurring supplies and materials | | | | −2,000 |
| B. Program: | | | | |
| 1. Reduction in project contracts | | | | −300,000 |
| Total decreases | | | | −591,500 |
| Total net changes requested | | | | 1,074,500 |

EXPLANATION OF CHANGES

*Research grants.*—The increase of $11,000 will provide $4,000 for general research support grants and $7,000 for the increased cost of regular research projects in 1969.

*Fellowships.*—The increase of $100,000 will provide for the award of 5 additional fellowships in 1969 and increased costs for special awards.

*Training grants.*—The increase of $97,000 will provide for the initiation of 1 additional program and increased costs for some ongoing programs.

*Laboratory and clinical research.*—The program increase of $489,000 and 54 positions will provide staffing for the establishment of an electron microscopy research program and a modest instrumentation development program, as well as expansion of the existing laboratories.

*Review and approval of grants.*—The increase of $19,000 provides 3 new positions to strengthen the scientific review of grant programs.

*Program direction.*—The increase of $23,000 and 4 new positions will provide additional supporting staff for the Director of the Division and his staff.

JUSTIFICATION—ENVIRONMENTAL HEALTH SCIENCES

| | 1968 estimate | | 1969 estimate | | Increase or decrease | |
|---|---|---|---|---|---|---|
| | Positions | Amount | Positions | Amount | Positions | Amount |
| Personnel compensation and benefits | 171 | $1,267,000 | 232 | $2,228,000 | +61 | +$961,000 |
| Other expenses | | 15,757,500 | | 15,871,000 | | +113,500 |
| Total | 171 | 17,024,500 | 232 | 18,099,000 | +61 | +1,074,500 |

GENERAL STATEMENT

*Introduction*

In the interval since the end of World War II there has developed a growing national awareness of the enormous impact which man is having on his physical and social environment. As has been pointed out in numerous national studies and in the scientific literature, man is now capable of adversely affecting his environment in a manner that increases its hazard to health.

The growth in American population projected over the next twenty years and the increasing complexity of American society makes imperative immediate effort directed to the procurement of answers to fundamental questions of environment and health which will not only affect our lives but those of our children in the years to come.

The Division of Environmental Health Sciences, with its intramural program the National Environmental Health Sciences Center, was established in response to both the threat and the challenge of the future. Its research programs have as their goal the advancement of fundamental knowledge and the development of a scientific base which will serve to provide answers to questions which man's interaction with his environment will inevitably generate in the coming decades.

*Extramural research and training*

The extramural activities of the Division of Environmental Health Sciences have a three-fold aim. First, support is provided for numerous independent explorations of the various facets of environmental health problems. Included are fundamental and applied research, utilizing a broad spectrum of scientific disciplines, such as chemistry, pathology, toxicology, general biology, biometry, epidemiology, clinical sciences, engineering and the physical sciences. Second, opportunities are made available for specialized training in order to enlarge the Nation's supply of highly-trained research scientists in the field of environmental health. Third, grants make it possible to take advantage of university capabilities to mobilize multidisciplinary concentrations of scientific talent for research and training that requires new methodology, new instrumentation, and innovative approaches to complex problems.

The research and training sponsored extramurally by the Division are directed toward quantification of hazards, elucidation of mechanisms of biological effects, and ultimate indication of possible methods for protection against hazards either through (a) establishing a need and basis for requiring removal of an agent

from the environment, (b) identifying and verifying non-toxic concentrations of the agent in the environment, or (c) developing host-buffering techniques or other biologically feasible procedures for protection of the host.

Grant-supported research and training are an essential means through which the Division helps to achieve a national focus on the mission of assessing actual and potential risks. These risks may be associated with exposure to environmental agents of all forms (chemical, physical, and biological) entering the host through all portals (skin, respiratory tract, and gastrointestinal system).

*Intramural research*

The National Environmental Health Sciences Center, the intramural program of the Division of Environmental Health Sciences, was created for the purpose of investigating at the fundamental level the long-term and subtle effects of environmental agents potentially hazardous to man. These studies will be directed to the development of a base for establishing standards and devising remedial measures. The increasing complexity of our environment makes it imperative to view the problems of environmental hazards from the vantage point of total health effects. It is this information that is necessary before an effective foundation can be constructed so as to assure protection of exposed population. Complementing the experimental laboratory studies, the Center will engage in long-term epidemiological studies of populations with unusual environmental experiences or unique morbidity and mortality experiences. The third aspect of the Center's projected program will include a clinical research program which will have as its primary objective the study of individuals and samples from defined population groups for the purpose of determining the effects of exposure to low concentrations of known or suspect environmental toxic agents over long periods of time. These studies will seek to identify the basis for variations in response to environmental insults and assess on an ongoing basis the compatibility of experimental laboratory data with human data. It is hoped that this approach will assure maximum extrapolation of laboratory findings, as well as provide important principles and generalizations, to permit the development of effective guidelines with which to judge the myriad new agents constantly entering our environment.

In summary, the Center will provide a central facility for research on the total health effects of physical, chemical and other environmental factors to which the American people are exposed.

The function of the Center is to identify harmful agents in the environment, discover the mechanisms by which they affect an individual's health and develop data on the effects of chronic exposure, thereby providing a scientific base upon which control measures can be developed. The seven classes of environmental agents on which research is now being initiated are natural products, metal compounds, hydrocarbon reaction products, tobacco smoke constituents, polymer dusts, pesticides, and pesticide synergists.

The narrative material which follows gives greater detail regarding both current and planned investigations for support and conduct either through grants or contracts, or in the Division's own laboratories. The programs of the Division are discussed here in terms of the mechanism employed for their support. However, these programs are viewed and planned in terms of a total national program with each component being complimentary to the others, and all aimed at the understanding of the hazards to health resulting from man's interaction with his biological environment.

The DEHS is requesting a total of $18,099,000 for 1969, an increase of $1,074,500 over 1968. This increase will strengthen the fellowship and training grant programs and maintain research grants at the same level of effort. Funding for an additional 61 positions is provided allowing the expansion of the National Environmental Health Sciences Center into the additional space to be available in 1969 at the Research Triangle Park, North Carolina. This expansion will allow the initiation of further elements of the planned intramural research program of the Division.

RESEARCH GRANTS

| | 1968 estimate | 1969 estimate | Increase or decrease |
|---|---|---|---|
| Research projects | $5,064,000 | $5,071,000 | +$7,000 |
| Special programs | 3,547,000 | 3,551,000 | +4,000 |
| Total research grants | 8,611,000 | 8,622,000 | +11,000 |

*Introduction*

These funds support research activities in the environmental health sciences within universities, hospitals, research institutions, and other public or private nonprofit institutions. Grants are awarded to support investigations aimed at defining and understanding effects upon human health of noxious agents in the environments. This involves research that ranges from smaller and circumscribed projects to broad and composite programs that coordinate the capabilities of scientists with diverse training and experience.

*Program plans in 1968 and 1969*

Projects supported by the Division through regular research grants in both 1968 and 1969 will be oriented largely to (1) defining the physical, biological and chemical hazards of the environment with particular relevance to the well-being of man: (2) determining the significance of these agents to the etiology of disease in man with special emphasis on exposure to low levels of environmental hazards: and (3) developing new or improved instrumentation and methodology for analysis and characterization of the biological effects of known and potentially hazardous substances.

The following problem areas indicate in specific terms the types of research activity that will continue to be emphasized:

There is a critical need for tests that can be applied harmlessly and conveniently in the intact animal or human being to characterize effects of environmental agents on physiological status and to make interspecies comparisons of response to a given material. Currently available techniques are frequently inadequate for detecting low-level and subtle effects resulting from chronic exposure to substances that may be present in the environment in low concentrations.

The problem of mutagenesis in the human population represents an important problem in public health. Man is constantly exposed to substances such as food additives, drugs, herbicides, and insecticides that have received only limited testing for mutagenic properties. This situation merits concern because many known mutagens are not particularly toxic at doses where mutational damage to the DNA occurs. The importance of dose in the induction of mutations as well as in the interpretation of mutagenic effect in experimental species in relation to man is critical in the interpretation of experimental data.

Research on the extent of interaction of pesticides and drugs that are ordinarily taken over extended periods of time has been strongly recommended by the President's Science Advisory Committee in a report entitled "Use of Pesticides." The Division is continuing to support promising studies that will indicate the capability of various combinations of pesticides with other agents to produce interaction at usually encountered dose levels.

The metabolism of insecticides is known to be a major determinant of their relative toxicities. The increasing extent of exposure of man and animals to insecticides accordingly underscores the urgency for a fuller understanding of the metabolic and toxicologic interrelations among such compounds. To facilitate such research, the Division is supporting work on the elaboration of extremely sensitive analytic tools for identification and classification of minute quantities of pesticides extracted from tissues, soils, animal and plant products, as well as the effects and interactions of pesticides in mammalian systems.

Pulmonary disease has become an increasingly significant source of morbidity and mortality in the population of the United States. Research by a grantee of the Division of the physiological fate of aerosols in the pulmonary system has led to two new procedures that promise to be useful diagnostic aids in such respiratory diseases as bronchitis and emphsema. These procedures have a potential for defining the extent and rate of progression of such diseases. These measurements can aid in elucidating the relationship of these diseases to exposure to environmental factors such as air pollutants. In this instance a long-standing interest in aerosols, which was originally oriented toward their role as carriers of toxic materials, has permitted their exploitation for diagnostic purposes.

Funds for regular projects are largely committed to the continuing support of ongoing studies. Since competing funds available in 1968 and 1969 will be exceeded by the anticipated costs of renewing projects that terminate in those years, expansion of ongoing research will be approved only under exceptional circumstances. In addition, an extremely limited number of high priority new studies will be activated through reduction or termination of projects now under way.

*Special programs.* University-based Environmental Health Sciences Institutes have been established in response to the multivariable nature and complexity of enviromental health problems. These problems require for their solution a broad spectrum of research endeavor which includes the following: target research and undifferentiated research; field studies and studies performed in laboratory and clinical facilities; routine work and highly creative work; investigations by individuals and by teams; and, availability of skills representing the biological, physical, and social sciences, as well as the various disciplines of clinical medicine. Few institutions have programs that cover more than a small fraction of this spectrum.

With their activities concentrated on environmental health problems, centers not only can provide types of specialized training relatively unavailable elsewhere, but can also help to meet the national need for attractive and stable career opportunities for research in the environmental health sciences. In addition, centers are uniquely able to promote the close integration of environmental technology with an underlying science base.

In 1968, the division is supporting five EHS Institutes that have operational status. Reflecting the research interests of their key personnel, the programs of these centers are focused on such problem areas as toxicology, the biology of natural systems, environmental systems analysis, environmental pollution and ecology, occupational health, and environmental carcinogenesis. Four other institutions are involved in pilot efforts to determine the feasibility and developmental opportunities for undertaking a long-term commitment to operating an institute for environmental health research and training. The estimate for 1969 remains at the same level as for 1968. This level of funds would permit continuation of the five ongoing Institutes and a transition to operational status for those currently-active developmental programs that will require renewal support.

Included in the unique features of the EHS Institutes are their specialized skills, their specially tailored facilities, and an effective array of disciplines that can be applied to a defined segment of the total environmental health problem. The research at each EHS Institute complements the programs at the other EHS Institutes and at the National Environmental Health Sciences Center in North Carolina. Each is designed to be a part of the whole, within the availability of our resources.

The increase of $4,000 in 1969 for General Research Support represents the Division's proportionate share of the increase in this program.

DISTRIBUTION OF RESEARCH GRANTS

| | 1968 estimate | | 1969 estimate | | Increase or decrease | |
|---|---|---|---|---|---|---|
| | Number | Amount | Number | Amount | Number | Amount |
| 1. Noncompeting continuations | 62 | $4,016,000 | 61 | $4,023,000 | −1 | +$7,000 |
| 2. Competing projects | 11 | 999,000 | 12 | 988,000 | +1 | −11,000 |
| 3. Supplementals | (1) | 49,000 | (2) | 60,000 | (+1) | +11,000 |
| 4. Subtotal | 73 | 5,064,000 | 73 | 5,071,000 | 0 | +7,000 |
| 5. General research support | | 547,000 | | 551,000 | | +4,000 |
| 6. Environmental health sciences institutes | | 3,000,000 | | 3,000,000 | | 0 |
| 7. Total research grants | | 8,611,000 | | 8,622,000 | | +11,000 |

RESEARCH GRANTS PROGRAM ANALYSIS

| Fields | 1968 estimate | 1969 estimate | Increase or decrease |
|---|---|---|---|
| Toxicology | $2,167,000 | $2,187,000 | +$20,000 |
| Pesticides | 2,098,000 | 1,888,000 | −210,000 |
| Natural products | 325,000 | 390,000 | +65,000 |
| Synthetic organics | 218,000 | 283,000 | +65,000 |
| Heavy metals | 174,000 | 231,000 | +57,000 |
| Smoking and health | 82,000 | 92,000 | +10,000 |
| Subtotal, regular program | 5,064,000 | 5,071,000 | +7,000 |
| General research support grants | 547,000 | 551,000 | +4,000 |
| Environmental health sciences institutes | 3,000,000 | 3,000,000 | 0 |
| Total research grants | 8,611,000 | 8,622,000 | +11,000 |

FELLOWSHIPS

| | 1968 estimate | 1969 estimate | Increase or decrease |
|---|---|---|---|
| Total fellowships | $100,000 | $200,000 | +$100,000 |

*Introduction*

The Division was authorized during 1967 to award a limited number of research fellowships with funds that were reprogrammed from the training grants activity.

Fellowships complement training grants by providing opportunities in departments which do not have training grant support. A wider selection of training disciplines, faculty sponsors, and locations is thereby afforded.

The purpose of the fellowship program is to augment the numbers of scientific investigators and teachers trained in the basic disciplines and sciences for use in attacking problems in the field of environmental health research. The program is competitive at the national level and provides opportunities for full-time study and research training for the best qualified predoctoral, postdoctoral, and advance investigator applicants.

*Program plans for 1968 and 1969*

Fellowships presently supported include predoctoral, postdoctoral and special awards. The emphasis will shift somewhat in 1969 from predoctoral to postdoctoral awards although additional predoctoral awards are anticipated and the cost of special awards will increase. In addition to stipends, funds are provided for dependents, tuition and fees, and necessary travel. Host institutions receive a supply allowance to defray the expenses for research supplies and equipment available to the fellow.

DISTRIBUTION OF FELLOWSHIPS

| | 1968 estimate | | 1969 estimate | | Increase or decrease | |
|---|---|---|---|---|---|---|
| | Number | Amount | Number | Amount | Number | Amount |
| 1. Continuations: | | | | | | |
| (a) Noncompeting | 0 | 0 | 11 | $103,000 | +11 | +$103,000 |
| (b) Competing | 0 | 0 | 1 | 6,000 | +1 | +6,000 |
| 2. Supplementals | (2) | $1,000 | (2) | 1,000 | 0 | 0 |
| 3. New awards | 16 | 99,000 | 9 | 90,000 | −7 | −9,000 |
| 4. Total fellowships | 16 | 100,000 | 21 | 200,000 | +5 | +100,000 |

FELLOWSHIPS (BY TYPE OF PROGRAM)

| | | | | | | |
|---|---|---|---|---|---|---|
| 1. Predoctoral | 7 | $38,000 | 9 | $75,000 | +2 | +$37,000 |
| 2. Postdoctoral | 5 | 33,000 | 8 | 81,000 | +3 | +48,000 |
| 3. Special | 4 | 29,000 | 4 | 44,000 | 0 | +15,000 |
| 4. Total fellowships | 16 | 100,000 | 21 | 200,000 | +5 | +100,000 |

TRAINING GRANTS

| | 1968 estimate | 1969 estimate | Increase or decrease |
|---|---|---|---|
| Training grants | $3,795,000 | $3,892,000 | +$97,000 |

*Introduction*

The graduate research training grants program of the Division of Environmental Health Sciences is broad and diverse. It has a three-fold goal: (1) to increase the numbers of highly qualified scientists primarily concerned with environmental health; (2) to enable institutions to strengthen and to enrich their research training capabilities; and (3) to expand opportunities for environ-

mental health research training in a greater number of graduate institutions throughout the United States. These grants permit local identification and selection of candidates with research potential, as well as provide funds for payment of stipends.

*Program plans for 1968 and 1969*

The programs to be supported in 1968 fall into the following fields: biochemical toxicology, pesticide biology, environmental engineering, microbiology, occupational health, and ecology. It is expected that new grants awarded in 1969 will show a relative decrease in those aspects of ecology, environmental engineering, and pesticide biology not immediately relevant to the health of man.

In 1968, the Division expects to provide training for approximately 450 full-time trainees. The increase of $97,000 in 1969 will provide for increasing costs of existing grants plus 1 additional grant and should provide for approximately 12 additional full-time trainees.

DISTRIBUTION OF TRAINING GRANTS

| | 1968 estimate | | 1969 estimate | | Increase or decrease | |
|---|---|---|---|---|---|---|
| | Number | Amount | Number | Amount | Number | Amount |
| 1. Continuations: | | | | | | |
| (a) Noncompeting | 36 | $2,933,000 | 49 | $3,297,000 | +13 | +$364,000 |
| (b) Competing | 6 | 260,000 | 4 | 250,000 | −2 | −10,000 |
| 2. Supplementals | (2) | 65,000 | (2) | 50,000 | 0 | −15,000 |
| 3. New programs | 14 | 517,000 | 4 | 275,000 | −10 | −242,000 |
| 4. Scientific evaluation | (1) | 20,000 | (1) | 20,000 | 0 | 0 |
| 5. Total training grants | 56 | 3,795,000 | 57 | 3,892,000 | +1 | +97,000 |

TRAINING GRANTS (BY PROGRAM)

| | | | | | | |
|---|---|---|---|---|---|---|
| 1. Graduate | 56 | $3,775,000 | 57 | $3,872,000 | +1 | +$97,000 |
| 2. Scientific evaluation | (1) | 20,000 | (1) | 20,000 | 0 | 0 |
| 3. Total training grants | 56 | 3,795,000 | 57 | 3,892,000 | +1 | +97,000 |

LABORATORY AND CLINICAL RESEARCH

| | 1968 estimate | | 1969 estimate | | Increase or decrease | |
|---|---|---|---|---|---|---|
| | Positions | Amount | Positions | Amount | Positions | Amount |
| Personnel compensation and benefits | 128 | $825,000 | 182 | $1,702,000 | +54 | +$877,000 |
| Other expenses | | 2,924,500 | | 2,836,000 | | −88,500 |
| Total | 128 | 3,749,500 | 182 | 4,538,000 | +54 | +788,500 |

*Introduction*

The National Environmental Health Sciences Center, the intramural research program of the Division of Environmental Health Sciences, is located in Research Triangle Park, North Carolina. Here are located all of the Center's research units except for the Occupational Studies Group. In addition, the establishment of an epidemiologic and biometric research operation is planned. The Center is essentially self-supporting in terms of having available to it engineering, research, and administrative support staff to provide assistance to the intramural research operations.

The National Environmental Health Sciences Center will serve as the focal point of a projected nationwide collaborative effort for research in environmental health problems.

The scope of research of the Center is broad and is structured to study at the fundamental level the long-term and subtle effects of environmental agents potentially hazardous to man.

Three major goals of the Center's program are:

1. The development of experimental methodologies, both laboratory and demographic, to meet existing needs which are not being met by traditional approaches.

2. Characterization of needs and solution of problems of environmental health with the totality of the problem providing the guidelines for protocol design and research pursuit. This permits the simultaneous application of diverse discipline and categorical approaches and a constant monitoring of the state of progress at any point in time. For each such investigation, this assures that significant areas are not being neglected either by default, or intent.

3. Maintenance of flexibility of programming so that continuous parallel assessment of laboratory and epidemiological research can be accomplished with minimal loss in time. The significance of each in relation to the other is under constant review to assure maximum effectiveness of both.

The interdependence of disciplines and the assured scientific exchange inherent in the problem-solving approach has been a recognized need in the biological sciences. The unprecedented accomplishment in the physical sciences has been achieved in large measure through the marriage of disciplines in problem-solving teams. Industry has long and successful experience in the use of this technique. The National Environmental Health Sciences Center, in contrast to traditional academic structure, is geared to this approach through the accumulation and utilization of data derived from many sources—in-house studies, university centers, and the scientific community in general, all of which provide information of a complementary character.

It is the function of the Center to identify harmful agents in the environment, discover the mechanisms by which they affect an individual's health, and develop understanding of the effects of chronic exposure, thereby providing a scientific base upon which standards can be developed and control measures can be established. The seven classes of environmental agents for which we are now initiating research programs are natural products, metal compounds, hydrocarbon reaction products, tobacco smoke constituents, polymer dusts, pesticides, and pesticide synergists. Within each of these areas a number of agents will be selected for study based on laboratory observations of adverse effects in animals exposed to a given agent and based on epidemiological studies suggesting adverse effects on population groups exposed to these agents in the environment.

*Program plans in 1968*

The staff of the cell biology branch is currently involved in studies of natural products and with enzyme induction and metabolism of toxicants.

The work in natural products is concerned primarily with toxins produced by fungi on foodstuffs. Preliminary studies have been initiated on the production of toxins by certain fungi in fruit and vegetable crops before and after harvest. Cultures of all fungi prevalent in food crops are being acquired from farm commodities by direct isolation. The cultures are fed to mice, which are kept under surveillance for symptoms of toxicity. Toxin-producing fungi will be cultured in quantities sufficient for isolation and identification of the toxins.

Cultures of mammalian cells have been established for the study of enzyme induction by certain chemicals. Preliminary experiments are underway to characterize nucleoproteins believed to play a role in the inductive process. The objective of these studies is to elucidate the mechanism by which enzymes responsible for detoxication of drugs and chemicals are induced. Because this is a primary defense mechanism against environmental pollutants, understanding of the induction process *per se* and of the factors which contribute to its operation becomes increasingly important as the body load of harmful foreign compounds from environmental sources increases.

Pilot studies with selected chemicals are being initiated to establish a model system for studying the effects of toxicants on the structure, function and biogenesis of mitochondria, which play a key role as regulators of the metabolism of cells. Thus, chemical agents that interfere with mitochondrial activity may also affect cellular growth and function.

The analytical and synthetic chemistry branch augments the functional programs of the Center by developing new and improved analytical techniques for determining micro qualitative and quantitative determination of many chemicals. It aids in determining purity and stability of chemicals, identifies trace metals and other environmental substances, such as flavors, food additives, or pesticides. Studies are also being carried out on the degradation products of some of these chemicals. The environmental parameters of pesticides are being elaborated with regard to both rates of degradation and the identity of the decomposition

products. Natural products with toxic properties are being isolated and characterized. Pesticide synergists are being tracked by means of tracer techniques from intake to their excretion by experimental animals.

The animal science and technology branch provides, maintains, and monitors all animals used in the Center research programs. The branch is also currently engaged in several research programs both on its own and in conjunction with the chemistry and cell biology branches. Several pesticides and other environmental chemicals are being studied in an effort to determine their effect on immune response mechanisms. Efforts are being made to determine whether rival infections are enhanced or reduced by exposure to these environmental chemicals. Mechanisms of interactions will be explored using tissue culture techniques and by examining the altered physiologic and pathologic responses of laboratory animals.

The objectives of the pharmacology and toxicology branch are five-fold. First, the branch will identify the effects of environmental agents on living systems. Second, it will assess the significance of initial interactions in terms of potential or actual end results. Third, it will attempt to understand the mechanisms by which the initial interactions produce the end results. Fourth, it will seek practical means of control over the sequence of events so that it might be possible to cancel, ameliorate, or otherwise modify the final outcome, in a potentially beneficial manner. Fifth, it will attempt to gain an understanding that will permit the prediction of those agents or classes of agents and their possible effects that may be harmful.

The program is concerned with the chronic, the less obvious, and unexpected effects, as well as the acute and the more obvious. By their nature, acute effects are relatively easy to detect and to associate with a causative agent. Chronic effects are not only more difficult to associate with a specific causative agent, but they are also readily modified by secondary interactions. Time, in the chronic effect, introduces the potentiality of greater variation in the type of manifest response.

Either the initial or the manifest response could be detrimental or beneficial, permanent or transient, cumulative or non-cumulative, immediate or delayed. The response could also vary in intensity or in type, depending upon the genetic composition of the organism. Finally, the organism might become sensitized or tolerant to the environmental agent. Each of these alternatives will be considered.

The pharmacology and toxicology branch, presently staffed only in the area of growth and development, has work underway on the testing of selected compounds for their ability to interfere with normal pre-natal and post-natal development, the ability of chemicals and other environmental agents to produce congenital malformations, and the transfer of compounds through the placenta and excretion of compounds in maternal milk.

In contrast with many studies of the occupational environment, the emphasis in the program of the Occupational Studies Group is placed on the identification of disease states in man which appear many years after exposure to causative agents. While evidence accumulative to date indicates that many industrial processes may be implicated as the cause of disease, not enough research has been done in this area due to lack of data resources, unavailability of scientific and administrative support, and limited cooperation of industry in undertaking such studies. The growth in number and reliability of data sources for identification and follow-up of exposed populations, as well as a spirit of willingness and cooperation on the part of industry, have now made it feasible to initiate an occupational studies program. The current research program is studying uranium miners and millers, steelworkers, coke-oven workers, hard rock miners, chromate painters, smelter workers, and workers exposed to cutting oils.

The Office of Scientific Information maintains intimate contact with program planning and current operations in the operational environmental health regulatory and control programs of the Service. In addition, this office is developing a system of scientific intelligence designed to identify and strengthen sources of information on the existence of environmental hazards, warranting intensive study or research. This office also provides scientific reference services for the intramural scientists.

*Program plans in 1969*

At the beginning of 1969, the Center will have gained a total of 16,000 additional square feet of space. By making possible the relocation of existing offices and warehouse space, this additional space will permit the Center to expand in ongoing research programs as well as initiate a select number of new research

activities. By the beginning of calendar year 1969, the Center will have available to it an additional 11,500 square feet of space that will permit the initiation of an electron microscopy research program, a modest instrumentation program, and a significant expansion of pathology facilities. This additional space will permit the strengthening and expansion in cell biology and pharmacology and toxicology programs.

In the cell biology program, it is planned to extend studies on the biochemical mechanisms of toxicant action. In addition, the studies on toxicant-induced diseases will be extended to include studies with the chlorinated hydrocarbon insecticides.

In the pharmacology and toxicology branch, a number of additional areas of investigation are planned. Among these are the metabolism of environmental agents in the pregnant animal as well as in the fetus and placenta; biochemical and morphological correlates of low birth weight, increased post-natal mortality, or decreased post-natal growth; and the potential of environmental agents to modify genetically deficient development in a beneficial manner.

In 1969, the Center plans to further explore the development of broadly based programs in both descriptive and analytical epidemiology. In addition to expanding and strengthening the currently ongoing occupational studies, this expansion will complement planned and ongoing laboratory studies, and provide a guide for future laboratory efforts. Descriptive epidemiology will be primarily concerned with the collection of data on variation in risk to environmentally determined or primarily initiated morbidity; i.e., measure disease and measure the factors. The demographic variables to be studied will include occupation, residence site, age, sex, race, antecedent and concurrent disease, genetic characteristics, etc. Analytical epidemiology will be concerned with the development of individually tailored protocols designed for the purpose of testing hypothesis by statistical correlations on the nature of associations between environmental agents, host characteristics, and the patterns of environmental disease. Together these should permit the testing of ideas concerning the relationship of environmental factors to disease in man particularly in the ranges of low-level exposure where long-term, cumulative effects are evaluated rather than the more obivous acute responses.

This information should provide a base for studies in which the effect of changing a group's experience on disease frequency can be determined. This will permit measuring the effect of the institution of broad public health measures.

The program increase of $489,000 and 54 positions would permit the establishment of an electron microscopy research program and an instrumentation development program, as well as modest expansion of most of the ongoing intramural research programs. An increase of $547,000 is requested for mandatory items such as annualization of new positions authorized in 1968, annualization of the 1968 pay increases and one additional day of pay in 1969. There is also an increase of $267,000 for centrally furnished services from the NIH Management Fund.

The above increases are partially offset by a decrease of $300,000 in project contracts and $214,500 in non-recurring other services and supplies and materials.

REVIEW AND APPROVAL OF GRANTS

| | 1968 estimate | | 1969 estimate | | Increase or decrease | |
|---|---|---|---|---|---|---|
| | Positions | Amount | Positions | Amount | Positions | Amount |
| Personnel compensation and benefits | 23 | $247,000 | 26 | $271,000 | +3 | +$24,000 |
| Other expenses | | 173,000 | | 178,000 | | +5,000 |
| Total | 23 | 420,000 | 26 | 449,000 | +3 | +29,000 |

*Introduction*

This activity, under the Associate Director for Extramural Activities, supports the scientific, administrative, and clerical staffs responsible for the over-all coordination and administration of the Division's grants program.

Functions for which the staffs are responsible include review and evaluation of fellowships, research and training grant applications for presentation to the Advisory Council; liaison with applicants, grantees, advisory bodies, other com-

ponents of NIH and PHS, and other interested organizations; maintenance of a continuing review of ongoing research and training programs; and the compilation and reporting of scientific and fiscal information relevant to all transactions.

The net increase of $29,000 and 3 positions requested for this activity includes a program increase of $19,000 to provide staff for more thorough scientific review of existing grants and new grant applications, a mandatory increase of $50,000 for annualization of new positions authorized 1968, annualization of 1968 pay increases and one additional day of pay in 1969, and an amount of $5,000 for the increased cost of centrally furnished services from the NIH management fund, partially offset by a decrease of $45,000 in non-recurring other services.

PROGRAM DIRECTION

| | 1968 estimate | | 1969 estimate | | Increase or decrease | |
|---|---|---|---|---|---|---|
| | Positions | Amount | Positions | Amount | Positions | Amount |
| Personnel compensation and benefits | 20 | $195,000 | 24 | $255,000 | +4 | +$60,000 |
| Other expenses | | 154,000 | | 143,000 | | −11,000 |
| Total | 20 | 349,000 | 24 | 398,000 | | +49,000 |

*Introduction*

This activity supports the Office of the Director, including the administrative, secretarial, and clerical staffs required for the administration, technical direction and coordination of all division activities; the review of current and proposed programs; the introduction of new knowledge into currently operating programs; and the provision and supervision of centralized administrative services.

Administrative personnel are also concerned with the areas of finance, supply, travel, space utilization, personnel, and management analysis.

The increase of $49,000 and 4 positions requested for this activity includes a program increase of $23,000 to strengthen the management planning and public information functions of the division, a mandatory increase of $36,000 for annualization of 1968 pay increases and one additional day of pay in 1969, and an amount of $22,000 for the increased cost of centrally furnished services from the NIH management fund, partially offset by a decrease of $32,000 in non-recurring other services.

NEW POSITIONS REQUESTED FISCAL YEAR 1969

| | Grade | Annual salary |
|---|---|---|
| Laboratory and clinical research: | | |
| Medical officer (1) | GS–16 | $20,982 |
| Chief of branch (2) | GS–15 | 36,808 |
| Scientist (1) | GS–15 | 18,404 |
| Medical officer (2) | GS–14 | 31,682 |
| Scientist (1) | GS–14 | 15,841 |
| Statistician (1) | GS–14 | 15,841 |
| Scientist (6) | GS–13 | 81,042 |
| Scientist (5) | GS–12 | 57,305 |
| Scientist (3) | GS–11 | 28,971 |
| Research assistant (1) | GS–11 | 9,657 |
| Research assistant (4) | GS–9 | 32,216 |
| Research assistant (6) | GS–7 | 40,404 |
| Statistical assistant (2) | GS–7 | 13,468 |
| Laboratory assistant (4) | GS–6 | 24,548 |
| Laboratory assistant (1) | GS–5 | 5,565 |
| Clerk-typist (1) | GS–5 | 5,565 |
| Laboratory assistant (2) | GS–3 | 8,932 |
| Clerk-typist (1) | GS–3 | 4,466 |
| Animal caretaker (3) | GS–2 | 12,324 |
| Scientist (2) | C.O.–05 | 20,028 |
| Scientist (5) | C.O.–04 | 44,380 |
| Subtotal (54) | | 528,429 |
| Review and approval of grants: | | |
| Scientist (1) | GS–14 | 15,841 |
| Do | GS–13 | 13,507 |
| Do | GS–5 | 5,565 |
| Subtotal (3) | | 34,913 |
| Program direction: | | |
| Management analyst (1) | GS–12 | 11,461 |
| Information specialist (1) | GS–9 | 8,054 |
| Personnel specialist (1) | GS–9 | 8,054 |
| Secretary (1) | GS–5 | 5,565 |
| Subtotal (4) | | 33,134 |
| Total new positions, all activities 61) | | 596,476 |

WITNESS BACKGROUND

Senator HILL. Now, environmental health centers, Dr. Kotin.

All right, Doctor, you are from North Carolina.

Dr. KOTIN. Yes, sir.

Senator HILL. Did you go to school there? You went to school at Illinois. How long have you been in North Carolina?

Dr. KOTIN. About a year and four months.

Senator HILL. All right, I remember when they established the Environmental Health Sciences Division in North Carolina. There was quite a contest about it?

Dr. KOTIN. There really was. Fortunately that antedated my involvement.

Senator HILL. You didn't have to get into that scrimmage, did you?

Dr. KOTIN. No, sir.

Senator HILL. When did you go down there?

Dr. KOTIN. The first of January of last year.

Senator HILL. You are just a youngster.

Dr. KOTIN. Thank you.

Senator HILL. All right, sir; we are happy to have you here. You may proceed now.

FIRST-YEAR PROGRESS

Dr. KOTIN. Thank you, I would like to read a statement.

I am privileged to be here to report on the first year's progress of the Division of Environmental Health Sciences and to discuss with you our plans for the future.

The industrial revolution has modified our environment in many ways and to a fantastic extent. It has opened the door to a universe that no previous civilization has known.

Senator HILL. Never dreamed of in the old days?

Dr. KOTIN. No, sir; they couldn't have. Our comforts have multiplied and the Gross National Product has soared. Man, meanwhile, has been almost unmindful of the damage inflicted by technological advances upon natural resources and human well-being.

Senator HILL. I think that is a very important statement you made. We have enjoyed the benefits, but have not thought about some of the other things that have not been benefits.

Dr. KOTIN. That is correct.

Only recently has there been a growing awareness of man's ability to influence the interaction between himself and his environment. There is general recognition that past efforts have been slow in developing, current efforts are inadequate, and further delay will surely mortgage the well-being of future generations. To remain master of the astounding potential of this modern world, man must constantly concern himself with the possible risks as well as the potential benefits of technological change.

CONTROL AND RESEARCH PROGRAMS

In recognition of the problems of enviromental health, the Public Health Service has developed major control and research programs. In the case of control programs, the primary aim is the application of today's knowledge to the solution of today's problems using the most advanced technology. Dr. Prindle and other members of the Bureau of Disease Prevention and Environmental Control have discussed these programs with you previously.

In the case of research programs focused in the Division of Environmental Health Sciences, the primary goal is to advance fundamental knowledge and to develop a scientific base that will serve to provide answers to problems that man's interaction with his environment have created and will inevitably generate in the coming decades. It is these programs that I will discuss today.

UNLOCK THE UNKNOWN IN ENVIRONMENTAL HAZARDS

In brief, the mission of the Division is to unlock the unknown in environmental hazards to man. The major responsibility for the application of this knowledge is vested in other organizations with whom the Division cooperates closely.

NATIONAL ENVIRONMENTAL HEALTH SCIENCES CENTER

The National Environmental Health Sciences Center, the intramural research program of the Division, has initiated research that permits the simultaneous applications of diverse scientific disciplines

and categorical approaches to meet existing needs that are incapable of being met by traditional methods. This interdigitated approach is also most likely to identify and appraise problems as they develop in the increasing tempo of our technological advances.

### RESEARCH ON ENVIRONMENTAL AGENTS

The seven classes of environmental agents on which we are now initiating research programs are natural products, metal compounds, hydrocarbon reaction products, tobacco smoke constituents——

Senator HILL. Tobacco smoke constituents, you say?

Dr. KOTIN. Yes, sir. Polymer dusts, pesticides, and pesticide synergists.

Research on these agents and their interaction with man's well-being will be concerned with the chronic, the less obvious, and the unexpected effects, but also with the acute and more obvious. Chronic effects are very difficult to associate with a specific causative agent; they are also readily modified by secondary interactions with other agents. Hopefully, by studying these secondary interactions, we may be able to identify and to capitalize upon potentially beneficial modifications.

### MULTIDISCIPLINARY FUNCTIONAL RESEARCH

Multidisciplinary functional research is underway in cell biology, analytical, and synthetic chemistry, pharmacology, and toxicology, and the animal science and technology branches at the National Environment Health Sciences Center.

### EPIDEMIOLOGY

In addition to extension of ongoing programs in 1969, we are exploring the feasibility of a broadly based epidemiology program, and I might say since this testimony was prepared, a conference was held in a retreat in the Research Triangle area, and a research program has been structured.

### TRADITIONAL RESEARCH GRANTS

The identification of the bases for variations in response to environmental insults among individuals must be correlated with experimental laboratory data to provide the important principles and generalizations for the development of guidelines for the use of regulatory agencies. In other words, the traditional research grant.

Emphasis will be continually applied to the identification of physical, biological, and chemical hazards of the environment with particular relevance to human well-being; the evaluation of the significance of environmental agents to the causation of disease in man, with special emphasis on low-level, long-term exposure to environmental hazards; and to the development of new or improved methodology and instrumentation to characterize the biological effects of known and potentially hazardous environmental agents.

NEED FOR TRAINING RESEARCH SCIENTISTS

As is true in most of the health fields today, one of the greatest needs in the environmental health field is the preparation and training of adequate numbers of research scientists.

Accordingly, the Division supports broad and diverse training efforts that will increase the numbers of researchers trained in the sciences underlying and directly involved in various fields of environmental health research; that will enable training institutions to strengthen and enrich their research training capabilities; and that will expand opportunities for environmental health research training in a greater number of graduate institutions throughout the United States.

There is no conceivable site for training that we are not devoting attention to for a reservoir of training scientists in these fields. These efforts are supported by utilizing both the fellowship and training grants mechanisms, which result in a wider selection of training disciplines, faculty sponsors, and geographic locations. In essence we are trying to synthesize what we are trying to do with the most efficient way of accomplishing it.

FORMAL AND INFORMAL LINKS TO RESEARCH RESOURCES

In summary, the Division of Environmental Health Sciences looks outward as much as it looks inward. We are utilizing research resources across the Nation not only through formal links just described, but also by informal bridges to many other organizations and scientists. Also, liaison staff at the National Center maintain intimate contact with program planning and current operations and needs of the regulatory and control programs of the Service.

In essence the regulatory and control programs of the Service and our own research activities are two sides of a single coin.

BUDGET REQUEST

To meet the program needs described in this statement, Mr. Chairman, we propose a budget of $18,099,000. The comparable operating level for 1968 is $17,024,500. Increases requested for 1969 include $11,000 for research grants, $100,000 for fellowships, $97,000 for training grants, and $866,500 for direct operations.

EFFECTS OF BUDGET REDUCTIONS

Senator HILL. You received a cut of $6.5 million, approximately, didn't you?

Dr. KOTIN. Approximately; yes, sir.

Senator HILL. What is that going to affect most?

RESEARCH PRIORITY LIST

Dr. KOTIN. The initiation of important items of research on our priority scale. Since we are a new activity, we do not have a broad array of programs that have been developed over a long period of time. Therefore when our funds are cut we have to examine the priorities that we have established in planning our programs both at the center and across the country. It is obvious (1) we will not get

as far down the priority list as we had hoped we could, and as national need urgently demands, and (2) we may even have to restructure our priorities in terms of the resources which each program component may have; so it really hits us two ways.

### UNABLE TO INITIATE INHALATION AIR TO TOXICOLOGY PROGRAM

Thus, for instance, we will not be able to initiate a broad program of inhalation toxicology for synthetic agents. For example fiberglass is now being substituted for asbestos in many industrial applications. Further many of the polymeric substances are being woven into fabrics.

### EPIDEMIOLOGY

We will not be able to initiate a program of epidemiology, which is really tragic in the sense that what we are looking for are responses that are not only long term in developing, but also are the result of low-level injury.

Well, the more subtle the influence, whether it is a laboratory population or human population, the larger the population you must study and the longer you have to wait in order to achieve measurable results.

Therefore we should lose no time in setting up population studies of a size large enough to achieve meaningful results. These would involve larger populations than have been undertaken in the past. The epidemiological and statistical groups within the universities and the Federal establishment have responded most enthusiastically.

The National Office of Vital Statistics has been most cooperative. Really, all we are lacking are the resources to establish this program. These studies are not going to pay off for a long time. There is no sense in fooling ourselves; it is going to be a decade before we begin to see——

Senator HILL. If you worked full steam ahead now.

Dr. KOTIN. That is correct. Then the other thing I think will suffer, and this seems to be the common thread running through most of the testimony I have been listening to this morning, is the extent to which we can provide training for people to work in this field.

### ENVIRONMENTAL HEALTH

Again, the Division of Environmental Health is a newcomer to the field. So together with all of the other programs we are fishing in a pool that is very, very poorly stocked with fish, as it were, and what we have to do is essentially stock this pool very, very rapidly, and this creates one additional problem. Most of the universities do not have departments of environmental health, so we have to create places in which to train individuals and then wait for them to be trained; a very long process, in itself. So our inability to develop these programs will result in a delay of geometric proportions at some time in the future.

### ACTIVATION OF NORTH CAROLINA ENVIRONMENTAL HEALTH CENTER

Senator HILL. Your center was just set up 2 or 3 years ago?

Dr. KOTIN. It was activated officially about 2 years ago. The actual facility itself became operational 1 year and 4 months ago.

Senator HILL. How long have you been there now, sir?

Dr. KOTIN. Sixteen months.

Senator HILL. Just about the time it got real hectic?

Dr. KOTIN. Actually I think the activation of the center began with its incorporation into the National Institutes of Health on November 1, 1966. Prior to that there was a cadre from the old Bureau of State Services which was concerned primarily with the physical facilities, albeit they are interim facilities, but the program as we now envision it had not been planned. The Bureau program was developed by an advisory committee, of which I was a member, and it is this advisory committee's report which served as a nucleus for planning the program as it is developing today.

### MODERN TECHNOLOGY AND URBANIZATION

Senator HILL. The center that you now head up?

Dr. KOTIN. That is correct, sir.

Senator HILL. This cut is going to reduce you down quite a bit from what you think ought to be done, isn't it?

Dr. KOTIN. Yes, sir.

Senator HILL. As you say, you have to get started now because it takes time; isn't that right?

Dr. KOTIN. That's right. And unfortunately technology, urbanization, industrialization are not waiting for us to try and catch up with them.

Senator HILL. All you have to do is turn on the TV and you get an advertisement to see one of these changes that you were speaking about.

Dr. KOTIN. That is correct.

### BUDGET HANDICAPS RESEARCH

Senator HILL. Dr. Shannon, what do you have to say?

Dr. SHANNON. Nothing really other than to concur with what Dr. Kotin said, and perhaps emphasize one point.

Much of the concern with air and water pollutants, with industrial hazards and the like, up to the present time has been by individuals who are attempting to modify and control particularly noxious substances. I think the Division of Environmental Health Sciences would recognize that there are many other pollutants than $SO_2$ in the air from low-grade oil and the like and that the biological base for determining what is important and what is unimportant is yet to be laid.

So Dr. Kotin has the intriguing, important and interesting, but nonetheless frustrating, task at this point of providing a base for what is probably our most important social problem of today. I am a little depressed, sir.

Senator HILL. That he should be handicapped as he is by this budget; is that right?

Dr. SHANNON. Yes, sir.

Senator HILL. He cannot move forward as he should.

I think these things are most important, really.

### RARE OPPORTUNITY TO INVESTIGATE BEFORE MORTALITY

Dr. KOTIN. Especially since for once—maybe that is an overstatement—but certainly rarely has the field of public health had an op-

portunity to investigate a problem in advance of the morbidity and mortality that may very likely and inevitably will result. We are going to be examining microchemical disease instead of the microbiological epidemics we have had in the past.

We have attacked the microbiological epidemics in the past after they have come and gone. Here we have an opportunity, I believe, to prevent the development of these epidemics with a body of fundamental information. Time is, I think, not going to be as kind to us in the future if we continue to use it as unwisely as we have in the past.

### Budget Forces Delays

Senator Hill. In other words, we ought to move now to stop these things?

Dr. Kotin. We should have moved perhaps 5 or 10 years ago, but at least we should not delay now.

Senator Hill. But under this budget we have there will be a delay?

Dr. Kotin. That is inevitable, sir.

Senator Hill. You just don't have the money to go forward, is that right?

Dr. Kotin. That is correct, sir.

Senator Hill. Just think what would have been the results if we had gotten the polio vaccines before we did; how many people would have been saved the suffering, disabilities.

Dr. Kotin. That is correct, and I think microchemicals exert their effect really no differently than microbiological agents do in terms of the long-term injury and the suffering and death that can follow their actions.

Senator Hill. Well, Doctor, we certainly appreciate your testimony very much. I want to thank you. Glad you are in North Carolina.

Dr. Kotin. It is very nice there. It has been a lovely spring.

Senator Hill. You spent a lot of time out in California, didn't you?

Dr. Kotin. Yes, sir; before going to North Carolina; but I am a convinced and converted Tarheel now.

Senator Hill. Fine. Thank you, sir.

## National Institute of Allergy and Infectious Diseases

STATEMENT OF DORLAND J. DAVIS, DIRECTOR
ACCOMPANIED BY:
JAMES A. SHANNON, DIRECTOR, NATIONAL INSTITUTES OF HEALTH
JOHN R. SEAL, DIRECTOR, INTRAMURAL RESEARCH, NATIONAL INSTITUTE OF ALLERGY AND INFECTIOUS DISEASES
WALTER H. MAGRUDER, EXECUTIVE OFFICER, NATIONAL INSTITUTE OF ALLERGY AND INFECTIOUS DISEASES
MARTIN J. FULLER, BUDGET OFFICER, NATIONAL INSTITUTE OF ALLERGY AND INFECTIOUS DISEASES
LELAND B. MAY, ACTING FINANCIAL MANAGEMENT OFFICER, NATIONAL INSTITUTES OF HEALTH
WILLIAM H. STEWART, SURGEON GENERAL
CHARLES MILLER, CHIEF FINANCE OFFICER
JAMES B. CARDWELL, DEPUTY ASSISTANT SECRETARY, BUDGET

### Appropriation Estimate

"NATIONAL INSTITUTE OF ALLERGY AND INFECTIOUS DISEASES

"For expenses, not otherwise provided for, necessary to carry out the purposes of the Act relating to allergy and infectious diseases [$94,422,000] *$98,562,000*, of which $500,000 shall be available for payment to the Gorgas Memorial Institute for maintenance and operation of the Gorgas Memorial Laboratory."

AMOUNTS AVAILABLE FOR OBLIGATION

| | 1968 | 1969 |
|---|---|---|
| Appropriation | $94,422,000 | $98,562,000 |
| Cutback from the 1968 President's budget required by H.J. Res. 888 | −1,422,000 | |
| Total currently authorized for obligation | 93,000,000 | 98,562,000 |
| Plus: Proposed release of reserves for increased pay costs | 502,000 | |
| Total available for obligation | 93,502,000 | 98,562,000 |
| Disposition of cutback: | | |
| To be used for pay costs in this account | 502,000 | |
| To be transferred to "Indian Health Activities" for pay and postal costs | 224,000 | |
| To be returned to the Treasury | 696,000 | |
| Total cutback | 1,422,000 | |

OBLIGATIONS BY ACTIVITY

| | 1968 estimate | | 1969 estimate | | Increase or decrease | |
|---|---|---|---|---|---|---|
| | Positions | Amount | Positions | Amount | Positions | Amount |
| Grants: | | | | | | |
| Research | | $52,264,000 | | $55,627,000 | | +$3,363,000 |
| General research support grants | | (5,169,000) | | (5,289,000) | | (+120,000) |
| Gorgas Memorial Laboratory | | (500,000) | | (500,000) | | (0) |
| Categorical clinical research centers | | (1,100,000) | | (1,100,000) | | (0) |
| Scientific evaluation | | (50,000) | | (50,000) | | (0) |
| Fellowships | | 4,267,000 | | 4,362,000 | | +95,000 |
| Training | | 9,251,000 | | 9,488,000 | | +237,000 |
| Direct operations: | | | | | | |
| Laboratory and clinical research | 628 | 14,852,000 | 642 | 15,142,000 | +14 | +290,000 |
| Collaborative research and development | 33 | 11,023,000 | 33 | 12,034,000 | 0 | +1,011,000 |
| Review and approval of grants | 55 | 1,479,000 | 57 | 1,504,000 | +2 | +25,000 |
| Program direction | 25 | 366,000 | 27 | 405,000 | +2 | +39,000 |
| Total obligations | 741 | 93,502,000 | 759 | 98,562,000 | +18 | +5,060,000 |

OBLIGATIONS BY OBJECT

| | | 1968 estimate | 1969 estimate | Increase or decrease |
|---|---|---|---|---|
| | Total number of permanent positions | 741 | 759 | +18 |
| | Full-time equivalent of other positions | 6 | 6 | |
| | Average number of all employees | 691 | 705 | +14 |
| 11 | Personnel compensation: | | | |
| | Permanent positions | $6,136,000 | $6,371,000 | +$235,000 |
| | Positions other than permanent | 53,000 | 53,000 | 0 |
| | Other personnel compensation | 147,000 | 149,000 | +2,000 |
| | Total personnel compensation | 6,336,000 | 6,573,000 | +237,000 |
| 12 | Personnel benefits | 780,000 | 798,000 | +18,000 |
| 21 | Travel and transportation of persons | 300,000 | 300,000 | 0 |
| 22 | Transportation of things | 75,000 | 75,000 | 0 |
| 23 | Rent, communications, and utilities | 230,000 | 230,000 | 0 |
| 24 | Printing and reproduction | 45,000 | 45,000 | 0 |
| 25 | Other services | 1,046,000 | 1,101,000 | +55,000 |
| | Project contracts | 10,641,000 | 11,800,000 | +1,159,000 |
| | Payment to "National Institutes of Health management fund" | 5,428,000 | 5,331,000 | −97,000 |
| 26 | Supplies and materials | 2,207,000 | 2,200,000 | −7,000 |
| 31 | Equipment | 650,000 | 650,000 | 0 |
| 41 | Grants, subsidies and contributions | 65,782,000 | 69,477,000 | +3,695,000 |
| | Subtotal | 93,520,000 | 98,580,000 | +5,060,000 |
| | Deduct quarters and subsistence charges | −18,000 | −18,000 | 0 |
| | Total obligations by object | 93,502,000 | 98,562,000 | +5,060,00 |

*Summary of Changes*

| | |
|---|---|
| 1968 enacted appropriation | $94,422,000 |
| Cutback from the 1968 President's Budget required by House Joint Resolution 888 | −1,422,000 |
| Proposed release of reserves for increased pay costs | +502,000 |
| 1968 total estimated obligations | 93,502,000 |
| 1969 estimated obligations | 98,562,000 |
| Total change | +5,060,000 |

| Increases | Base | | Changes from base | |
|---|---|---|---|---|
| | Positions | Amount | Positions | Amount |
| A. Built in: | | | | |
| 1. Annualization of pay costs | | | | $81,000 |
| 2. 1 additional day of pay in 1969 | | | | 19,000 |
| B. Program: | | | | |
| 1. Research grants | | $52,264,000 | | 3,353,000 |
| 2. Fellowships | | 4,267,000 | | 95,000 |
| 3. Training | | 9,251,000 | | 237,000 |
| 4. Laboratory and clinical research | 628 | 10,379,000 | 14 | 325,000 |
| 5. Collaborative research and development | 33 | 10,972,000 | | 1,000,000 |
| 6. Review and approval of grants | 55 | 695,000 | 2 | 17,000 |
| 7. Program direction | 25 | 246,000 | 2 | 20,000 |
| Total program increases | | | 18 | 5,057,000 |
| C. Payments to the "National Institutes of Health management fund" for centrally furnished services: | | | | |
| Laboratory and clinical research | | 4,473,000 | | −118,000 |
| Collaborative research and development | | 51,000 | | 4,000 |
| Program direction | | 120,000 | | 17,000 |
| Total management fund | | | | −97,000 |
| Total net changes requested | | | +18 | +5,050,000 |

## Explanation of Changes

*Research grants.*—The $3,363,000 increase will provide $3,243,000 for approximately 101 additional project grants and $120,000 for general research support grants.

*Fellowships.*—The increase of $95,000 will support continuation of the fellowship program and provide "cost-of-living" increases inherent in the program.

*Training grants.*—The increase of $237,000 will support continuation of the graduate training program and provide for the annual incremental increase experienced yearly in this activity.

*Laboratory and clinical research.*—The increase of $325,000 and 14 positions will provide for studies in the clinical allergy and immunology, and viral mycoplasma and rickettsial diseases.

*Collaborative research and development.*—The increase of $1,000,000 will intensify the Transplantation Immunology Program.

*Review and approval of grants.*—The increase of $17,000 will provide two additional positions to support grants management activities.

*Program direction.*—The increase of $20,000 will provide two additional staff positions.

### *Explanation of Transfers*

Proposed transfer to "Indian health activities":

| | |
|---|---|
| 1968 estimate | $224,000 |
| 1969 estimate | 0 |

### PURPOSE

To cover pay raise costs.

### JUSTIFICATION—NATIONAL INSTITUTE OF ALLERGY AND INFECTIOUS DISEASES

| | 1968 estimate | | 1969 estimate | | Increase or decrease | |
|---|---|---|---|---|---|---|
| | Positions | Amount | Positions | Amount | Positions | Amount |
| Personnel compensation and benefits | 741 | $7,116,000 | 759 | $7,371,000 | +18 | +$255,000 |
| Other expenses | | 86,386,000 | | 91,191,000 | | 4,805,000 |
| Total | 741 | 93,502,000 | 759 | 98,562,000 | +18 | +5,060,000 |

## General Statement

The Institute conducts and supports research on the causes, characteristics, prevention, control, and treatment of diseases believed to be caused by infectious agents including bacteria, fungi, viruses, and parasites—or by abnormalities in the body's immune mechanisms such as allergies. In its attack on infectious and allergic diseases, the Institute is focusing attention primarily on important problems. that demand increased research efforts. Two types of programs—nationally organized research programs and special emphasis research programs—have been set up to deal with these problems.

The nationally organized research programs are collaborative, contract-financed, Institute-coordinated efforts carried on by many laboratories to attain a common goal. They are conducted in partnership with industry, university research centers, and other Institutes of NIH. The special emphasis research programs are designed to intensify investigations of critical disease problems in urgent need of increased effort. Special emphasis research programs are also aimed at promoting the exchange of information to help identify and evaluate avenues of research that should be followed. The Institute also supports a large body of free-ranging investigator-inspired research.

The National Institute of Allergy and Infectious Diseases is requesting a total of $98,562,000 for 1969, an increase of $5,060,000 over 1968. This increase is to be directed toward research of allergic and infectious disease in the following areas: (1) $3,695,000 for support of extramural activities; (2) $354,000 for intramural research and (3) $1,011,000 for the contract program.

RESEARCH GRANTS

| | 1968 estimate | 1969 estimate | Increase or decrease |
|---|---|---|---|
| Regular programs | $45,445,000 | $48,688,000 | +$3,243,000 |
| Special programs | 6,819,000 | 6,939,000 | +120,000 |
| Total, research grants | 52,264,000 | 55,627,000 | +3,363,000 |

## Introduction

The Institute has developed a structured procedure for determining and funding grants in areas of special emphasis. The criteria for selection of the areas were set by staff members of the Institute after lengthy review and were based primarily on morbidity-mortality statistics as a measure of impact upon public health. Staff, in their deliberations, also considered such data as the state of scientific and technical knowledge, resource availability and the current intellectual commitments of the scientific community. The selected programs have been presented to the National Advisory Council for criticism and advice. Staff, along with its advisory groups, continually redefines, redevelops, and reviews these areas.

These procedures resulted in a structured specific mechanism by which the National Advisory Council could review grant applications, not only in terms of scientific merit, but also in terms of their relevance to the public health. The staff with the collaboration of Council is assuring effective attention to research needs of high national import by a system which channels funds into specific areas of research.

In 1968, the National Institute of Allergy and Infectious Diseases plans on supporting approximately 1,384 regular research projects in the amount of $45,445,000. The majority of these projects are ongoing noncompeting continuation grants which were approved for payment by advisory groups in 1967 and prior years for project periods of two to five years. The noncompeting continuation grants represent approximately 70% of this Institute's total regular research program.

### Program Plans in 1968 and 1969

*Allergy and other immunologic disorders*

*Transplantation Immunology.*—A base for the future development of a comprehensive approach to the support of research in immunology as associated with organ transplantation has been established by this Institute. Through the influence of the intensified programming activities of staff and through the

continued operations of a subcommittee of expert consultants, it is anticipated that the accelerated growth rate of meritorious research grant applications reviewed and recommended for payment by the National Advisory Allergy and Infectious Diseases Council will continue. Renewed emphasis will be placed on the support of basic immunological investigations, because the solution to one of the two principal barriers to practical and successful organ transplantation—rejection of the transplanted organ—lies in the immunological field. The Institute plans to provide $2,839,000 in 1969 for this program.

*Bacterial and mycotic diseases*

*Drug Resistance.*—The widespread use of potent antimicrobial agents has resulted in a new responsibility of major proportion to public health. More and more strains of bacteria are becoming resistant to a greater variety of drugs. The present arsenal of antimicrobial agents will not continue to be adequate even though their judicious use will minimize the development of resistance to some of the antibiotics developed recently. This phenomenon of drug resistance has been dramatically emphasized by the exhibitions of severe outbreaks of meningococcal infection, staphylococcal disease, and the continuing presence of chronic bacterial disease as demonstrated by chronic pyelonephritis and chronic pulmonary disease. The Institute plans to maintain support for research in this area at approximately $5,283,000 in 1969.

*Parasitic diseases*

*Malaria.*—Despite the immense research effort which has been directed at malaria by work supported by this Institute and particularly by other agencies, several questions remain unresolved. The appearance in recent years of drug resistant strains of human malaria is a serious obstacle to effective treatment. Development and evaluation of new drugs and drug regimens, studies on the biochemical mechanism involved in drug resistant and development of new methods of mosquito control can be expected to provide useful solutions to the problem. The Institute plans to award approximately $598,000 for work in this research area during 1969.

*Viral and rickettsial diseases*

*Chronic and Degenerative Diseases.*—The Institute has projected a $1,957,000 program in the field of chronic and degenerative diseases of probably microbial origin during 1968. This area includes such dread diseases as emphysema, multiple sclerosis and amyotrophic lateral sclerosis, it also includes chronic kidney diseases (e.g., chronic nephritides of viral and bacterial origin) and vascular disease (e.g., viral and bacterial damage to heart and blood vessels). The possible infectious and immunologic genesis of these diseases is a research area which, until now, has received little attention from the scientific community. There is a significant body of information available which suggests that participation in a broad-fronted attack will be fruitful. The Institute plans to award approximately $2,093,000 in the field of chronic and degenerative diseases in 1969, an increase of $136,000 over 1968. There has been an alarming increase in chronic-progressive respiratory diseases, often resulting in pulmonary emphysema. Additional support in recent years for emphsema studies has permitted a systematic exploration of the role of microbial agents and allergic materials through comprehensive studies in large medical centers where the various interrelating components can be intensively investigated and evaluated.

*Infectious Hepatitis.*—The importance of research on this disease is evidenced by the 1965 statistics of 707 deaths with 34,365 cases reported. These figures do not adequately describe the distress caused by the long recovery period necessary and possibly permanent debilitating effects of this disease. Research in this area has been plagued by two major problems: first there is the problem of finding a convenient reliable laboratory method of isolating and growing etiological agents; while, on the other hand, there is the equally great problem of establishing by immunologic methods or by host reaction, the significance of those agents which have been isolated. This disease is considered to be of such significance that the Institute has identified it as a special emphasis program. It is planned that staff will strive to identify a resource base which will allow meaningful scientific investment into the problem.

*Antiviral Substance.*—Viral diseases as a single category constitute the largest single cause of morbidity in the United States. In addition, present evidence suggests that many dread diseases of unknown etiology may eventually be shown to be of viral origin.

The great diversity of virus types necessitates the consideration of alternate approaches in combating viral diseases. Despite discovery of a few drugs with activity against specific viruses, no generally useful drugs have appeared for the treatment of viral infections.

Drug therapy in viral disease must await the development of a rational approach to synthesis of chemotherapeutic agents. This approach can best be fostered by fundamental studies of the virus-cell interaction and through basic studies of the way in which viruses grow and replicate. Equipped with this basic virological knowledge, investigators may then devise means of disrupting the virus growth for therapeutic purposes.

In recent years, the increasing knowledge of molecular biology including the structure and metabolism of nucleic acid and protein synthesis has produced a large resource base of interest in addition to opening up the possibility of rationally designed antiviral substances. In this area this Institute will support projects amounting to $5,283,000 in 1969.

*Special programs*

The increase of $120,000 requested for general research support grants represents the Institute's proportionate share of the proposed National Institutes of Health increase in this area.

DISTRIBUTION OF RESEARCH GRANTS

| | 1968 estimate | | 1969 estimate | | Increase or decrease | |
|---|---|---|---|---|---|---|
| | Number | Amount | Number | Amount | Number | Amount |
| Noncompeting projects | 990 | $31,844,000 | 1,091 | $35,087,000 | +101 | +$3,243,000 |
| Competing projects | 394 | 13,101,000 | 394 | 13,101,000 | 0 | 0 |
| Supplementals | (60) | 500,000 | (60) | 500,000 | 0 | 0 |
| Subtotal, regular programs | 1,384 | 45,445,000 | 1,485 | 48,688,000 | +101 | +3,243,000 |
| General research support | | 5,169,000 | | 5,289,000 | | +120,000 |
| Scientific evaluation | (1) | 50,000 | (1) | 50,000 | | 0 |
| Gorgas Memorial Laboratory | | 500,000 | | 500,000 | | 0 |
| Categorical clinical research centers | 5 | 1,100,000 | 5 | 1,100,000 | 0 | 0 |
| Total, research grants | 1,389 | 52,264,000 | 1,490 | 55,627,000 | +101 | +3,363,000 |

RESEARCH GRANTS PROGRAM ANALYSIS

| | 1968 estimate | 1969 estimate | Increase or decrease |
|---|---|---|---|
| FIELDS | | | |
| Allergy and other immunologic disorders | $9,384,000 | $10,114,000 | +$730,000 |
| Transplantation immunology [1] | (2,615,000) | (2,839,000) | (+224,000) |
| Bacterial and mycotic diseases | 15,217,000 | 16,277,000 | +1,060,000 |
| Drug resistance | (4,939,000) | (5,283,000) | (+344,000) |
| Parasitic diseases | 5,358,000 | 5,731,000 | +373,000 |
| Malaria | (559,000) | (598,000) | (+39,000) |
| Viral and rickettsial diseases | 15,486,000 | 16,566,000 | +1,080,000 |
| Chronic and degenerative diseases | (1,952,000) | (2,093,000) | (+136,000) |
| Antiviral substance | (4,939,000) | (5,283,000) | (+344,000) |
| Subtotal regular program | 45,445,000 | 48,688,000 | +3,243,000 |
| General research support grants | 5,169,000 | 5,289,000 | +120,000 |
| Scientific evaluation | 50,000 | 50,000 | 0 |
| Gorgas Memorial Laboratory | 500,000 | 500,000 | 0 |
| Categorical clinical research centers | 1,100,000 | 1,100,000 | 0 |
| Total research grants | 52,264,000 | 55,627,000 | +3,363,000 |

[1] Excludes $600,000 in categorical clinical research centers for 1968 and 1969.

*Fellowships*

Total fellowships:

| | |
|---|---|
| 1968 estimate | $4,267,000 |
| 1969 estimate | 4,362,000 |
| Increase or decrease | +95,000 |

PROGRAM PLANS IN 1968 AND 1969

The Fellowships Program is designed to function as an integral part of the research grants and training grants activities. It is intended to increase the availability of trained professional researchers who are preparing to launch their career or who are in mid-career in selected research areas within the categorical interests of the Institute.

DISTRIBUTION OF FELLOWSHIPS

| | 1968 estimate | | 1969 estimate | | Increase or decrease | |
|---|---|---|---|---|---|---|
| | Number | Amount | Number | Amount | Number | Amount |
| 1. Continuations: | | | | | | |
| a Noncompeting | 168 | $3,039,000 | 146 | $2,813,000 | −22 | −$226,000 |
| b. Competing | 44 | 608,000 | 44 | 692,000 | 0 | +84,000 |
| 2. Supplementals | (7) | 9,000 | (7) | 9,000 | 0 | 0 |
| 3. New | 65 | 611,000 | 83 | 848,000 | +18 | +237,000 |
| 4. Total fellowships | 277 | 4,267,000 | 273 | 4,362,000 | −4 | +95,000 |

FELLOWSHIPS (BY TYPE OF PROGRAM)

| | | | | | | |
|---|---|---|---|---|---|---|
| 1. Postdoctoral | 110 | $825,000 | 110 | $880,000 | 0 | +$55,000 |
| 2. Special | 35 | 396,000 | 35 | 420,000 | 0 | +24,000 |
| 3. Research career: | | | | | | |
| a. Career | 26 | 820,000 | 25 | 710,000 | −1 | −110,000 |
| b. Development awards | 106 | 2,226,000 | 103 | 2,352,000 | −3 | +126,000 |
| 4. Total fellowships | 277 | 4,267,000 | 273 | 4,362,000 | −4 | +95,000 |

*Training grants*

| | |
|---|---|
| Total training grants: | |
| 1968 estimate | $9,251,000 |
| 1969 estimate | 9,488,000 |
| Increase or decrease | +237,000 |

PROGRAM PLANS IN 1968 AND 1969

The Training Grants Program of this Institute provides opportunities for young scientists to receive the background, training and experience which are essential for meeting future manpower requirements within the categorical responsibilities of the Allergy and Infectious Diseases Institute. Newly trained personnel are especially essential to insure continued progress in such rapidly expanding areas as virology and immunology.

DISTRIBUTION OF TRAINING GRANTS

| | 1968 estimate | | 1969 estimate | | Increase or decrease | |
|---|---|---|---|---|---|---|
| | Number | Amount | Number | Amount | Number | Amount |
| 1. Continuations: | | | | | | |
| a. Noncompeting | 153 | $8,298,000 | 151 | $8,505,000 | −2 | +$207,000 |
| b. Competing | 4 | 248,000 | 4 | 258,000 | 0 | +10,000 |
| 2. Supplementals | (17) | 326,000 | (17) | 326,000 | 0 | 0 |
| 3. New | 7 | 329,000 | 7 | 349,000 | 0 | +20,000 |
| 4. Scientific evaluation | (1) | 50,000 | (1) | 50,000 | 0 | 0 |
| 5. Total training grants | 164 | 9,251,000 | 162 | 9,488,000 | −2 | +237,000 |

TRAINING GRANTS (BY TYPE OF PROGRAM)

| | | | | | | |
|---|---|---|---|---|---|---|
| 1. Graduate | 164 | $9,201,000 | 162 | $9,438,000 | −2 | +$237,000 |
| 2. Scientific evaluation | (1) | 50,000 | (1) | 50,000 | 0 | 0 |
| 3. Total training grants | 164 | 9,251,000 | 162 | 9,488,000 | −2 | +237,000 |

TRAINING GRANTS PROGRAM ANALYSIS

| | 1968 estimate | | 1969 estimate | | Increase or decrease | |
|---|---|---|---|---|---|---|
| | Number | Amount | Number | Amount | Number | Amount |
| Allergy and other immunologic disorders | 44 | $2,498,000 | 44 | $2,582,000 | 0 | +$84,000 |
| Bacterial and mycotic diseases | 43 | 2,405,000 | 43 | 2,517,000 | 0 | +112,000 |
| Parasitic diseases | 23 | 1,295,000 | 21 | 1,233,000 | −2 | −62,000 |
| Viral and rickettsial diseases | 54 | 3,003,000 | 54 | 3,106,000 | 0 | +103,000 |
| Scientific evaluation | (1) | 50,000 | (1) | 50,000 | 0 | 0 |
| Total training grants | 164 | 9,251,000 | 162 | 9,488,000 | −2 | +237,000 |

LABORATORY AND CLINICAL RESEARCH

| | 1968 estimate | | 1969 estimate | | Increase or decrease | |
|---|---|---|---|---|---|---|
| | Positions | Amount | Positions | Amount | Positions | Amount |
| Personnel compensation and benefits | 628 | $5,984,000 | 642 | $6,187,000 | +14 | +$203,000 |
| Other expenses | | 8,868,000 | | 8,955,000 | | +87,000 |
| Total | 628 | 14,852,000 | 642 | 15,142,000 | +14 | +290,000 |

## Introduction

Objectives of the intramural research program are the discovery and exploitation of new knowledge for the better prevention or treatment of diseases caused and infectious agents or resulting from abnormal immunological reactions. The scope of the program is broad, embracing both basic and applied research on all aspects of a wide variety of diseases of infectious etiology including those caused by viruses, rickettsia, bacteria, yeasts, molds, fungi, protozoa and helminths; on various allergic and immune reactions to these agents and other antigens, and on such related problems as emphysema and the mechanisms of rejection of tissue transplants. Epidemiological, clinical, and laboratory approaches to these problems are constantly being modified by the new knowledge and technics deriving from the broad-based research programs in the medical and related sciences in this country and abroad. New viruses are discovered at intervals; the role of these and other newly discovered causes of human disease, such as mycoplasma, is being better defined and extended, new diagnostic methods evolved, and new technics of vaccination developed. Yet the large number of still unsolved problems provide ample evidence of the need for a continued vigorous multidisciplinary research effort to expand knowledge and to seek still undiscovered ways for earlier translation of the benefits of this expanding knowledge to the public benefit.

One of the properties of viruses and related obligate intracellular infectious agents (such as rickettsia) which has become increasingly clear during the past few years is that of persistence. New technics, developed in large part in the Laboratory of Viral Diseases, have shown that the infectious nucleic acid core of many viruses can persist in a state in which infectious virus particles are not produced for many generations of cell multiplication and replacement. These "latent" infections may be changed into "active" processes by many factors including climatological, biochemical, endicrinological changes, introduction of other infecitous agents, and other natural or induced changes in the immunological status of the host. Herpes simplex or "cold sores" is the most common human example; but the relations between chicken pox in childhood and herpes zoster or "shingles" 40 or 50 years later, or of activation of cytomegalic virus during cancer chemotherapy or immunosuppression for organ transplant are other examples of an increasingly important problem in medicine. Still more recently, the demonstration that several sarcoma viruses of animals exist in undetectable state in the tumor but can be converted into infectious sarcoma virus by adding the animal leukemia virus has shown how "helper" viruses can be used to detect these inapparent infections of cells and to open up new pathways for understanding how viruses or other intracellular parasites may cause a variety of chronic or degenerative diseases.

Still further advances in laboratory technology are needed before the etiologic agents of a number of common human diseases such as hepatitis and epidemic virus diarrheas can be isolated, identified, and used in vaccine development. New antiviral agents need to be identified and characterized as to their possible usefulness in prevention or treatment of a wide spectrum of viral diseases since vaccination can be only a partial public health answer to the hundreds of viruses capable of causing human infection.

The Institute continues to maintain field stations in Honolulu, Hawaii; Hamilton, Montana; Atlanta, Georgia; and the Panama Canal Zone. These stations enable the Institute to take advantage of the geographic differences in prevalence of certain diseases, to work more safely with these diseases in their natural ecological habitats or in animal populations which cannot be accommodated at Bethesda, or to take advantage of certain human volunteer populations for the study of malaria. Additionally the Institute has the scientific responsibility for research in cholera under the State Department Agency for International Development-Department of Health, Education, and Welfare agreement for the SEATO Cholera Research Program. This includes scientific responsibility for the SEATO-Pakistan Cholera Research Laboratory in Dacca, East Pakistan, where studies on the use of improved vaccines and new treatments for this scourge of the old world are being conducted. Exciting advances in the United States under NIAID grant support by the U.S.-Japan Cooperative Medical Science Program in coordination with the SEATO Program are those related to isolation of the cholera toxin which causes the fatal diarrhea and the development of vaccines for protection against this toxin. The SEATO-Cholera Research Program, using AID funding, is developing the toxins and vaccines for use in these studies both in the United States and in Pakistan, and plans the translation of beneficial results to man whenever appropriate.

## PROGRAM PLANS IN 1968 AND 1969

*Allergy and other immunologic disorders*

With the appointment of a new Clinical Director early in 1968, plans for the development of a broad based program of research on allergic disorders and chronic infections began implementation. These plans resulted from earlier decisions to alter and expand the clinical research program toward those problems which take full advantage of the unique facilities provided by the Clinical Center and which are difficult to conduct in the grant-supported university based research programs. Allergic disorders affect more than 20,000,000 Americans but, despite the rapid advance of medical science in many areas, are still little understood and are usually treated empirically. The closely related problem of immunological rejection of transplanted organs and tissues has been highly publicized and study of this phenomenon is a necessary part of research on allergy, as is the study of the genetically linked immunological disorders. The role of basic defects in the tissue immune or host resistance systems which permit establishment of chronic infections such as bronchitis or pyelonephritis is a second area of emphasis. The importance of these diseases in American medicine, and the difficulty of establishing broad and continuing programs in non-Federal facilities where the investigator must depend on short term grants and competitive use of clinical facilities for care of the sick and for research, make it necessary to undertake the program intramurally. Implementation of these programs will involve the addition of new investigator-level staff, renovations of existing space, new equipment, and expanded research activities. When fully implemented, the program will not only provide a vital area of new research competence, but will train and add to the medical research community a group of investigators interested in and competent for research in allergy and chronic infections.

Paralleling the expanded and redirected effort in Clinical Investigation is the program of the Laboratory of Immunology. Under a newly recruited Laboratory Chief, who is an internationally recognized leader in immunological research including the problems of hypersensitivity, autoimmunity, and mechanisms of tolerance to antigenic stimuli, the program is expected to be complementary and closely correlated with the efforts on human disease problems in the clinical program. Because of the increased effort on clinically oriented problems and the broad program directed to basic immunological disorders and reactions of man, the proportionate staff of research trained physicians will be larger than had been previously required, with commensurate increases in costs.

To expand and implement these research programs for clinical allergy and immunology an increase of 9 positions and $200,000 is requested.

*Viral, mycoplasma, and rickettsial diseases*

The virological research program is being reorganized to provide three major efforts. The Laboratory of Viral Diseases will be subdivided in 1968 to provide for a new laboratory concerned with the problems of respiratory virus and mycoplasmal diseases. The sections of the Laboratory of Viral Diseases which have been engaged in studies on the oncogenic properties of respiratory viruses that also have significance for oncogenesis in general, will be combined with the sections on viral biology from the Laboratory of Biology of Viruses and undertake the additional responsibility for a program of research on viruses as underlying causes of chronic and degenerative diseases. This effort will relate to the program at the Rocky Mountain Laboratory on slow viruses, but will reduce the need to install a sophisticated virological competence at that laboratory by making it possible to take advantage of the animal models under study on the NIH site. The redirected laboratory effort will also relate to the programs of the Laboratory of Clinical Investigation on chronic bronchitis and other chronic infections since the deranged physiological activities induced by chronic viral infections may be an important underlying element. The Laboratory of Biology of Viruses will provide the capability for biochemical and biophysical studies of viruses at the molecular level which is a necessary component of the overall virological program in understanding the enzymatic and physiological changes induced by viral infections. Since the 1969 requirements for these reprogrammed efforts will be mostly met by present resources of the two laboratories, no specific increase is requested.

The "slow" virus research program at the Rocky Mountain Laboratory was scheduled for expansion in 1968 to take advantage of the animal facilities which were enlarged in 1967. This expansion was planned because of the importance of rapidly advancing efforts to isolate and identify *in vitro* this group of viruses which cause chronic progressive fatal diseases in animals as an essential step towards similar studies in man. Cost reductions have postponed this expansion at RML.

The research on arboviruses is being more sharply focused and concentrated at the Middle America Research Unit. While efforts at defining the Latin America hemorrhagic fevers continue to be productive and will be pursued, more emphasis is being given to vesicular stomatitis and other viruses which are common problems in North America. The special ecological environments available to MARU will enable it to define the ecology of vesicular stomatitis virus infections in various population groups and to learn the range of clinical illnesses which accompany this infection. Cooperative planning between the Middle America Research Unit, the Gorgas Memorial Laboratory and the Medical Entomology Section of the Rocky Mountain Laboratory on the research towards developing new methods for the control of encephalitis has been undertaken. The major need in the control of arbovirus infections is effective, safe vaccines. New approaches to inactivation of infectivity without loss of antigenicity are needed since conventional technics have often failed. There is also the need for discovery of more strains of virus in nature that have little ability to cause illness but which could be used to provide protection against the more pathogenic strains. The developing of attenuated strains in the laboratory and bringing them to human trial will at best be a long, difficult, and costly effort.

An increase of 5 positions and $125,000 is requested for these virological research programs.

*Bacterial and mycotic diseases*

Work on killed tuberculosis vaccine will be maintained even though costs are increasing rapidly as the studies on immune processes progress through the necessary stages of studies from mice to higher animals before reaching man. Facilities at the Rocky Mountain Laboratory are not adequately safe to enable challenge of immunized primates with virulent mycobaterium tuberculosis strains, therefore these studies must be done in contract facilities. The increased costs will be met by reprogramming both at RML and elsewhere. No increase in costs are projected.

Still another parameter to the problem of antibiotic resistance of bacteria was added during 1967 when it was reported that episomal factors causing resistance to several antibiotics could be quickly transferred from resistant bacteria

to previously susceptable bacteria even of different species. While the initial importance of this finding was directly related to enteric infections caused by gram negative bacteria, the discovery opened new pathways for the study of resistance in other micro-organisms and needs to be fully explored. Since these factors occur at the cellular level and the mechanism of action is so far undetermined, the primary efforts are in the area of bacterial genetics and the determinants of resistance. The work could be highly important to the study of chronic infections such as bronchitis because of the unresponsiveness of such infecitons to antibiotic therapy and the rapid emergence of resistant strains of bacteria in such cases which often create the worst problems of spreading hospital infections.

The involvement of intramural staff in research related to the disease categories identified under the U.S.-Japan program has increased the opportunities with corresponding pressures in research on such diseases as filariasis, schistosomiasis, tuberculosis and cholera. There are, however, no plans to increase the scope of commitment to research in these areas in 1968 and 1969.

The Institute will continue its efforts to develop better preventive, diagnostic and therapeutic methods for malaria. Vigorous research during the past few years on both human and monkey malaria has shown definitive immune responses to infection and an increased resistance to infection which appears to be long lasting. The major problem in approaching artificially induced immunity is that of the complex antigenic composition of the protozoa in the various stages of its life cycle and the complex interrelationships of the protozoa and tissue cells. The antigenic composition is being studied and related to specific immunoglobulin responses of patients infected, either as volunteers or naturally with various strains of malaria. Concomitantly, there is research on the mechanisms involved in host eliminations of the parasite using the new opportunities which have been provided by simian malarias where species specificity enables strain selections which are eliminated with varying ease by the human host. Therapeutic evaluation of new drugs will also continue as these become available.

Renovation and updating of laboratories and equipment will continue as funds and opportunities permit. This is a continuation of a program begun in 1966 and directed toward the eventual replacement of obsolete laboratory furnishings and equipment. With the turnover of senior investigators, the necessary regroupings which accompany shifts in research emphasis as new senior investigators emerge or are employed, and the continued advancement in equipment saves time and expands capability for the scientist. Competing with laboratory equipment needs is the rapid growth of computer technology and the expanding requirements for funds to employ programmers and to obtain computer time.

Other programs of the Institute will continue at about the same levels as in 1968 with major changes being accomplished by reorientation.

Also included in the requested increases is $83.000 for the following mandatory items; annualization of 1968 pay costs and pay above the stated annual rate. There is also a decrease of —$118.000 for centrally furnished services from the "National Institutes of Health management fund."

COLLABORATIVE RESEARCH AND DEVELOPMENT

| | 1968 estimate | | 1969 estimate | | Increase or decrease | |
|---|---|---|---|---|---|---|
| | Positions | Amount | Positions | Amount | Positions | Amount |
| Personnel compensation and benefits | 33 | $347,000 | 33 | $354,000 | 0 | +$7,000 |
| Other expenses | | 10,676,000 | | 11,680,000 | | +1,004,000 |
| Total | 33 | 11,023,000 | 33 | 12,034,000 | 0 | +1,011,000 |

## Introduction

The Collaborative Research and Development Program has as its mission the translation of significant basic research data into practical achievements of clinical applicability in allergy and infectious diseases. These activities are carried out primarily through research contracts with industry, universities, and other Federal and non-Federal institutions. In the planning and evaluation of contract-supported work the Institute is advised by committees comprised of leading scientists in the fields concerned. Each contract is monitored by a

Scientist Project Officer, usually an NIH intramural research investigator, who reviews the scientific progress of the work and aids the contractors with special technical problems. In addition, an Administrative Project Officer is assigned to each contract to handle the non-scientific aspects of the project. The research areas encompassed by the Collaborative Research and Development Program are: (1) Transplantation and Immunology; (2) Research Reference Reagents; and (3) Virus and Bacterial Vaccine Development.

PROGRAM PLANS IN 1968 AND 1969

*Allergy and other immunologic disorders*

The primary mission of the *Transplantation Immunology Program* is to determine the importance in human organ transplantation of matching tissue antigens by typing. With the establishment of the program in 1965, the initial goal was to produce reagents necessary for human tissue typing tests.

During 1968, this goal was met to a degree far exceeding initial expectations. Substantial quantities of over 200 different tissue typing sera used in the matching of donors and recipients of organ transplants were produced. The characteristics of these sera have been listed in a catalog which is made available to interested immunologists. Good-quality antisera are now being redistributed to qualified laboratories. By the use of these reagents, rapid progress has been made in the identification of human transplantation antigens and tissue matching for kidney transplantation has become a reality in a number of clinics. The value of proper matching appears to be demonstrated in several small-scale prospective studies.

Conversely graft rejection was closely correlated with mismatches in a number of retrospective studies. During 1968, program efforts have resulted in the improvement of technical aspects of tissue typing with the result that it is now practical to conduct histocompatibility matching using small quantities of reagents. The Institute has established five regional tissue typing evaluation centers which actively participate in a program of prospective matching of donors and recipients for kidney transplants. These centers provide needed facilities in areas where kidney dialysis and transplantation programs are under way. Patients awaiting transplantation can now be typed prospectively. Methods have been established for rapid typing of cadaveric kidneys thus assuring the best possible match between the donor and recipient. Initial steps have been taken for immunological studies in recipients of transplanted tissue to determine the presence of recurrence of immunological disorders such as glomerulonephritis, auto-immune diseases, and incipient graft rejection.

During 1969, the program will be directed towards a large-scale evaluation of the efficacy of tissue typing in the selection of appropriate donors and recipients for transplantation. Facilities will be made available to type for kidney and other organ transplants. There will be a gradual reduction in the emphasis on reagents production with increasing emphasis on quality control and the establishment of a supply of stable, high-titered antisera which will be made available to immuonlogists engaged in clinical programs. The number of regional typing evalution facilities will be increased and contractors will be asked to provide bench space and facilities to enable other workers to acquire increased proficiency in tissue typing techniques. Studies will be continued in delineating the patho-physiological changes which take place in kidneys during storage with the aim of producing more efficient methods for the preservation of kidneys. The typing evaluation centers will be closely integrated with the existing dialysis and surgical programs, organ procurement, and storage activities. Methods will continue to be explored to correlate programs which will permit investigators to work together—partial funding to be obtained from other agencies and institutes.

Also during 1969, studies directed at achieving more efficient immuno-suppression will be instituted. These include a study of candidate drugs discovered in the cancer chemotheraphy program for immunosuppressive activity in patients, preliminary studies to develop more efficient and less toxic antilymophocyte sera, and studies to facilitate the production and evaluation of stable forms of tissue antigens which might be used to diminish the rejection reaction. A program is also planned to provide for the collection of more useful and comprehensive data on transplant recipients. This program will provide information that can be used in the evaluation of data currently being collected on the results of tissue typings. Coordination with existing programs of the National Institute of Arthritis and Metabolic Diseases for the collection of data on dialysis patients

will permit a more efficient analysis of the clinical course of patients who have been transplant failures and will provide additional data on the clinical background of new transplant patients formerly on dialysis therapy. An increase of $1,000,000 is programmed for these studies.

*Viral, mycoplasma, bacterial, and rickettsial diseases:*

During 1968, the *Vaccine Development Program* is continuing its efforts in two major areas, (1) the development and testing of experimental rubella (German measles) vaccines and (2) the further development of vaccines against a mycoplasma and several viruses which are known to cause severe respiratory illness, and is initiating studies in two other promising areas: (1) the development and testing of streptococcal vaccines; and (2) the development and testing of vaccines for the prevention of pneumococcal pneumonia.

The *rubella virus* is recognized as an important cause of congenital defects such as heart disease, blindness and mental retardation in children born to mothers contracting German measles during pregnancy. Every effort is being directed toward the development of a safe, effective vaccine to prevent the occurrence of these congenital defects.

In 1968, an attenuated strain of rubella virus designated as HPV–77 developed by scientists at the Division of Biologics Standards has been extensively evaluated by clinical investigators in this country and abroad. Over 500 volunteers have been inoculated and approximately 450 susceptible individuals have been in contact with the vaccinees. None of the vaccinees or their contacts developed any illness attributable to the inoculation—96 percent of the vaccinees sero-converted. Although virus was shed from the nasopharynx, there was no evidence of transmission of the virus to the contact group.

Ideally, the rubella virus strain selected should be that which best meets all of the criteria for a safe and effective vaccine. These criteria include the following requirements: Inability to induce clinical illness and viremia; nontransmissability of the vaccine virus from vaccinee to close contacts; lack of any appreciable shedding of vaccine virus from the pharynx; induction of high levels of serum antibody in recipients, and a life-long immunity to the natural disease; and ability of the vaccine strain to grow to high titer in a cell culture system acceptable for eventual administration to millions of children. HPV–77, the prime strain, fulfills most of the criteria. The small clinical trials which are now underway will be expanded to include larger numbers of vaccinees and controls.

In 1969, in addition to producing larger amounts of HPV–77 vaccine, the program will continue to explore HPV–77 derivatives propogated in other tissue culture systems such as canine kidney and duck and chick embryo.

The desirability of a killed rubella vaccine, particularly for women in the childbearing age group, is evident; however, work on developing an inactivated rubella vaccine has been discouraging. A number of physical and chemical agents have been employed to inactivate the virus. Although most agents used did inactivate the virus, they unfortunately also inactivated the virus' antigenicity. These studies will continue in 1969 to see if it is possible to completely inactivate the virus with the margin of safety that would be required and still maintain viral antigenicity.

During 1968, *respiratory viruses vaccine* development activities proceeded on a broad front. Extensive field trials of the adenovirus type 4 tableted vaccine have been conducted in the Armed Forces. Almost half a million military recruits received the oral vaccine during the past year. The vaccine continues to be about 90 percent effective in protecting against the natural disease. No untoward reactions have occurred. The yearly financial savings to the Armed Forces in preventing acute respiratory disease is estimated at more than $10,000,000. Approximately the same amount of vaccine will be purchased by the Armed Forces during 1969.

Studies by two universities have confirmed the significance of *Mycoplasma pneumoniae* in causing pneumonia in civilian and military populations. Studies by other contractors have shown that the carrier state persists over several months or more, even in those with clinical illness adequately treated with the tetracyclines. Several prototype inactivated vaccines have been prepared which are extremely potent in animal model systems. However, the response in animals does not correlate well with the human response. Most of the *Mycoplasma pneumoniae* vaccines produced until now have been only about 50 percent effective. Work will continue in this field to study the development of potency test for

*Mycoplasma pneumoniae* vaccines and to prepare concentration and fractionation of the antigens of *Mycoplasma pneumoniae*. In addition, the role of nutritional factors in the growth and antigenicity of *Mycoplasma pneumoniae* will be studied.

An inactivated trivalent parainfluenza vaccine was tested in children. Although the vaccine induced antibody in almost all vaccinees, it still did not protect against the disease. Improved vaccine preparations are now under clinical evaluation but no data are available at this time. A live attenuated respiratory syncytial (RS) virus vaccine has been produced and tried in adults. This live vaccine is capable of infecting adults without producing disease. Careful studies will be undertaken to observe the effect of this vaccine in children. Studies will continue including intranasal immunization in an effort to develop a vaccine effective against this most important pathogen of infancy. Work on the preparation of vaccine for the rhinoviruses which are the main known causes of the common cold will be increased. The rhinovirus typing program continues to be very successful. Through efforts of the program, fifty-five separate immunological types of rhinoviruses have been identified, characterized and accepted by the International Congress of Microbiology and the World Health Organization. Additional candidate rhinovirus strains have been submitted to the typing center and it is expected that the number of immunologically distinct rhinovirus types will approach one hundred. In 1968, several prototype inactivated rhinovirus vaccines will be clinically tested. Development of improvement methodology for the assay of antibody response to rhinovirus infection will be pursued as well as the development of strains of rhoinoviruses with attenuated virulence for humans, that may have promise as vaccine strains.

A program for the development of streptococcal vaccines is just beginning. During 1969, the further clinical evaluation of these vaccines will continue. The need for a safe and effective vaccine that could hopefully prevent strep throats and their serious long term complications such as rheumatic fever and glomerulonephritis is obvious.

In 1968, a program was instituted to develop and evaluate a *polyvalent pneumococcal vaccine* based on surveillance studies of pneumococcal disease incidence in those population groups which show high rise of morbidity and death from pneumonia. Despite antibiotic therapy, pneumococcal infection continues to account for a significant number of the 55,000 or more "pneumonia and influenza" deaths per year which rank this among the ten leading causes of death in the United States—there is now evidence that this incidence is rising. In 1969, surveillance studies will be extended to other susceptible groups suitable for clinical evaluation of prototype vaccines; production of initial lots of vaccine for testing will also begin. An effective immunizing vaccine would not only lower the mortality rate, but should be a valuable step in combating the serious socio-economic problem posed by sharply rising hospitalization costs.

In 1968, the *Reference Reagents Program* has (1) completed reagents to most of the members of the adeno, myxo, entero, and herpes virus groups; (2) completed the production, testing and certification of eight arbovirus reagents, and eight of the human and animal mycoplasma reagents; (3) continued the production of human and animal mycoplasma reagents in a cooperative effort with the Division of Biologics Standards, and initiated a rhinovirus reagents production effort; (4) established five new contract projects for the production, testing and processing of both type specific and grouping reagents for arboviruses; and (5) distributed interferon reagents and entered a cooperative program with the World Health Organization for stability studies on mouse interferon.

In 1969, this program will (1) expedite the production, testing and distribution of much needed rhinovirus and arbovirus reference reagents; (2) continue the preparation of reagents to newly recognized enterovirus prototypes and make maximum use of the antiserum now on hand by preparing preliminary typing pools; (3) institute a systematic reexamination of research reference reagents now in the repository to confirm viability, titers, etc., and to determine presence of contaminants now detectable by methods not previously available, and to plan and initiate production of replacement reagents where indicated; (4) study and develop improved methodology in the production of antiserum, concentrating on such factors as the type and quality of animals used, the nature of antigens and adjuvants, immunization schedules and routes of injection; (5) develop and initiate production of immunoglobulin reagents for immunological research in virology: and, (6) initiate the production of research reagents to miscellaneous human viruses as well as other microbial agents of interest to the researcher or as needed by NIH intramural laboratories.

The Institute's Reference Reagents Program will continue to maintain close liaison with the National Communicable Diseases Center, World Health Organization, American Type Culture Collection and other groups with specific reagent programs to assure maximum coordination of effort and effective utilization of program funds as well as specific cooperative efforts to yield new information on reference reagents.

Included in this net increase is $7,000 for annualization of 1968 pay costs and $4,000 for services furnished centrally by the National Institutes of Health management fund.

REVIEW AND APPROVAL OF GRANTS

| | 1968 estimate | | 1969 estimate | | Increase or decrease | |
|---|---|---|---|---|---|---|
| | Positions | Amount | Positions | Amount | Positions | Amount |
| Personnel compensation and benefits | 55 | $542,000 | 57 | $566,000 | +2 | +$24,000 |
| Other expenses | | 937,000 | | 938,000 | | +1,000 |
| Total | 55 | 1,479,000 | 57 | 1,504,000 | +2 | +25,000 |

This activity provides for the over-all coordination and administration of the Institute's grants programs. The activity is responsible for planning and developing scientific programs for research and training grants and fellowship awards. This involves the collection, processing, review and evaluation of applications; support of the National Advisory Allergy and Infectious Disease Council; liaison with appropriate organizations and scientists, continual vigilance by professional staff of program progress on scientific activities; and surveillance by supporting personnel on recording and reporting of varied information concerning grants management.

The requested program increase of $17,000 will provide for two additional positions for the grants management activity. The increase also includes $6,000 for annualization of 1968 pay costs and $2,000 for pay above stated annual rate.

PROGRAM DIRECTION

| | 1968 estimate | | 1969 estimate | | Increase or decrease | |
|---|---|---|---|---|---|---|
| | Positions | Amount | Positions | Amount | Positions | Amount |
| Personnel compensation and benefits | 25 | $243,000 | 27 | $264,000 | +2 | +$21,000 |
| Other expenses | | 123,000 | | 141,000 | | +18,000 |
| Total | 25 | 366,000 | 27 | 405,000 | +2 | +39,000 |

This activity supports the Institute Director and his immediate staff in the over-all administration, coordination and direction of all the Institute's activities.

The requested program increase of $20,000 will provide for two staff positions. Also included are increases for annualization of the 1968 pay costs and $2,000 for pay above the stated annual rate. There is also an increase of $17,000 for centrally furnished services from the National Institutes of Health Management fund.

NEW POSITIONS REQUESTED, FISCAL YEAR 1969

| | Grade | Annual salary |
|---|---|---|
| Laboratory and clinical research: | | |
| Medical officer (5) | GS–13 | $81,035 |
| Research technician | GS–9 | 8,054 |
| Do | GS–7 | 6,734 |
| Research technician (2) | GS–5 | 11,130 |
| Animal caretaker (5) | WB–4 | 26,416 |
| Total (14) | | 133,369 |
| Review and approval of grants: | | |
| Scientist administrator | GS–13 | 13,507 |
| Clerk-stenographer | GS–5 | 5,565 |
| Total (2) | | 19,072 |
| Program direction: | | |
| Program analyst | GS–13 | 13,507 |
| Management analyst | GS–11 | 9,657 |
| Total (2) | | 23,164 |
| Total, new positions, all activities (18) | | 175,605 |

THREAT OF INFECTIOUS AGENTS

Senator HILL. Now, Dr. Davis, allergy and infectious diseases; all right, sir, if you will proceed now, sir.

Dr. DAVIS. Mr. Chairman and members of the committee; medical science can claim many victories against disease, but man is continually threatened by infectious agents—whether they be viruses, bacteria, fungi, or parasites. Casualties remain high. Allergic and infectious diseases together rank third as the cause of death, taking the lives of nearly 110,000 Americans each year.

Of these, respiratory infections—including influenza and pneumonia—account for about 70,000 deaths; an estimated 20 million Americans suffer from allergies.

IMMUNOLOGY AND MICROBIOLOGY

It is increasingly apparent that two disciplines basic to this Institute have a profound impact on all biomedical research: immunology, a study of the body's protective reaction, and microbiology. Their impact will continue to increase. To illustrate, I will highlight three significant areas of Institute research; one from the field of immunology, and two from microbiology.

ORGAN TRANSPLANTATION

Today, organ transplantation is surgically possible. This is evident by recent dramatic news reports of the transfer of hearts from persons recently dead to living recipients. Of the 1,600 persons who have received kidney transplants since 1954, more than half are still alive. Within the year, a surgeon in Colorado has transplanted livers in five children with somewhat encouraging results.

Senator HILL. Are those children still living as far as you know?

Dr. DAVIS. One is still living after 9 months, the others unfortunately have not survived. We are encouraged because this is a most difficult feat—a single organ transplant.

Senator HILL. You say this is the most difficult—the liver?

Dr. Davis. The liver is very difficult because one has only one organ to transplant. In the case of the kidney, one has two organs. In heart and liver there is only one.

Senator Hill. And you have to have that one organ—there is no substitute for the heart.

Dr. Davis. The primary obstacle still to be overcome is the immune response—the body's tendency to mobilize specialized forces (white cells and blood substances called antibodies) to destroy the foreign tissue. This is the same response the body makes to disease-causing microbes. Two keys to successful organ transplantation are (1) tissue typing techniques and (2) suppression of antibody production.

### Tissue Typing Techniques

Scientists have identified a relatively small number of substances in the body's tissue cells which are important in determining acceptance or rejection of a transplant. Tissue typing techniques—similar in concept to the familiar red blood cell matching principles now used routinely for blood transfusions—have been developed by investigators supported by this Institute since 1965. Early tests indicate that proper matching between donors and recipients before organ transplantation will increase the likelihood of a successful transplant.

### Rejection Control by Biology

Even with tissue matching, the rejection activity of the recipient cannot be completely eliminated. Various immunosuppressive methods—including X-ray, drugs, and biological preparations—are being employed to reduce rejection. Existing drugs have two disadvantages: they are toxic to the tissues and tend to suppress the body's normal protective reaction to infection. One biological preparation known as antilymphocyte serum—which is obtained from horses immunized with human white blood cells—acts by preventing the formation of antibodies that cause organ rejection.

Senator Hill. That is quite a step forward.

Dr. Davis. This is a promising line of investigation, the control of rejection by biological means in contrast to chemical means, which is the one that has been most widely used.

Senator Hill. When did you make this step forward?

Dr. Davis. This has been done in the past 2 years, and a great deal of work is going on in this particular avenue of investigation.

### Immunosuppressive Methods of Rejection Control

Institute-supported scientists are conducting animal studies of immunosuppressive methods for the better control of rejection.

A major effort of the Institute is directed toward developing vaccines against virus infections. One outstanding accomplishment has been the development of an oral vaccine against adenovirus type 5—a common disease among military recruits. The Army used this vaccine last year in 12 camps with an estimated 44-percent reduction in respiratory disease and as much as $18 million saved in hospitalization costs and training time.

Senator HILL. Have they had a good deal of this disease?

Dr. DAVIS. The Army had a lot of this disease in the past but the reports show that with the use of adenovirus type 4 vaccine there is a very marked reduction.

RESPIRATORY VIRUSES

I would like to mention, Senator Hill, some recent work on a new group of respiratory viruses which is just being reported. These are known as infectious bronchitis-like viruses, which are found in epidemic form from year to year. In some series of cases they may cause 14 percent of the respiratory illnesses in adults. These viruses have been identified by new techniques using what we call organ cultures; that is tissue cultures made from whole organs, and by examining these tissues under the electron microscope.

One of the interesting things about this group is that they are very closely related to viruses causing a disease of birds known as avian infectious bronchitis. It is important that the study of these viruses in birds, particularly chickens, was very helpful in developing our methods for identifying these new viruses of man.

I think it is illustrative of the importance of comparative pathology and comparative microbiology.

PNEUMOCOCCAL PNEUMONIA VACCINE DEVELOPMENT

The Institute is extending its efforts to develop a vaccine against pneumococcal pneumonia—a bacterial disease responsible for as many as 40,000 deaths a year and an estimated 300,000 hospitalized cases. The highest mortality from this disease is in the elderly and chronically ill patient who often develops an overwhelming infection before antibiotics can take effect.

Senator HILL. This would be quite a triumph, wouldn't it?

Dr. DAVIS. This would be a very significant advance and would be extremely useful in actually preventing pneumonia and reducing much hospitalization.

A successful vaccine——

Senator HILL. It would mean a lot to our troops in camps, wouldn't it?

Dr. DAVIS. Yes. It still is a serious disease in the young adult population.

Senator HILL. Particularly where you have them all living close together in barracks and associating very closely together; is that right?

Dr. DAVIS. Yes.

This would reduce some of the staggering costs of hospitalization and prolong useful lives.

RUBELLA VACCINE AND IMMUNITY MEASURE

Since 1966—when the Congress provided NIAID with additional funds for coordinating the development of a rubella vaccine—NIH scientists in the Division of Biologic Standards (1) have developed an attenuated rubella virus strain (HPV–77) which appears to confer immunity without transmitting the infection to unvaccinated contacts, and (2) have perfected a method of measuring rubella immunity through a simple, yet sensitive and reliable test.

Scientists in pharmaceutical houses—both under NIAID contract and in independent projects—have produced sufficient quantities and varieties of vaccines to test in limited groups.

We have just had a report that within the last few months several thousand individuals, adults and children, have actually be vaccinated in trials with this new vaccine. We hope that there will be enough vaccinated so that we can have an evaluation of the effectiveness of the vaccine next year during the season when the disease is expected.

Senator HILL. In other words, we have really made progress.

Dr. DAVIS. This has been very rapid progress. So far it has been more than we should have hoped for. The evaluations centers are ready for field trials, and are hopeful that rubella vaccines will be available for mass vaccination before the next rubella epidemic which is predicted for the early 1970's.

These areas represent only three of the opportunities we at NIAID have to contribute to the improvement of our Nation's health. We welcome these opportunities, and we have strong convictions that the support our Institute has enjoyed in the past will continue to pay dividends to our fellow Americans in the years to come.

### 1968 APPROPRIATIONS AND 1969 BUDGET REQUEST

The 1969 request for the National Institute of Allergy and Infectious Diseases is $98,562,000, including $500,000 for the Gorgas Memorial Laboratory, an increase of $5,060,000 over the operating level of $93,502,000 for 1968. The 1969 request provides a net increase of $3,363,000 for research grants; $95,000 for fellowships; $237,000 for training grants; $290,000 for laboratory and clinical research; $1,011,000 for collaborative research and development; $25,000 for review and approval of grants, and $39,000 for program direction.

### GORGAS MEMORIAL LABORATORY

Senator HILL. How about the $500,000 for the Gorgas Memorial Laboratory. Wouldn't it be well to think they could use more money than that?

Dr. DAVIS. Yes; as you know, the present authorization provides only that amount, but they could use——

Senator HILL. I am thinking in terms of raising that authorization.

### GRANTS

Dr. DAVIS. In addition to this, Senator Hill, the NIH provides the Gorgas Memorial Laboratory with three grants, two from our Institute and one from the National Heart Institute.

Senator HILL. How much would they amount to?

Dr. DAVIS. They amount to roughly $200,000.

Senator HILL. The total?

Dr. DAVIS. Yes.

Senator HILL. Would that be included in this $500,000?

Dr. DAVIS. No; it is in addition to the $500,000.

Senator HILL. That is what I want to emphasize—that would be in addition to the $500,000 figure.

Dr. DAVIS. Yes; in 1968 there are two NIAID grants for a total of $178,784.

PERSONNEL PROBLEMS

Dr. SHANNON. Senator Hill, I think the feeling of the people at the Gorgas Memorial Laboratory is that, in running an overseas establishment of that sort it is more difficult to retain competent staff when a substantial part of their work must depend upon research grants. This doesn't permit long-range planning. Now, I have a great deal of sympathy with them because we run some overseas operations——

Senator HILL. You know something of the difficulties?

Dr. SHANNON. They present problems far above and beyond that of a domestic operation.

It is not that they need more money. I think that with the $700,000-plus that they have now they conduct a very effective operation. But it is the way in which the money comes to them that disturbs me.

BUDGET REDUCTION EFFECT

Senator HILL. You have a reduction of some $6,910,000; is that right, Doctor?

Dr. DAVIS. Yes.

Senator HILL. How is that going to affect you?

Dr. DAVIS. This will affect us primarily in the research project grants that we will be able to pay. We expect to have funds to pay only about 60 percent of those applications which will be aproved by the study section and council in 1969.

RESEARCH PROGRAM ON IMMUNOTHERAPY

Senator HILL. Last year you recall, Doctor, this committee was concerned about the collaborative research program on immunotherapy. We had some correspondence on that. You, Dr. Lee and Dr. Shannon. What are the chances of stepping up that program?

SKIN CANCER

Dr. DAVIS. We have had some discussions with Dr. Shannon and with Dr. Endicott and we have been very much interested in these observations of modifying skin cancer by immunologic response to certain drugs. The National Cancer Institute has assembled a small group of scientists under the chairmanship of Dr. Van Scott to examine the scientific basis for these clinical observations which have been made on immunotherapy.

For example, if the drug trenimon is applied to skin cancer, it will penetrate the lesions more readily and with greater reaction than it will on normal skin. The reaction is both cytotoxic and inflammatory of the delayed hypersensitivity type. Sloughing of the lesion frequently results, with clinical improvement. Preliminary assessment by the National Cancer Institute group is that while the observations are true, there is no evidence that there is a change in the tumor antigen because the reaction occurs only at the site of drug application and the specificity has not yet been demonstrated.

The same reaction might be provoked by other means; nevertheless, the scientific basis for the immunologic control of skin cancers needs

continued support through the regular project grant mechanism and, as you know, we have at least one such application now under review.

We believe that this should be pursued intensively at the basic level in trying to determine what are the mechanisms, biological mechanisms, and what are the limits and the opportunities in a stepwise approach.

Dr. SHANNON. Senator Hill, in this area, this is really an example of what I would call applied immunology. The cancer institute has a fairly broad program in this area and we have asked Dr. Endicott to look into this and see the extent to which broader funding of this type work can be done as part of his broad immunological approach to cancer.

### COMBINING CHEMICAL AND IMMUNOLOGICAL PROCESSES

As I may have told you, it is highly unlikely that chemicals will completely eliminate every cancer cell and in diseases that require only one cell for persistence of the disease, it is quite likely that one must depend upon immunological processes to do the final cleaning out of the disease. Current work and experiments would tend to support this view.

So, it would be more appropriate for Dr. Endicott to take on this type of applied immunology than for Dr. Davis, so I have had Dr. Davis and Dr. Endicott together to exchange ideas; to assess the problem. Dr. Van Scott, who is on the staff of the National Institutes of Health, has also worked in this topical field of antitoxic agents.

And a problem will evolve, and the problem, quite frankly, is not that there are relatively few people with skills in dermatology who in addition have basic immunological skills. We have a very interesting undertaking now with the American Dermatological Association who have surveyed the entire field of dermatology and come up with a very broad plan of attack on the many diseases and I think that we finally have stimulated this group of people to realize that the underpinning of their clinical specialty will not progress until some of them, knowledgeable in the field of dermatology, engage with some of the underlying scientific issues.

### ANTICARCINOGENIC LESIONS RESULTS

Senator HILL. Hasn't the Roswell Park Institute made some definite progress, sir?

Dr. SHANNON. I think what they have done is to show that the application of several anticarcinogenic medications does more than one would expect—does more than killing the cancer cells. One of their investigators has proposed a substantially broader approach to the problem.

His research application came before the Cancer Council this past month. They recommended that, if he is to expand this work, he might benefit from some discussions. They have arranged a site visit by some of the people in the field who will discuss his problems with him and then his application will be brought back to the June Cancer Council.

Senator HILL. He came into see me quite a few months ago, way last year some time and brought me some slides and pictures of what he felt had been the results.

Dr. SHANNON. There is no doubt that there is a very dramatic result that goes beyond the simple cytotoxic action on these cancer cells.

Senator HILL. Those pictures and slides certainly evidenced very different——

Dr. SHANNON. I would say that the problem has been defined. Now it requires very careful thought, high-powered immunological investigation of precisely what is happening to cause this hypersensitive reaction which at times rejects the skin tumor.

Senator HILL. Don't you think we ought to press forward with it?

Dr. SHANNON. Yes.

Senator HILL. Anything else you want to add?

Dr. DAVIS. No, sir.

Senator HILL. Off the record.

(Brief discussion off the record.)

Senator HILL. On the record.

Any other suggestions, sir?

Dr. SHANNON. No, sir.

Senator HILL. Thank you very much, Doctor.

## National Institute of General Medical Sciences

STATEMENT OF FREDERICK L. STONE, DIRECTOR

ACCOMPANIED BY:

JAMES A. SHANNON, DIRECTOR, NATIONAL INSTITUTES OF HEALTH
GORDON J. KLOVDAHL, EXECUTIVE OFFICER, NATIONAL INSTITUTE OF GENERAL MEDICAL SCIENCES
MRS. EMMA LOU AKERS, BUDGET OFFICER, NATIONAL INSTITUTE OF GENERAL MEDICAL SCIENCES
JAMES A. HICKEY, ACTING FINANCIAL MANAGEMENT OFFICER, NATIONAL INSTITUTES OF HEALTH
WILLIAM H. STEWART, SURGEON GENERAL
CHARLES MILLER, CHIEF FINANCE OFFICER
JAMES B. CARDWELL, DEPUTY ASSISTANT SECRETARY, BUDGET

### Appropriation Estimate

"NATIONAL INSTITUTE OF GENERAL MEDICAL SCIENCES"

"For expenses not otherwise provided for, necessary to carry out the purposes of the Act with respect to general medical sciences, including the training of clinical anesthesiologists, [$160,284,000] *$165,777,000*."

AMOUNTS AVAILABLE FOR OBLIGATION

| | 1968 | 1969 |
|---|---|---|
| Appropriation | $160,284,000 | $165,777,000 |
| Transferred to "Community Health Services" | −34,000 | |
| Cutback from the 1968 President's budget required by H.J. Res. 888 | −1,351,000 | |
| Total currently authorized for obligation | 158,899,000 | 165,777,000 |
| Plus proposed release of reserves for increased pay costs | 147,000 | |
| Total available for obligation | 159,046,000 | 165,777,000 |
| Disposition of cutback: | | |
| To be used for pay costs in this account | 147,000 | |
| To be returned to the Treasury | 1,204,000 | |
| Total cutback | 1,351,000 | |

OBLIGATIONS BY ACTIVITY

| | 1968 estimate | | 1969 estimate | | Increase or decrease | |
|---|---|---|---|---|---|---|
| | Positions | Amount | Positions | Amount | Positions | Amount |
| Grants: | | | | | | |
| Research | | $84,054,000 | | $88,886,000 | | +$4,832,000 |
| General research support grants | | (7,989,000) | | (8,127,000) | | (+138,000) |
| Scientific evaluation grants | | (1,437,000) | | (1,437,000) | | |
| Pharmacology-toxicology research | | (3,500,000) | | (3,500,000) | | |
| Anesthesiology and diagnostic radiology centers | | (1,000,000) | | (1,000,000) | | |
| Fellowships | | 20,910,000 | | 21,373,000 | | +463,000 |
| Training | | 45,729,000 | | 46,901,000 | | +1,172,000 |
| Direct operations: | | | | | | |
| Collaborative research and development | 2 | 3,540,000 | 2 | 3,544,000 | | +4,000 |
| Training activities | 30 | 430,000 | 30 | 452,000 | | +22,000 |
| Review and approval of grants | 124 | 3,030,000 | 139 | 3,186,000 | +15 | +156,000 |
| Program direction | 59 | 1,353,000 | 63 | 1,435,000 | +4 | +82,000 |
| Total obligations | 215 | 159,046,000 | 234 | 165,777,000 | +19 | +6,731,000 |

OBLIGATIONS BY OBJECT

| | 1968 estimate | 1969 estimate | Increase or decrease |
|---|---|---|---|
| Total number of permanent positions | 215 | 234 | +19 |
| Full-time equivalent of all other positions | 7 | 7 | 0 |
| Average number of all employees | 212 | 217 | +5 |
| Personnel compensation: | | | |
| Permanent positions | $2,093,000 | $2,187,000 | +$94,000 |
| Positions other than permanent | 69,000 | 67,000 | −2,000 |
| Other personnel compensation | 17,000 | 16,000 | −1,000 |
| Total personnel compensation | 2,179,000 | 2,270,000 | +91,000 |
| Personnel benefits | 224,000 | 230,000 | +6,000 |
| Travel and transportation of persons | 183,000 | 210,000 | +27,000 |
| Transportation of things | 23,000 | 25,000 | +2,000 |
| Rent, communications, and utilities | 124,000 | 130,000 | +6,000 |
| Printing and reproduction | 143,000 | 142,000 | −1,000 |
| Other services | 105,000 | 112,000 | +7,000 |
| Project contracts | 3,525,000 | 3,513,000 | −12,000 |
| Payment to "National Institutes of Health management fund" | 1,749,000 | 1,863,000 | +114,000 |
| Supplies and materials | 65,000 | 84,000 | +19,000 |
| Equipment | 33,000 | 38,000 | +5,000 |
| Grants, subsidies, and contributions | 150,693,000 | 157,160,000 | +6,467,000 |
| Total obligations by object | 159,046,000 | 165,777,000 | +6,731,000 |

*Summary of changes*

| | |
|---|---|
| 1968 enacted appropriation | $160,284,000 |
| Transferred to "Community Health Services" | −34,000 |
| Cutback from the 1968 President's budget required by House Joint Resolution 888 | −1,351,000 |
| Proposed release of reserves for increased pay costs | +147,000 |
| 1968 total estimated obligations | 159,046,000 |
| 1969 estimated obligations | 165,777,000 |
| Total change | +6,731,000 |

| Increases | Base | | Change from base | |
|---|---|---|---|---|
| | Positions | Amount | Positions | Amount |
| A. Built-in: | | | | |
| 1. Annualization of new positions authorized in 1968 | | | | $28,000 |
| 2. Annualization of pay increase effective in 1968 | | | | 31,000 |
| 3. Additional day of pay in 1969 | | | | 8,000 |
| B. Program: | | | | |
| 1. Research grants | | $84,054,000 | | 4,832,000 |
| 2. Fellowships | | 20,910,000 | | 463,000 |
| 3. Training grants | | 45,729,000 | | 1,172,000 |
| 4. Review and approval of grants | 124 | 1,707,000 | 15 | 60,000 |
| 5. Program direction | 59 | 974,000 | 4 | 23,000 |
| Total program increases | | | 19 | 6,550,000 |
| Payment to "National Institutes of Health management fund" for centrally furnished services: | | | | |
| Collaborative research and development | | 4,000 | | |
| Training activities | | 1,000 | | |
| Review and approval of grants | | 73,000 | | |
| Program direction | | 36,000 | | 114,000 |
| Total net changes requested | | | +19 | +6,731,000 |

## Explanation of Changes

*Research grants.*—The $4,832,000 program increase includes $4,694,000 for regular projects (noncompeting continuations, $4,694,000; competing projects, $2,844,000; offset by a decrease of $2,844,000 in new projects and supplementals) and $138,000 for general research support grants.

*Fellowships.*—The program increase of $463,000 includes $76,000 for research career awards, $250,000 for special fellowships, and $137,000 for postdoctoral awards.

*Training grants.*—The program increase of $1,172,000 reflects increases of $1,461,000 for noncompeting continuations, $361,000 for competing continuations and $50,000 for scientific evaluation offset by decreases of $450,000 for new grants and $250,000 in supplementals.

*Review and approval of grants.*—The program increase of $60,000 and fifteen positions will support the staff required to perform maximum evaluation of the grants programs.

*Program direction.*—The program increase of $23,000 and four positions will strengthen the immediate staff in the Office of the Director, including staff for specialized program analysis.

### *Explanation of transfers*

Transfer to "Community health services":

| | |
|---|---|
| 1968 estimate | $34,000 |
| 1969 estimate | ------- |

### PURPOSE

Transfer of Scientific Evaluation Grant funds for support of Health Services Research Study Section.

### JUSTIFICATION—NATIONAL INSTITUTE OF GENERAL MEDICAL SCIENCES

| | 1968 estimate | | 1969 estimate | | Increase or decrease | |
|---|---|---|---|---|---|---|
| | Positions | Amount | Positions | Amount | Positions | Amount |
| Personnel compensation and benefits | 215 | $2,403,000 | 234 | $2,500,000 | +19 | +$97,000 |
| Other expenses | | 156,643,000 | | 163,277,000 | | +6,634,000 |
| Total | 215 | 159,046,000 | 234 | 165,777,000 | +19 | +6,731,000 |

## General Statement

The National Institute of General Medical Sciences supports a broad base of fundamental and applied biomedical research activities aimed at the solution of certain major health problems. Specific programmed research objectives are to develop new knowledge for safer and more effective use of drugs, to understand the genetic basis of disease, to improve health services through the application of engineering knowledge to medical care; and to provide better diagnosis and therapy in medicine. The Institute also has principal responsibility for training young medical scientists in some 20 pre-clinical and clinical disciplines, thus reinforcing strongly the total National Institutes of Health research effort.

The National Institute of General Medical Sciences is requesting a total of $165,777,000 for F.Y. 1969, an increase of $6,731,000 over F.Y. 1968. This increase is to be used to sustain the support of research and training and increase the effort in existing programs of Clinical and Applied Sciences, Human Genetics and Sciences Supporting Applied Efforts.

### RESEARCH GRANTS

| | 1968 estimate | 1969 estimate | Increase or decrease |
|---|---|---|---|
| Regular program | $70,128,000 | $74,822,000 | +$4,694,000 |
| Special programs | 13,926,000 | 14,064,000 | +138,000 |
| Total, research grants | 84,054,000 | 88,886,000 | +4,832,000 |

## Introduction

The research effort of NIGMS is two-fold in scope. It consists in the support, first, of several areas of planned investigation which are designed to exploit opportunities for early application of research discoveries to major health problems and, second, of many independent research projects in diverse fields of science which in sum total provide the knowledge needed by applied, disease-oriented programs. These special areas include automation of clinical laboratories, trauma, pharmacology/toxicology, and human genetics. Development of a major program in each of these areas depends strongly on research results developed initially within small, independent research projects in various fields, the results of which can be brought to bear on a special problem or area.

For instance, study of gaseous transport and respiratory physiology has been important to the anesthesiology and surgery programs. Research discoveries in pharmacology, analytical chemistry and computer science have been important to both the automated clinical laboratories and the clinical pharmacology programs. Progress in biophysics, biomathematics and biochemistry has been essential to research on the technical developments in automated clinical laboratories, anesthesiology and trauma. The important programs and centers which are developing are combinations of clinical and multi-disciplinary science programs. Several of these grew out of small or individual research projects whose initial support was begun by NIGMS.

Biomedical engineering, human genetics, pharmacology and toxicology are less clinically oriented programs which are, however, of increasing importance to the clinician. All of these programs have their roots in the fundamental science areas. Each may result in major advances in the treatment of specific diseases.

### PROGRAM PLANS IN 1968 AND 1969

The budget proposed for the coming year will sustain the support of research and increase effort in the existing programs to hasten the application of developments in biomedical science and clinical research areas to specific medical problems.

A number of awards have been made to highly qualified centers for research in the automation of clinical laboratories and to develop research programs in anesthesiology, radiology and trauma. The coming year will see these programs attain a significant level of productivity. Research efforts are expected to reveal

ways of reducing the time and increasing the accuracy with which specimens are processed in the clinical diagnostic laboratory. Techniques for obtaining added information from diagnostic radiographic films are being developed and new insight is expected to be gained into the processes which cause death and disability in trauma victims.

Fiscal 1968 saw the test tube synthesis of a complete virus DNA by Dr. Kornberg of Stanford University. This major research advancement brings valuable insight into mechanisms associated with virus replication and has possible value in developing an understanding of phenomena such as the cancer process. Research in the pharmacology/toxicology program was stimulated by the opening of several new centers. The coordinated efforts of the project directors will allow this program to function as a national effort. The NIGMS pharmacology/toxicology research effort has already provided background information which will prove valuable in the extrapolation of research discoveries in animals to therapies for human illnesses. 1968 also saw the development of better methods for measuring the effectiveness and the required dose of drugs and for predicting the possible toxic reactions to drugs based on the genetic makeup of the recipient.

Since these applications include coordinated clinical and basic research in pharmacology and toxicology applications to clinical medicine will be hastened.

*Clinical sciences*

*Trauma.*—For the past several years the NIGMS has sought increasingly to stimulate and support research in to the complex aspects of the therapy of trauma. Though previously little research has been done on this problem, the nation's fourth leading cause of death and disability, and the leading cause of disabling of young people between the ages of 1 and 35, the NIGMS has now started several centers for trauma research and has an additional 23 small research projects which are contributing in specific areas. Present major programs are concentrating on the metabolism of the injured patient, biochemical changes at the cellular level due to inadequate tissue oxygenation; infections as a sequela of burns or decreased resistance due to other major injury; the use of on-line computers for the constant assessment of severly injured patients: and other aspects of the pathology and physiology of trauma. The smaller projects in addition to supplementing these studies are also concerned with different phases of shock, the repair of tissues and wound healing, rehabilitation, prosthetic devices and drowning. During the coming year, the Institute expects to review and hopefully to fund two or three more trauma research centers at a cost of $500,000 which will add significant strength to this program. The present support of trauma research is approximately $1,400,000. The economic return to the country from reducing the time of stay in the hospital, reducing costs of treatments, and decreasing the time required for rehabilitation of the traumatized patient, numbering the tens of thousands per year, cannot be overestimated.

*Research in genetics*

The NIGMS program in Gentics seeks to improve health through understanding of the role of heredity in health and disease. It is estimated that in the United States more than a hundred thousand pregnancies end each year in miscarriage and that thousands of babies are born each year with such defects as mental retardation or abnormal anatomical and glandular development because of fetal chromosomal errors. Already evidence of cause and effect relationship between gene and action of specific diseases has been shown in a number of familial or inherited diseases. These include sickle cell anemia. Down's syndrome, cystic fibrosis, phenylketonuria, and others. It is in this area, and in the associated science underlying this area, that one of the most significant advances in Institute programs occurred this year. Nobel Laureate, Dr. Arthur Kornberg, announced the synthesis of biologically active DNA which enabled him to produce a product that acted exactly like a virus when introduced into living cells. This program is contributing valuable information in genetic factors which affect tissue and organ transplanation. The Institute's program is also concerned with chemical mutagenesis in the mammalian species. This refers to the ability of various chemicals in the environment to cause chromosomal aberrations in the same way that radiation or X-rays may damage the human reproductive process. Altogether, this program supports some 200 research projects covering the broad spectrum of genetics research including genetic chemistry, pharmacogenetics, and population genetics. The present level of support is approximately $8,000,000.

In 1969, we do not expect to appreciably increase the number of projects in this area; emphasis will be placed on selection of those projects which enhance and further the aims of this program, especially those areas of genetics research which can be applied directly to clinical problems.

*Automated clinical laboratories*

This program represents a concerted activity to bring chemistry and engineering knowledge and capabilities to bear on the information explosion in biochemistry and physiology as they relate directly to patient care. The program's purpose is to provide, through mechanical means, a more rapid and more accurate analysis of biochemical and physiological data obtained from patients, and to provide the physician with reliable diagnostic data in a shorter time.

A next step in this process is expected to provide the physician automatically with an analysis of much of these data comparing by computer those chemical and physiological data which vary significantly with each other or with the normal.

A few years ago the armamentarium of the average hospital laboratory was some eight to ten clinical test procedures. Today this has been expanded to include several hundred tests on tissues, blood and other fluids. It is estimated now that the total number of annual tests in the United States is nearing one billion per year and it is expected to double within the next five years as it has over the past two decades. Present technology allows the "machine system" to make many simultaneous analyses for "routine" blood constituents. Experts in the field have advised the Institute that by improving, expanding and developing new instrumental approaches, hardware and software will be made available which should increase the laboratory capability by 15 percent to 20 percent by 1970 at a great savings of money and manpower.

Present programs are aimed at bringing much of this automation capability not only to large hospitals but also to the smaller hospitals where there are significant shortages of adequate automation to perform these tests and a severe limitation of trained personnel. These projects have been funded at a level of approximately $1,400,000 for the past two years, supporting sixty-one research projects and two contracts. Linked to this effort are thirty-eight specific research projects totaling $1,055,000 to provide essential understanding of new chemical techniques and methodologies which can be applied to further development. Modest expansion of the program will continue in the coming year with speical emphasis on the development of automated analysis techniques.

*Behavioral sciences*

Support of the behavioral sciences was assigned to this Institute because of their relation to other biomedical science disciplines and because research in the behavioral sciences provides information essential to the study of the interaction of man and his surroundings. The present program consists of only ten projects investigating behavioral development, environmental adaptation and learning. The support of anthropological studies of populations is included in this category and is closely related to those projects in the genetics program concerned with population genetics. There are also three programs in the neurosciences which study behavior as related to function. Present support is $300,000, at the cellular and molecular level. Our plans are to increase support in this area to $400,000 during the coming year.

*Supportive basic research*

The NIGMS supports and encourages promising lines of investigation, utilizing the tools of the physical, biological, chemical, and mathematical sciences, which are concerned with the structure and function of living tissues and the processes of disease. These biomedical disciplinary programs are important to all of the Institutes.

The knowledge and information gained in the primary sciences permits explorations of mechanisms which can be applied to problems of medical significance. For example, promising lines of investigation in the physical sciences, computer technology, and chemistry lighted the way to engineering in biology and medicine and development of devices of patient monitoring, automated chemical tests in clinical laboratories, microelectronic devices for patient diagnosis, etc. To provide for coordination of this program and to guide it into the programs with targeted goals, a program director for biophysical sciences has been appointed.

Studies of living function are essential to all of the other programs; they provide the scientific rationale for these more applied missions. The kinds of research supported in this program are necessarily diverse since it is unrealistic to anticipate those scientific discoveries which might be applied to solving important medical problems. Therefore, the Institute supports programs that will increase information and advance knowledge on how cells react in disease states; studies in bioenergetics, which are related to problems of health and nutrition; and the chemistry and physics of cell function and structure in normal state and the disarrangements which occur in disease.

The programs in this area are a major unifying thread of research in the biological sciences and are focused at life processes studied on all levels of biological organization with the aim of elucidating the mechanisms and their control.

*Pharmacology-toxicology research centers*

The Institute's Pharmacology-Toxicology Program seeks to improve human health through safer and more effective use of drugs. In recent years, pharmacology has produced many drugs and chemicals which have promoted the well being and comfort of millions of patients and have markedly altered the course of many diseases. On the other hand, the treatment of most types of cancer, heart disease, and stroke is still inadequate except for those situations where major surgery is feasible.

There is a serious need for new medications for the metabolic diseases, the degenerative diseases such as arthritis, the allergic or hypersensitive conditions and for the treatment of trauma and injury. As rapidly as these needs are met through production of new pharmacological products, the need for evaluation of possible adverse drug reactions and long-term effects is created. Knowledge obtained in this program is important to the medical profession and all the government agencies administering medical programs. Scientific research is necessary to provide information for safe use of drugs in the many disease oriented programs of the PHS where drugs are being applied and reviewed. This program is providing a focal point for the detection and study of adverse drug reactions.

During the past year several important developments have taken place. Methods have been developed and are being applied in study of the metabolism of a number of drugs, e.g., glutethimide, a sedative, guanethidine, an antihypertensive and related compounds, which show potential as therapeutic agents in hypertension. Application of chemistry methods such as gas chromatography and mass spectrometry to studies of drug metabolism in humans is being made. This is probably the most sensitive and specific methods of identification and analysis available and may reveal unsuspected toxic byproducts or new useful compounds.

In the coming year further application of such methodology can be expected to lead to improved understanding of the effects of drugs and consequently more effective use of these materials. A particularly important study of the passage of drugs across the maternal—fetal barrier is planned. Such studies are of extreme importance in medication of pregnant women. New programs are also planned in molecular pharmacology to provide an understanding of how drugs react not only with the body cells and membranes but also with each other within the body. This is expected to reveal information on the causes of adverse drug reactions.

The present funding for the centers and projects in this area is $3,500,000. During the next year the existing centers will continue their development and new program projects specifically in the areas of maternal and fetal pharmacology, physical pharmacology and related areas will be developed.

*Centers for research in anesthesiology and diagnostic radiology*

As a result of testimony before Congress relating to the Heart Disease, Cancer and Stroke Program, it became apparent that major advances in the supporting specialties such as anesthesiology and diagnostic radiology would be essential to the conquest of these diseases. Therefore, the NIGMS was directed to stimulate research in these areas. In F.Y. 1968, $1,000,000 will be used for the development and support of a limited number of centers of excellence for research in these fields. To date two important centers in anesthesiology have been established utilizing fully the funds made available. Programs are being developed in diagnostic radiology but none yet have qualified as centers.

*Anesthesia.*—The modern specialty of anesthesiology is concerned with far more than rendering a patient unconscious so that otherwise painful procedures can be carried out. The anesthesiologist because of his special combination of skills in clinical and underlying areas is concerned with all aspects of pain control, with the management of the unconscious patient from any cause, the treatment of respiratory emergencies, resuscitation, inhalational therapy, post-operative care, and many other problems. With full realization of the breadth and importance of this specialty, the NIGMS supports research in all its related areas as well as in the actual use and administration of anesthetics. Much of the research must be at original levels of pharmacology, respiratory physiology, and neurophysiology. Other research involves bioengineering approaches as in the development of automated anesthesia techniques. An important clinical area is concerned with obstetrical anesthesia and its effects on the newborn. This is still a major cause of natural death and infant distress. All of these areas are covered in the two new anesthesia research centers which have been established, and in the four active and highly productive program projects. They are further strengthened by our 30 individual projects concerned with specific aspects of the problem. There are good prospects for the development of at least three new major programs and several new smaller projects in F.Y. 1969.

*Diagnostic Radiology.*—The central and essential role of diagnostic radiology in clinical medicine is well-known. The diagnostic radiologist functions primarily in the hospital setting where his service to every specialty creates a heavy work load which together with his need for very expensive, complex equipment makes research difficult. Nevertheless, new techniques and new approaches are essential if the radiologist is to meet the increasing demands for his services both in terms of the numbers of examinations required and the new types of procedures which should be developed.

At present, the NIGMS is supporting research in the techniques of the specialty including such special procedures as autoradiography and thermographic analysis of body heat radiation patterns to establish the existence of tumor, blocked blood vessels, or other abnormal conditions. The Institute also is supporting research on radioisotopes which will provide new instruments and computerized systems which will enhance greatly the radiologist's effectiveness in diagnosis using these valuable tools. One new project on a completely electronic emaging and recording system for X-rays permitting electronic reading of chest X-rays may have a tremendous effect on radiology practice in the future. Other programs which eventually will develop into a limited number of centers for research in diagnostic radiology have been programmed and are being considered at this time.

RESEARCH GRANTS PROGRAM ANALYSIS

| Fields | 1968 estimate | 1969 estimate | Increase or decrease |
|---|---|---|---|
| Clinical and applied sciences | $14,587,000 | $17,087,000 | +$2,500,000 |
| Human genetics and other biologic control systems | 19,986,000 | 21,486,000 | +1,500,000 |
| Pharmacology-Toxicology and medicinal chemistry | 9,117,000 | 9,117,000 | ---------- |
| Sciences supporting applied efforts | 26,438,000 | 27,132,000 | +694,000 |
| Subtotal, regular program | 70,128,000 | 74,822,000 | +4,694,000 |
| General research support grants | 7,989,000 | 8,127,000 | +138,000 |
| Scientific evaluation and planning | 1,437,000 | 1,437,000 | ---------- |
| Pharmacology-toxicology research | 3,500,000 | 3,500,000 | ---------- |
| Anesthesiology and diagnostic radiology centers | 1,000,000 | 1,000,000 | ---------- |
| Total, research grants | 84,054,000 | 88,886,000 | +4,832,000 |

DISTRIBUTION OF RESEARCH GRANTS

| | 1968 estimate | | 1969 estimate | | Increase or decrease | |
|---|---|---|---|---|---|---|
| | Number | Amount | Number | Amount | Number | Amount |
| 1. Noncompeting continuations | 1,120 | $49,883,000 | 1,200 | $54,577,000 | +80 | +$4,694,000 |
| 2. Competing projects | 189 | 8,708,000 | 251 | 11,552,000 | +62 | +2,844,000 |
| 3. Supplementals | (150) | 908,000 | (53) | 700,000 | (−97) | −208,000 |
| 4. New | 123 | 10,629,000 | 93 | 7,993,000 | −30 | −2,636,000 |
| 5. Subtotal, regular program | 1,432 | 70,128,000 | 1,544 | 74,822,000 | +112 | +4,694,000 |
| 6. General research support grants | | 7,989,000 | | 8,127,000 | | +138,000 |
| 7. Scientific evaluation and planning grants | | 1,437,000 | | 1,437,000 | | |
| 8. Pharmacology-toxicology research centers | | 3,500,000 | | 3,500,000 | | |
| 9. Anethesiology and diagnostic radiology centers | | 1,000,000 | | 1,000,000 | | |
| 10. Subtotal, special programs | | 13,926,000 | | 14,064,000 | | +138,000 |
| 11. Total, research grants | 1,432 | 84,054,000 | 1,544 | 88,886,000 | +112 | +4,832,000 |

*Fellowships*

| | |
|---|---|
| Total fellowships: | |
| 1968 estimate | $20,910,000 |
| 1969 estimate | 21,373,000 |
| Increase or decrease | +463,000 |

INTRODUCTION

Through its various fellowship programs, the National Institute of General Medical Sciences annually supports several hundred carefully selected scientists for research training in a broad spectrum of biomedical sciences. During F.Y. 1968, approximately 2,215 individuals will receive support under these programs in leading institutions throughout the country. All are working with mentors of proven competence and several, in fact, under the guidance of Nobel Laureates and other eminent leaders of the scientific world. It can be confidently expected that from this pool of scientific talent will emerge many outstanding biomedical investigators of the future. It is pertinent to note that a recent study of 300 of the Institute's former Research Career Development Awardees reveals that 50 percent are currently full professors or departmental chairman at various universities throughout the Nation. An additional 30 percent have associate professorships, and most of the remainder hold responsible positions in research institutes or government laboratories.

PROGRAM PLANS IN 1968 AND 1969

*Predoctoral Fellowships.*—Basic to the several types of fellowships awarded is the large predoctoral program, which provides full-time graduate training leading to doctoral degrees in a wide variety of disciplines related to health.

Funds expended through this program represent a wise investment in our Nation's future, for it constitutes an important mechanism for assuring trained biomedical investigators to develop the application of basic findings to clinical medicine in the years ahead. During the current year, and in the coming year, support will be provided for some 1,430 predoctoral fellows, nearly one-third of whom can be expected to complete the requirements for their doctoral degrees annually.

Support is now provided for predoctoral fellows in approximately 120 institutions throughout the United States. Continued emphasis will be devoted during the coming year to achieving still broader institutional representation in this program while at the same time maintaining high standards of quality. In this endeavor, particular attention will be directed to the encouragement of fellowship support in departments to which training grants are unavailable. In addition, the program will be utilized to foster the training of additional graduate students in the areas of biomedical engineering, biophysics, genetics, and pharmacology-toxicology.

*Postdoctoral Fellowships.*—As the substance and methods of the biomedical sciences become increasingly complex, the need for research training beyond the formal graduate curriculum becomes more universal. Postdoctoral fellowships are designed to help meet this need, and from this program emerge young scientists qualified to conduct meaningful research in a wide variety of health-related fields.

Cognizant of the acute need for research manpower in pharmacology-toxicology as well as the increasing needs in biomedical engineering, biophysics, and genetics, staff effort will be devoted to the mounting of a more substantial program of postdoctoral training in these areas. Some emphasis will also be directed toward the support of additional postdoctoral fellows in the clinical sciences of anesthesiology, diagnostic radiology, and experimental surgery, although the major thrust in these areas will be provided through the programs of special fellowships and development awards.

The demand for postdoctoral fellowship support has increased markedly in recent years, and has far outstripped the number of available awards. Reaching a peak of 348 fellows in 1967, the number supported during the current year will be reduced to an estimated 271 due to an increase in stipend level and supply allowance. The increase of $137,000 requested in 1969 will permit a modest expansion of this program toward a level more commensurate with the need for postdoctoral training.

*Special Fellowships.*—Special fellowships, which are characterized by a high degree of flexibility with respect to eligibility requirements, stipend levels, and duration of award, constitute an ideal mechanism for implementing the shifting emphases of the Institute's programmatic interests and responsibilities. Traditionally, these awards have been utilized primarily to support mature scientists in mid-career to take time from the pressures of regular professional responsibilities for the purpose of increasing or updating their research capabilities through advanced or specialized training. To an increasing degree, however, the Institute is emphasizing the special fellowship as a means of supporting young persons just emerging into scientific maturity. Thus, physicians who have just completed a residency and desire research training leading to a career in academic medicine, and young engineers who wish to enter the field of biomedical engineering are being supported in increasing numbers through this program.

Although still relatively small, the special fellowship program thus provides an important mechanism for fostering the training of highly selected individuals, with varied professional backgrounds, in fields of particular relevance to the mission of the Institute. During the current year, and in 1969, program emphasis will be focused on such areas as pharmacology-toxicology, biomathematics, biomedical engineering, biophysics and genetics, as well as on the selected clinical science of anesthesiology, diagnostic radiology and surgery. The increase of $250,000 requested for 1969 will permit a modest expansion of this program from the current level of 158 awards to an estimated 172 in the coming year.

*Research Career Development Awards.*—Development awards are designed to foster the development of young scientists with outstanding research potential for careers of independent research in the sciences related to health. Through these awards, the Institute provides stable salary support (5 to 8 years) for some 300 talented young men and women during the crucial period of their careers when they are seeking to bring to fruition their capacity for independent investigation. From this program have emerged many individuals currently occupying senior positions in medical schools and other academic institutions, as well as in leading research institutes throughout the Nation.

Development awards, like special fellowships, are well adapted to the provision of advanced research training in clinical specialties as well as in scientific areas of particular importance to the mission of this Institute. Accordingly, during the currently and coming year, continued programmatic effort will be devoted to the fields of anesthesiology, diagnostic radiology, and surgery, and also to the important areas of pharmacology-toxicology and genetics, and the interdisciplinary sciences of biomathematics, biomedical engineering, and biophysics.

*Research Career Awards.*—Although new career awards are no longer being granted, provision must be made for the support of 40 ongoing awards. For this purpose, an estimated $1,256,000 will be required in F.Y. 1969.

DISTRIBUTION OF FELLOWSHIPS

| | 1968 estimate | | 1969 estimate | | Increase or decrease | |
|---|---|---|---|---|---|---|
| | Number | Amount | Number | Amount | Number | Amount |
| 1. Continuations: | | | | | | |
| (a) Noncompeting | 1,272 | $12,580,000 | 1,350 | $14,026,000 | +78 | +$1,446,000 |
| (b) Competing | 91 | 1,302,000 | 112 | 1,450,000 | +21 | +148,000 |
| 2. Supplementals | (591) | 842,000 | (20) | 147,000 | −(571) | −695,000 |
| 3. New awards | 852 | 6,186,000 | 787 | 5,750,000 | −65 | −436,000 |
| 4. Total fellowships | 2,215 | 20,910,000 | 2,249 | 21,373,000 | +34 | +463,000 |

FELLOWSHIPS (BY TYPE OF PROGRAM)

| | | | | | | |
|---|---|---|---|---|---|---|
| 1. Predoctoral | 1,430 | $7,947,000 | 1,430 | $7,947,000 | | |
| 2. Postdoctoral | 271 | 2,409,000 | 307 | 2,546,000 | +36 | +$137,000 |
| 3. Special | 158 | 2,160,000 | 172 | 2,410,000 | +14 | +250,000 |
| 4. Development awards | 316 | 7,214,000 | 300 | 7,214,000 | −16 | |
| 5. Career awards | 40 | 1,180,000 | 40 | 1,256,000 | | +76,000 |
| 6. Total fellowships | 2,215 | 20,910,000 | 2,249 | 21,373,000 | +34 | +463,000 |

*Training grants*

Total training grants:

| | |
|---|---|
| 1968 estimate | $45,729,000 |
| 1969 estimate | 46,901,000 |
| Increase or decrease | +1,172,000 |

INTRODUCTION

The graduate training programs of the National Institute of General Medical Sciences are essential to achievement of the Nation's health research goals as well as those specific goals of the Institute. The development of a research program depends more upon the existence of adequately trained manpower than any other factor. As new areas of science develop and become clinically important, there must be manpower present and trained to exploit these applications and discoveries. The training of such persons must begin years in advance of the clearly anticipated need, since a minimum of seven years of training beyond the baccalaureate degree is necessary to produce a fully competent biomedical scientist.

From its inception the Institute has been responsible for the majority of the National Institutes of Health's program to develop new young health scientists. Research training programs currently aid some 4,500 predoctoral students on 637 different college and university grants. The number of students assisted has remained approximately constant over the past two years but the number of training grants has declined by 34. This decrease reflects a rise in the quality level of training programs as well as increased costs of research training in continuing programs supported by the Institute. Each research training grant award supports a number of students (trainees), enriches the research environment, and introduces apprentice researchers to broad perspectives of research under experienced and highly competent teachers. Research fellowships, by contrast, are administered on the basis of individual national competition but serve to complement training grants in several ways. At the predoctoral level, for example, they may be used to help support capable candidates in schools where formal training grant programs have not been established.

On a nationwide basis, Institute training grants support on the average more than 40 percent of the total national graduate enrollment in the fundamental health science disciplines, in some of which this ranges as high as 70 percent. This research manpower development program is thus able to substantially assist in determining both the scope and direction of the Nation's future health research effort and capabilities. Altogether, more than 25 biomedical and clinical science disciplines are supported which provide much of the research trained manpower necessary for the varied and continuing research programs central to the missions of the National Institutes of Health.

Experience over the past several years shows that about one-half the Institute-supported trainees and fellows will be recruited to research and academic positions in the Nation's medical schools where a large portion of NIH research-supported activities are conducted. This is most significant since a large number of academic positions are currently unfilled and projected needs for scientists to staff expansion of the Nation's medical education and research efforts over the next decade are still growing.

As intended and directed by the Congress, the Institute's manpower development program constitutes the Nation's most important single public support program for the training of medical scientists. These include the scientists who are needed now and who will be needed in increasing numbers for achievement of major research goals in areas of pharmacology and toxicology, biomedical engineering, biophysics, genetics, molecular biology, experimental psychology, and other behavioral sciences. The Institute is almost the sole source of support for training in research in general clinical areas, such as anesthesiology, diagnostic radiology, and general surgery. In a number of these areas where manpower needs are unusually urgent and where programmatic support is essential to the Institute's research missions, the Institute stimulates and supports special programs of research training.

PROGRAM PLANS IN 1968 AND 1969

Because of the marked deficit in qualified researchers, and in those competent to train others, a special supplemental appropriation in F.Y. 1966 permitted the Institute to substantially increase the quantity and improve the quality of research training programs in surgery, diagnostic radiology, and anesthesiology. These programs continued to receive emphasis, although at a modest growth in F.Y. 1967 and 1968. This trend is expected to continue in F.Y. 1969.

Present indications are that trainees supported by existing grants in research anesthesiology will increase in number from 29 in 1966 to 69 in 1967 to 78 in 1968; in diagnostic radiology from 16 to 75 to 85 in the same period; and in surgery from 18 in 1966 to 122 in 1968. New training programs in *clinical* anesthesiology were launched in F.Y. 1967 to improve the quality of clinical care and bring the latest research innovations, after trial and evaluation, to the bedside. Approximately 80 postdoctoral and special trainees are enrolled in this program, which will be continued at the same levels in F.Y. 1968 and F.Y. 1969.

The Institute considers it important that emphasis be placed on increasing the number of full-time students working toward a definite career goal. As a result, training programs support only full-time trainees on stipends.

*Medical scientist program*

The objective of the Medical Scientist Training Program is to assist universities and their medical schools in the development of flexible, individualized programs of combined medical and scientific training for highly-motivated trainees of superior research and academic potential. The grants are institutional in nature, and permit trainees to draw upon the full range of academic, scientific, and related opportunities. Medical Scientists, upon the completion of training, will differ from most scientists in having had the background of medical training required to investigate direct clinical problems of disease in man. They will differ from most clinicians in having had extended research experience and the essential background in appropriate combinations of the physical, biomedical, and behavioral sciences needed to bring the fundamental knowledge of these disciplines into clinical research. It is estimated that approximately 200 individuals with such combined training are needed each year for the next decade. This program now consists of 6 grants with funds which total approximately $1,500,000 and which support approximately 112 trainees, each enrolled in a six-year program. The first 15 trainees in these programs are expected to graduate in 1970.

The funds requested in 1969 will permit the continuation of 611 high quality training programs. At the same time, 26 programs of lesser merit will be discontinued. Because of increased costs of living, the 611 continuing programs will cost more than the 637 programs supported in F.Y. 1968. In addition, three new training grants will be made. All of the requested increase will be devoted to meet committed increases in the medical scientist and clinical research training areas.

TRAINING GRANTS PROGRAM ANALYSIS

| | 1968 estimate | | 1969 estimate | | Increase or decrease | |
|---|---|---|---|---|---|---|
| | Number | Amount | Number | Amount | Number | Amount |
| Anatomical sciences | 41 | $2,450,000 | 40 | $2,450,000 | −1 | |
| Anesthesiology | 14 | 1,120,000 | 14 | 1,170,000 | | +$50,000 |
| Clinical anesthesiology | 30 | 1,000,000 | 30 | 1,000,000 | | |
| Behavioral sciences | 32 | 2,400,000 | 30 | 2,400,000 | −2 | |
| Biochemistry | 71 | 5,300,000 | 68 | 5,300,000 | −3 | |
| Biomedical engineering | 17 | 1,400,000 | 16 | 1,400,000 | −1 | |
| Biometry | 30 | 2,300,000 | 29 | 2,300,000 | −1 | |
| Biophysical sciences | 30 | 2,700,000 | 29 | 2,700,000 | −1 | |
| Epidemiology | 10 | 750,000 | 10 | 750,000 | | |
| Genetics | 34 | 2,820,000 | 34 | 2,820,000 | | |
| Medical scientist | 6 | 1,429,000 | 7 | 1,877,000 | +1 | +448,000 |
| Microbiology | 51 | 2,530,000 | 48 | 2,530,000 | −3 | |
| Multidisciplinary and special programs | 32 | 3,420,000 | 31 | 3,420,000 | −1 | |
| Nutritional sciences | 13 | 650,000 | 12 | 650,000 | −1 | |
| Pathology | 59 | 3,710,000 | 56 | 3,710,000 | −3 | |
| Pharmacology and toxicology programs | 70 | 4,650,000 | 66 | 4,694,000 | −4 | +44,000 |
| Physiology | 50 | 2,780,000 | 47 | 2,780,000 | −3 | |
| Diagnostic radiology | 21 | 1,760,000 | 21 | 2,100,000 | | +340,000 |
| Surgery | 26 | 2,260,000 | 26 | 2,500,000 | | +240,000 |
| Scientific evaluation and planning | (2) | 300,000 | (2) | 350,000 | | +50,000 |
| Total training grants | 637 | 45,729,000 | 614 | 46,901,000 | −23 | +1,172,000 |

DISTRIBUTION OF TRAINING GRANTS

| | | | | | | |
|---|---|---|---|---|---|---|
| 1. Continuations: | | | | | | |
| (a) Noncompeting | 539 | $37,000,000 | 511 | $38,461,000 | −28 | +$1,461,000 |
| (b) Competing | 86 | 7,429,000 | 100 | 7,790,000 | +14 | +361,000 |
| 2. Supplementals | (10) | 400,000 | (10) | 150,000 | | −250,000 |
| 3. New programs | 12 | 600,000 | 3 | 150,000 | −9 | −450,000 |
| 4. Scientific evaluation and planning | (2) | 300,000 | (2) | 350,000 | | +50,000 |
| 5. Total training grants | 637 | 45,729,000 | 614 | 46,901,000 | −23 | +1,172,000 |

TRAINING GRANTS (BY TYPE OF PROGRAM)

| | | | | | | |
|---|---|---|---|---|---|---|
| 1. Graduate | 607 | $44,429,000 | 584 | $45,551,000 | −23 | +$1,122,000 |
| 2. Clinical training anesthesiology | 30 | 1,000,000 | 30 | 1,000,000 | | |
| 3. Scientific evaluation and planning | (2) | 300,000 | (2) | 350,000 | | +50,000 |
| 4. Total training grants | 637 | 45,729,000 | 614 | 46,901,000 | −23 | +1,172,000 |

COLLABORATIVE RESEARCH AND DEVELOPMENT

| | 1968 estimate | | 1969 estimate | | Increase or decrease | |
|---|---|---|---|---|---|---|
| | Positions | Amount | Positions | Amount | Positions | Amount |
| Personnel compensation and benefits | 2 | $11,000 | 2 | $20,000 | | +$9,000 |
| Other expenses | | 3,529,000 | | 3,524,000 | | −5,000 |
| Total | 2 | 3,540,000 | 2 | 3,544,000 | | +4,000 |

## Introduction

This activity supports by contract research projects that are both developmental and applied in nature and directed toward the mission of this Institute. Current programs supported by this activity include: (1) Automated Laboratory Medicine; (2) Pharmacology-Toxicology; (3) Genetic Chemistry; (4) Hospital Computer Project; and (5) Studies and Projects Conducted by the National Academy of Sciences.

### Program plans in 1968 and 1969

*Automated laboratory medicine*

This program will provide the means whereby the most recent advances in medical laboratory science may be applied to the practice of preventive, diagnostic and therapeutic medicine as well as to the evaluation of individual and

public health through the design and development of automated clinical laboratory equipment.

Increasing numbers of clinical laboratory procedures are being demanded for diagnostic purposes. Recent studies indicate that the number of tests performed in the hospital laboratory has increased 10–15 percent per year since 1955 and there is no indication of a leveling off of this trend in the foreseeable future.

In addition to the problem of handling the massive amount of data now obtained on each hospital patient, other serious problems are created by the increasing number and complexity of tests. The solution to the clinical laboratory problem rests in: the automation of current laboratory procedures; development of new procedures which can be automated; invention of devices which can accept samples and produce finished results in a short time with high reliability, reproducibility and sensitivity; use of computer technology to control processing; recording of results; and print-out of data. Other advantages to development of automation to its maximum extent would be: a reduction in the time elapsed from receipt of a sample to delivery of information to the physician from days or hours to minutes; rapid diagnosis by providing computer output of all tests performed on each patient on a single print-out sheet; identification of abnormal test results by computer program; and consecutive read-out of past tests, as a profile, to identify trends in patient response.

Although the largest portion of this program is supported by grants, two contracts totaling $500,000 are being supported in the current year in this field. These contracts are largely for the purpose of automating analysis of steriods and urinary constituents. The 1969 estimate provides for continuing this program at the same level.

*Pharmacology/Toxicology*

This program provides by contract support of collaborative studies designed to develop information in specific areas, such as: (1) study of widely used sedatives which may interfere with the beneficial and occasionally life-saving action of other drugs frequently prescribed for the treatment of acute coronary thrombosis (heart attack); (2) study of drugs given for the treatment of serious illness which may appear to have failed in certain patients not because of the inadequacy of the drug, but because of inability to achieve the necessary blood levels or concentrations in the average person; (3) study of drugs which may at times have very serious adverse side effects. In 1968 this program is being supported at a level of $1,000,000 and the 1969 estimate provides for a program at the same level.

*Genetic chemistry*

The objectives of this program are to understand the functions of genetic material; to determine the specific sites in the molecule which determine genetic activity; and to find appropriate ways of possibly altering genetic functions to correct defects producing disease states. In an attempt to solve this problem the Institute has contracts with the Oak Ridge National Laboraory for research on methods of separation, purification, and isolation of pure ribonucleic acids (RNA) and specific enzymes, for isolation of large quantities of pure RNA on pilot-plant scale, and provision of these biomacromolecules so that chemical analyses and structure details may be determined. To date, this research has succeeded in devising novel separations technology for the isolation, in several-hundred milligram quantities, of a few kinds of pure s-RNA's for distribution to prominent geneticists.

This program is supported at a level of $800,000 during 1968 and 1969.

*Hospital computer project*

The Hospital Computer Project is being supported in 1968 and 1969 at $800,000 by contract. This project involves the development of a computer-based hospital information system to process clinical research data, including but not limited to specific patient care data. Though still at the research level, ultimate emphasis is on providing stable, reliable operation of the computer based system in order to aid the efficient collection of operating data. Additional programs will be put into service for: (1) the implementation of a hospital-wide system for reporting laboratory results; and (2) the utilization of a general information storage and retrieval system by the hospital's research community. This system is now permitting up to 64 stations to use the computer simultaneously, and when completely operable, it is designed to permit 256 simultaneous users. Documentation of the complete operation required as a part of the contract will permit other hospitals, large and small, to adapt the project's techniques to their needs.

The results of the program to date have been made available to such firms as General Electric, International Business Machines, and Western Union in the interest of expediting the technology transfer to industry of this extremely important aspect of the delivery of health service.

*Studies and projects conducted by the National Academy of Sciences*

In 1968 an amount of $429,000 is included in this activity and $415,000 for 1969 for the support of several projects and studies by the National Academy of Sciences, such as the Evaluation of the NIGMS Training Grant Program and Evaluation of the Various Aspects of Postdoctoral Education in the United States.

No program increase is requested for this activity. An increase in compensation and benefits of $9,000 provides for full employment. There is a decrease in project contracts of $12,000 offset by an increase of $3,000 in other expense, and $4,000 for centrally furnished services from the "National Institutes of Health Management Fund".

TRAINING ACTIVITIES

| | 1968 estimate | | 1969 estimate | | Increase or decrease | |
|---|---|---|---|---|---|---|
| | Positions | Amount | Positions | Amount | Positions | Amount |
| Personnel compensation and benefits | 30 | $307,000 | 30 | $328,000 | ..... | +$21,000 |
| Other expenses | ..... | 123,000 | ..... | 124,000 | ..... | +1,000 |
| Total | 30 | 430,000 | 30 | 452,000 | ..... | +22,000 |

This intramural activity supports the training of young scientists as well as more mature investigators for both basic and applied research in pharmacology and related areas of biomedical sciences.

The request will provide continued support for specialized training of thirty research associates through the various NIH intramural programs.

The increase requested provides $17,000 for annualization of new positions in 1968, $3,000 for annualization of pay increases and $1,000 for an additional day of pay in 1969.

There is also an increase of $1,000 for centrally furnished services from the "National Institutes of Health Management Fund".

REVIEW AND APPROVAL OF GRANTS

| | 1968 estimate | | 1969 estimate | | Increase or decrease | |
|---|---|---|---|---|---|---|
| | Positions | Amount | Positions | Amount | Positions | Amount |
| Personnel compensation and benefits | 124 | $1,395,000 | 139 | $1,458,000 | +15 | +$63,000 |
| Other expenses | ..... | 1,635,000 | ..... | 1,728,000 | ..... | +93,000 |
| Total | 124 | 3,030,000 | 139 | 3,186,000 | +15 | +156,000 |

This activity supports professional and supporting staff required for the planning, direction, review, analysis and overall management of three specialized grant programs, research grants, training grants and fellowships. This activity also supports the National Advisory General Medical Sciences Council.

The program increase of $60,000 and fifteen positions will provide for gradual recruitment of highly specialized staff to perform more extensive review and evaluation of grant applications with increased surveillance of nationally emphasized program areas. Included in the net increase is $18,000 for annualization of pay increases effective in 1968, and $5,000 for one additional day of pay in 1969.

There are also increases of $73,000 for centrally furnished services from the "National Institutes of Health Management Fund."

PROGRAM DIRECTION

| | 1968 estimate | | 1969 estimate | | Increase or decrease | |
|---|---|---|---|---|---|---|
| | Positions | Amount | Positions | Amount | Positions | Amount |
| Personnel compensation and benefits | 59 | $690,000 | 63 | $694,000 | +4 | +$4,000 |
| Other expenses | | 663,000 | | 741,000 | | +78,000 |
| Total | 59 | 1,353,000 | 63 | 1,435,000 | +4 | +82,000 |

This activity supports the overall administration and direction of the programs of the Institute which includes the Office of the Director and the Program Analysis Branch.

The program increase requested of $23,000 and four new positions will provide staff necessary to meet requirements for increased emphasis in the compilation of data on Institute programs and preparation of interpretative reports.

Included in the net increase is $11,000 for annualization of positions new in 1968, $2,000 for an additional day of pay in 1969, and $10,000 for annualization of pay increase effective in 1968, offset by increase in lapsed employment of $19,000.

There are also increases of $36,000 for centrally furnished services from the "National Institutes of Health Management Fund."

NEW POSITIONS REQUESTED, FISCAL YEAR 1969

| | Grade | Number | Annual salary |
|---|---|---|---|
| Program direction: | | | |
| Public health program specialist | GS–15 | | $18,404 |
| Program assistant | GS–9 | | 8,054 |
| Clerical assistant | GS–5 | | 5,565 |
| Secretary | GS–5 | | 5,565 |
| Total | | 4 | 37,588 |
| Review and approval: | | | |
| Scientist Administrator | GS–14 | 2 | 31,682 |
| Do | GS–13 | 3 | 40,521 |
| Public health program specialist | GS–11 | | 9,657 |
| Do | GS–9 | 2 | 16,108 |
| Secretary | GS–5 | 2 | 11,130 |
| Clerical assistant | GS–4 | | 4,995 |
| Commissioned officers | | 4 | 39,932 |
| Total | | 15 | 154,025 |
| Total new positions, all activities | | 19 | 191,613 |

PROGRESS REPORT

Senator HILL. Dr. Stone, you have been very patient here all day.

Dr. STONE. I have enjoyed it, sir.

Senator HILL. Has it elucidated you?

Dr. STONE. It has stimulated me, sir.

Senator HILL. That is good. You are from Biloxi, Miss.?

Dr. STONE. Yes, sir. Dr. Shannon works me so hard I never seem to be able to get back down to Biloxi.

That is a hint.

Senator HILL. That is somewhat of an invitation?

Dr. STONE. Yes, sir.

Senator HILL. All right, sir, you may proceed now.

Dr. STONE. Mr. Chairman and members of the committee: I welcome this opportunity to give you a progress report on the National Institute of General Medical Sciences, which was authorized by the Congress to foster, support, and coordinate research and training in a wide range of basic and clinical sciences.

MAJOR SCIENTIFIC AREAS OF SUPPORT

The Institute has this past year clearly defined six major scientific areas for support: pharmacology and toxicology as one unit, human genetics, biomedical engineering, clinical sciences, behavioral sciences, and those closely related sciences basic to an understanding of body functions.

These areas are being advanced through 1,500 project grants, 640 grants that support the training of 5,500 young scientists, and 2,200 fellowships awarded to young men and women of unmistakable promise.

The Institute is justly proud that its long support and encouragement of Dr. Arthur Kornberg and his associates at Stanford Medical Center were rewarded with the announcement last December that the team had produced a DNA virus capable of reproducing itself, creating in a test tube for the first time, the basic molecule of life, a notable achievement hailed throughout the world as a giant step toward the conquest of many human diseases and afflictions.

PHARMACOLOGY AND TOXICOLOGY

The urgency and importance of the pharmacology and toxicology program is evidenced by the plethora of drugs in this country—more than 21,000 prescription drugs and tens of thousands of drugs sold without prescription in drugstores, supermarkets, and through the mail. Yet, the mechanisms of drug action and interaction in the body, as well as long-term adverse effects are vaguely understood. Studies supported by the Institute reveal the daily jeopardy of millions of persons who consume billions of doses of drugs, including alcohol.

Senator HILL. You classify alcohol as a drug?

Dr. STONE. It is so classified, but I think it does aid social intercourse.

RESEARCH PROJECTS

We know that age, sex, disease, and even behavioral patterns modify drug action, but we do not yet understand how. This past year, the Institute awarded grants for seven large-scale, multidisciplinary research projects where these and many other drug problems are being investigated. Other projects concentrate on developing methods for evaluating the efficacy and safety of drugs, one of the most pressing needs in clinical pharmacology.

BIOMEDICAL ENGINEERING

In biomedical engineering, the major effort of the past year was the support of scientists who are developing automated systems for use in hospital and other laboratories that conduct analyses for diagnostic purposes. Of particular promise is the automated laboratory system one of our grantees is perfecting and testing in a San Francisco hospital, a system that hospitals of all sizes could use and even small ones could afford.

HUMAN GENETICS

With the control of infectious diseases and the correction of many metabolic disorders, more scientists are turning their attention to genetics, for a long time a wallflower of the health sciences, but duti-

fully attended to by this Institute. Now classical human genetics is rapidly dividing into specialties, most recent of which are pharmacogenetics, the relation of a patient's genetic constitution to his response to drugs, and immungenetics, largely in the field of organ transplantation which, so far, has been marked by surgical triumphs and chemical death due to genetic incompatibilities in tissues.

In sitting here before you, sir, I thought that this remark I have just given you might be misinterpreted. It should be read as a complete support of Dr. Davis and his efforts.

The Institute's extensive genetics program embraces all aspects of that area of science. Among the grants awarded this past year were three to world-renowned geneticists whose scope extends from studies of molecular action to genetic aspects of whole populations.

CLINICAL SCIENCES

This year, the Institute launched a national effort to stimulate research in the nature of trauma and ways of mitigating the effects of injuries and of speeding recovery in trauma victims. At the Institute-supported trauma center at the University of Cincinnati, physician-scientists are studying complications resulting from chest injuries in automobile accidents and from penetrating injuries of all types, wound contamination, and the control of infection in burns. At the Albany Medical College trauma center, a computer system is being developed to measure in seconds critical bodily changes that ordinarily take hours to measure, thus greatly increasing the chance of life-saving treatment. From the subtlest chemical changes in body cells to the behavioral effects of trauma, studies are now underway in a concerted effort that will save numerous lives in a nation where injuries from all causes cost incalculable suffering and $15 billion a year.

ANESTHESIOLOGY

The increased interest among scientists in anesthesiology research was manifest in the high quality and number of requests for support of research and research training. The first anesthesiology research center grant was made to the University of Pennsylvania. Other grants for large, multidisciplinary projects were awarded to Northwestern and Harvard Universities. From these projects, we expect results that will benefit the 25 million patients who every year undergo surgery. A milestone was the new grant program to upgrade physician training in anesthesiology, a program which now supports some 80 specialists in training.

1968 APPROPRIATION AND 1969 BUDGET REQUEST

In conclusion, Mr. Chairman, the appropriation request for the National Institute of General Medical Sciences for 1969 totals $165,777,000, an increase of $6,731,000 over the 1968 operating level of $159,046,000. Of the total increase requested, $4,832,000 is for research grants; $463,000 for fellowships; $1,172,000 for training grants; $4,000 for collaborative research and development; $22,000 for training activities; $156,000 for review and approval; and $82,000 for program direction.

I shall be happy to answer any questions, sir.

BUDGET REDUCTION EFFECT

Senator HILL. You got quite a reduction, didn't you, both by the Department and the Bureau of the Budget? A total of some about $20½ million; is that right?

Dr. STONE. Yes, sir; we got a reduction of $20,416,000.

Senator HILL. What is going to be the effect of this?

SCIENTIFIC TRAINING

Dr. STONE. The effect of this will be to slow down our program—the attainment of our program goals and will result in our inability to train the number of scientists that we clearly need to train in this Nation.

Senator HILL. We have got to have them for these new medical schools; is that right?

Dr. STONE. This program that I testified to each year before you, sir, supports in some cases 40 percent of the young men in training in that field, up to 70 percent of the young men in training in other fields.

We know of 17 medical schools that are either just opening or are in the active planning category and about eight more that are in preliminary planning stages.

These will involve the need for additional hundreds and hundreds of physicians and physician-scientists and other types of scientists that frankly I don't see on the horizon, sir.

Senator HILL. Certainly this reduction will make it all the more difficult to have these scientists; isn't that true?

Dr. STONE. Yes, sir; it means that we will have to slow down in our production of well-trained young people.

Senator HILL. Which we so much need today.

Dr. STONE. Yes, sir.

Senator HILL. Our population is growing all the time, we are gaining more and more medical knowledge all the time.

Dr. STONE. Yes, sir.

Senator HILL. We will need more and more trained people; is that correct?

Dr. STONE. We need more and more trained people for at least two basic needs. One is the development of knowledge through research and the other is making available the fruits of research to the population. If I may go off the record a moment, sir.

Senator HILL. All right, off the record.

(Brief discussion off the record.)

SCIENTIFIC TEACHING

Senator HILL. On the record.

Dr. SHANNON. It is not a question of simply doing business as usual. These programs must in some way compensate for the physicians who will not go into the academic environment but will accept service responsibilities. Except for very few doctoral fellows under categorical training grants, the bulk of present doctoral fellowships—the bulk of the Ph. D. production—is in Dr. Stone's area of responsibility.

Dr. STONE. I would say probably between 45 and 50 percent of the total Ph. D. production in the health sciences broadly interpreted——

Dr. SHANNON. At NIH.

Dr. STONE. About 90 percent of the present predoctoral candidates of the total of NIH is in this particular program.

Senator HILL. In this particular program?

Dr. STONE. Yes, sir.

Senator HILL. This seems to be quite a reduction then.

Dr. STONE. We will do the best we can with the money that is available to us.

Senator HILL. I understand that.

### TRAINING GRANTS REDUCTIONS

Dr. STONE. The facts are, sir, that this is the fourth year that essentially the training program has been cut back and your budget data before you will show that it has been cut back this year by 23 grants but by shaving other costs we can still support about the same number of young people.

At one time, instead of having about 614 grants, we had over 700 grants, but that was some years ago.

Senator HILL. You are down to the 614 now?

Dr. STONE. Yes, sir, about that order of magnitude.

Senator HILL. And you need a good many more than that; don't you?

Dr. STONE. Yes, sir.

Senator HILL. A good many more.

Anything you would like to add, Dr. Shannon?

Dr. SHANNON. No, sir.

### SERVICE OF DR. STONE

Senator HILL. Doctor, we want to thank you very much, you always bring us some mighty good testimony.

Dr. STONE. I regret I will not be testifying before you again. Dr. Endicot and I, I believe, have the pleasure of having testified before you for the longest time.

Senator HILL. How long have you been at NIH?

Dr. STONE. My total time with NIH is split time but it comes to about a total of 22 years.

Senator HILL. You are still a young man.

Dr. STONE. Thank you, sir.

Senator HILL. You only get grown at 21, you know.

Dr. STONE. They say life begins at 40.

Senator HILL. Thank you, sir.

## National Institute of Child Health and Human Development

STATEMENT OF GERALD D. LAVECK, DIRECTOR
ACCOMPANIED BY:
JAMES A. SHANNON, DIRECTOR, NATIONAL INSTITUTES OF HEALTH
CALVIN B. BALDWIN, JR., EXECUTIVE OFFICER, NATIONAL INSTITUTE OF CHILD HEALTH AND HUMAN DEVELOPMENT
EARL M. HUBSCHER, BUDGET OFFICER, NATIONAL INSTITUTE OF CHILD HEALTH AND HUMAN DEVELOPMENT
JAMES A. HICKEY, ACTING FINANCIAL MANAGEMENT OFFICER, NATIONAL INSTITUTES OF HEALTH
WILLIAM H. STEWART, SURGEON GENERAL
CHARLES MILLER, CHIEF FINANCE OFFICER
JAMES B. CARDWELL, DEPUTY ASSISTANT SECRETARY, BUDGET

### Appropriation Estimate

"NATIONAL INSTITUTE OF CHILD HEALTH AND HUMAN DEVELOPMENT

"For expenses, not otherwise provided for, necessary to carry out the purposes of the Act with respect to child health and human development, [$68,621,000] *$75,394,000.*"

AMOUNTS AVAILABLE FOR OBLIGATION

| | 1968 | 1969 |
|---|---|---|
| Appropriation | $68,621,000 | $75,394,000 |
| Cutback from the 1968 President's budget required by H.J. Res. 888 | −846,000 | |
| Total currently authorized for obligation | 67,775,000 | 75,394,000 |
| Plus proposed release of reserves for increased pay costs | 260,000 | |
| Total available for obligation | 68,035,000 | 75,394,000 |
| Disposition of cutback: | | |
| To be used for pay costs in this account | 260,000 | |
| To be returned to the Treasury | 586,000 | |
| Total cutback | 846,000 | |

OBLIGATIONS BY ACTIVITY

| | 1968 estimate | | 1969 estimate | | Increase or decrease | |
|---|---|---|---|---|---|---|
| | Positions | Amount | Positions | Amount | Positions | Amount |
| Grants: | | | | | | |
| Research | | $42,447,000 | | $44,265,000 | | +$1,818,000 |
| General research support grants | | (4,264,000) | | (4,082,000) | | (−182,000) |
| Scientific evaluation | | (100,000) | | (100,000) | | (0) |
| Categorical clinical research centers | | (500,000) | | (500,000) | | (0) |
| Mental retardation centers | | (0) | | (2,000,000) | | (+2,000,000) |
| Fellowships | | 4,102,000 | | 4,193,000 | | +91,000 |
| Training | | 9,762,000 | | 10,012,000 | | +250,000 |
| Direct operations: | | | | | | |
| Laboratory and clinical research | 271 | 5,098,000 | 354 | 6,693,000 | +83 | +1,595,000 |
| Collaborative research and development | 34 | 1,530,000 | 39 | 5,032,000 | +5 | +3,502,000 |
| Biometry, epidemiology, and field studies | 23 | 2,040,000 | 23 | 2,046,000 | | +6,000 |
| Training activities | 5 | 89,000 | 5 | 89,000 | | |
| Review and approval of grants | 94 | 1,954,000 | 98 | 1,986,000 | +4 | +32,000 |
| Program direction | 51 | 1,013,000 | 54 | 1,078,000 | +3 | +65,000 |
| Total obligations | 478 | 68,035,000 | 573 | 75,394,000 | +95 | +7,359,000 |

OBLIGATIONS BY OBJECT

| | 1968 estimate | 1969 estimate | Increase or decrease |
|---|---|---|---|
| Total number of permanent positions | 478 | 573 | +95 |
| Full-time equivalent of all other positions | 13 | 13 | |
| Average number of all employees | 407 | 521 | +114 |
| Personnel compensation: | | | |
| Permanent positions | $3,488,000 | $4,273,000 | +$785,000 |
| Positions other than permanent | 99,000 | 102,000 | +3,000 |
| Other personnel compensation | 83,000 | 100,000 | +17,000 |
| Total, personnel compensation | 3,670,000 | 4,475,000 | +805,000 |
| Personnel benefits | 401,000 | 465,000 | +64,000 |
| Travel and transportation of persons | 271,000 | 320,000 | +49,000 |
| Transportation of things | 46,000 | 56,000 | +10,000 |
| Rent, communications, and utilities | 140,000 | 185,000 | +45,000 |
| Printing and reproduction | 86,000 | 95,000 | +9,000 |
| Other services | 653,000 | 700,000 | +47,000 |
| Project contracts | 2,957,000 | 6,349,000 | +3,392,000 |
| Payment to "National Institutes of Health management fund" | 2,733,000 | 3,378,000 | +645,000 |
| Supplies and materials | 228,000 | 252,000 | +24,000 |
| Equipment | 539,000 | 649,000 | +110,000 |
| Grants, subsidies, and contributions | 56,311,000 | 58,470,000 | +2,159,000 |
| Total, obligations by object | 68,035,000 | 75,394,000 | +7,359,000 |

SUMMARY OF CHANGES

| | |
|---|---|
| 1968 enacted appropriation | $68,621,000 |
| Cutback from the 1968 President's budget required by H.J. Res. 888 | −846,000 |
| Proposed release of reserves for increased pay costs | +260,000 |
| 1968 total estimated obligations | 68,035,000 |
| 1969 estimated obligations | 75,394,000 |
| Total change | +7,359,000 |

| Increases | Base | | Changes from base | |
|---|---|---|---|---|
| | Position | Amount | Positions | Amount |
| A. Built-in: | | | | |
| 1. Annualization of new positions authorized in 1968 | | | | $395,000 |
| 2. One additional day of pay in 1969 | | | | 20,000 |
| 3. Annualization of the 1968 pay raise costs | | | | 50,000 |
| Total, built-in increases | | | | 465,000 |
| B Program: | | | | |
| 1. Research grants | | $42,447,000 | | 1,818,000 |
| 2. Fellowships | | 4,102,000 | | 91,000 |
| 3. Training grants | | 9,762,000 | | 250,000 |
| 4. Laboratory and clinical research | 271 | 3,433,000 | 83 | 550,000 |
| 5. Collaborative research and development | 34 | 1,463,000 | 5 | 3,500,000 |
| 6. Biometry, epidemiology, and field studies | 23 | 1,966,000 | | |
| 7. Training activities | 5 | 82,000 | | |
| 8. Review and approval | 94 | 1,313,000 | 4 | 20,000 |
| 9. Program direction | 51 | 734,000 | 3 | 20,000 |
| Total, program increases | | | 95 | 6,249,000 |
| C. Centrally furnished services from the "National Institutes of Health Management Fund": | | | | |
| 1. Laboratory and clinical research | | 1,665,000 | | 623,000 |
| 2. Collaborative research and development | | 67,000 | | −3,000 |
| 3. Biometry, epidemiology, and field studies | | 74,000 | | 1,000 |
| 4 Training activities | | 7,000 | | |
| 5. Review and approval | | 641,000 | | −7,000 |
| 6. Program direction | | 279,000 | | 31,000 |
| Subtotal, management fund | | | | 645,000 |
| Total net changes requested | | | +95 | +7,359,000 |

## Explanation of Changes

*Research Grants.*—The net increase of $1,818,000 results from an increase of $2,000,000 for Mental Retardation Research Centers offset by a decrease of $182,000 in General Research Supports Grants.

*Fellowships.*—The increase of $91,000 will provide for an additional 6 fellowships.

*Training Grants.*—The increase of $250,000 will provide for an additional 4 training grants.

*Laboratory and Clinical Research.*—The increase of $550,000 and 83 positions will be distributed among the following laboratories and branches of the expanding Intramural Research Program: the Reproduction Research Branch will require 8 positions and $53,000 to establish an obstetrical unit to be located in a teaching hospital in the Washington metropolitan area; the Laboratory of Biomedical Sciences will need 7 positions and $46,000 to support investigations of possible permanent behavioral modifications produced by drugs and medicinals administered during embryonic and fetal development; the Behavioral Biology and Developmental Biology Branches will divide 6 positions and $40,000 to recruit branch chiefs and staffs to head these programs; the Gerontology Research Center will be assigned 40 positions and $265,000 to staff and continue equipping its new gerontological research facility; 6 positions and $40,000 will be used to recruit a clinical director and staff to direct the clinical research program; and the Office of the Associate Director will use 16 positions and $106,000 for increasing the Clinical, Research, and Staff Associates Program and to provide additional service staff for the intramural program.

*Collaborative Research and Development.*—The increase of 5 positions and $3,500,000 will provide for an increased research contract program in the reproduction and population and fertility control programs. There are three areas of concentration; medical effects of contraceptives, the development of new contraceptives, and the psycho-social aspects of family planning.

*Review and Approval.*—The increase of 4 positions and $20,000 will provide for increased grants management support.

*Program Direction.*—The increase of 3 positions and $20,000 will provide for increased administrative support.

JUSTIFICATION—NATIONAL INSTITUTE OF CHILD HEALTH AND HUMAN DEVELOPMENT

| | 1968 estimate | | 1969 estimate | | Increase or decrease | |
|---|---|---|---|---|---|---|
| | Positions | Amount | Positions | Amount | Positions | Amount |
| Personnel compensation and benefits | 478 | $4,071,000 | 573 | $4,940,000 | +95 | +$869,000 |
| Other expenses | | 63,964,000 | | 70,454,000 | | +6,490,000 |
| Total | 478 | 68,035,000 | 573 | 75,394,000 | +95 | +7,359,000 |

## General Statement

The National Institute of Child Health and Human Development, unlike those Institutes which are primarily concerned with one category of diseases or part of the body, seeks to acquire new knowledge and deeper insight into the array of health problems and requirements of mothers and children, and into the nature of the developmental processes of all individuals throughout the life span. The over-all, long-range objective of the Institute is improvement in the quality of human existence through greater scientific understanding of the developmental processes.

The Institute is requesting $75,394,000 for 1969, an increase of $7,359,000 over 1968. This increase will be used primarily for three purposes: (1) $2,000,000 for the support of research to be conducted in the newly constructed Mental Retardation Research Centers; (2) $1,595,000 for intramural research, particularly to staff and equip the new Gerontology Research Center in Baltimore; and, (3) $3,500,000 for expansion of the contract program in reproduction and population research and fertility control.

RESEARCH GRANTS

| | 1968 estimate | 1969 estimate | Increase or decrease |
|---|---|---|---|
| Regular projects | $37,583,000 | $37,583,000 | |
| Special program | 4,864,000 | 6,682,000 | +$1,818,000 |
| Total, research grants | 42,447,000 | 44,265,000 | +1,818,000 |

INTRODUCTION

This activity supports regular research grant projects in reproduction and population, perinatal biology and infant mortality, growth and development, adult development and aging, and mental retardation. In addition, funds are provided for general research support grants, scientific evaluation grants, categorical clinical research center grants, and mental retardation research center grants.

In 1968, the Institute plans to support approximately 1,122 regular research projects in the amount of $37,583,000. Most of these projects are ongoing noncompeting continuation grants which were approved for payment by advisory groups in 1967 and prior years. The noncompeting continuation grants represent approximately 70% of the total regular research programs.

In 1969, the Institute plans to support 39 more competing awards than are to be funded in 1968. By the end of 1969, eight Mental Retardation Research Centers will be in operation. $2,000,000 is requested in 1969 to support research in these new centers.

PROGRAM PLANS FOR 1968 AND 1969

*Reproduction and population research*

The Institute's overall program in reproduction and population research is broadly based and includes the research areas of reproductive biology, development of contraceptives, the psychological and social aspects of reproduction and fertility regulation, and the application of epidemiology to family planning programs. Most of the grants held by NICHD in these fields support projects in reproductive biology, and contracts are used to support projects in the other areas. This arrangement has occurred because fundamental research in reproductive biology is a well established scientific field with a number of qualified investigators, whereas the scientific importance of the other fields has been recognized only recently. These other fields warrant, therefore, the special attention available to them through collaborative programs.

The grant program in reproduction and population research is devoted primarily to studies which will add to fundamental information on the biological and behavioral processes of reproduction in humans and experimental animals. Many of these studies are part of the Institute's programs in population research because it is clear that meaningful advances in population research are dependent upon the continued acquisition of information concerning the reproductive process.

Reproductive biology includes investigation of the development of germ cells in the male and female, ovulation, the processes of fertilization, oviduct transport, implantation in the uterus, and studies of the physiological, endocrine and neuroendocrine factors influencing these processes. Studies of ovulation include projects on the maturation of ovarian follicles, and the biochemical and biophysical factors involved in ovum release, as well as attempts to improve the detection of ovulation by such methods as luteinizing hormone or temperature measurement. Research on male germ cells includes work on spermatogenesis, sperm metabolism, and sperm antigens in relation to male infertility or as a potential method of fertility control. There are a number of projects on factors involved in sperm transport and sperm capacitation in the female reproductive tract and on the effects of oviductal and uterine secretions.

Reproductive endocrinology includes studies of hypothalamic releasing factors, gonadotrophic hormones and sex hormones, and involves work on isolation and structure, biosynthesis, and mechanisms of action in target tissues. A number of investigators are concerned with factors involved in the maintenance or lysis of the corpus luteum. Embryological studies deal with differentiation, embryonic induction mechanisms, and biochemical differentiation. There are a number of

studies of cell structure, cell division, and cell differentiation. The reproductive biology program also includes a number of studies in genetics, some of which are clinical investigations in biochemical or cytogenetics, while others are more basic and deal with chromosome structure and function in lower forms. Finally, there is also some behavioral and social science research in the reproduction program, including studies of sex behavior and of factors controlling animal population density, as well as demographic studies of human fertility.

*Perinatal biology and infant mortality*

A major concern of this Institute is the stimulation and support of fundamental research which relates to various aspects of maternal and infant health. New knowledge must be achieved which will make possible the realization of maximum health and well being for every pregnant woman and her progeny. In order to achieve this goal, the Institute has developed a research program evolving around the broad areas of pregnancy maintenance, management, and termination: intrauterine fetal survival and well being; extrauterine adaption; and disorders of infancy. Since the two major causes of infant mortality are neonatal respiratory distress syndrome and prematurity, the Perinatal Biology and Infant Mortality Program will emphasize a multifaceted attack upon the specific problems involved in each of these two areas.

Each year in this country, some 300,000 infants are born weighing 5½ pounds or less, and must wage an uphill struggle for survival and normal health. For more than 42,000 of these infants each year the battle is a losing one, and they die during the neonatal period. Should the infant survive these first difficulties and others related to intrauterine life and the process of birth, long periods of expensive hospitalization and nursing care are frequently required before the infant can be cared for at home. Each year, Americans spend an estimated $500,000,000 for such hospital care services, not including continued constant care which is often necessary for infants severely brain damaged or crippled at birth.

To prevent this tremendous waste in human life and the expenditure of millions of dollars yearly, there is a pressing need for research into the nature, causes, and sequelae of prematurity and intrauterine growth retardation. These are, for the most part, still obscure.

Until we can fill these gaps, low birth weight will remain an outstanding child health problem. The National Institute of Child Health and Human Development Perinatal Biology and Infant Mortality Program, through development of an integrated program of research and training, is seeking to accomplish four major objectives, as part of its efforts to gain new knowledge of, and solutions to, problems associated with low birth weight. These are: 1) a means of prolonging gestation to term with optimal prenatal development of the fetus before birth: 2) because prolongation is not always feasible an understanding of the immature systems and adaption processes of premature babies so they will receive the best possible care; 3) identification of reliable indices of fetal and neonatal maturation; and 4) prevention and/or correction of intrauterine growth retardation.

Studies of extrauterine adaptation will be devoted to research concerning the respiratory distress syndromes, including hyaline membrane disease. This is a common cause of death among the newborn, especially premature infants, and yet its pathogenesis remains a mystery and its treatment empirical and frequently unsatisfactory.

If greater understanding of the problems of respiratory distress in the newborn is to be achieved much greater emphasis must be placed on scientific study that will contribute new knowledge about embryology, anatomy, and physiology of the normal developing lung and will also identify those factors that may be controlled to prevent the development of this syndrome. We need also to find methods by which to improve pulmonary vascular function in infants with respiratory distress syndrome.

Thus, future program plans will emphasize activities directed toward the identification of the cause, treatment, and prevention of this syndrome. If it were possible to prevent or to treat adequately this syndrome, a significant inroad into our present infant mortality problem would be accomplished.

*Growth and development*

The Institute-supported research in growth and development is concerned with the period of development extending from birth to adulthood. The ultimate goal is the enhancement of individual capabilities through an understanding of

the factors, both biological and behavioral, contributing to human variability and optimal development. The biological aspects of human development which will receive special emphasis in 1968 and 1969 include studies related to the malnourished child and to the process of biological maturation.

Current data suggest that children are maturing at an earlier age. Not only is this of considerable interest insofar as physical size and sexual maturation are concerned, but it may be importantly related to questions of physical fitness and preparation for adult life. Laboratory, clinical and field studies will be conducted to define more precisely the relationships between chronologic age and indicators of biologic age such as bone formation and secondary sexual characteristics. Special emphasis will be given to developing specific growth standards for all segments of the population and to devising accurate methods for predicting ultimate stature on the basis of measurements made at an early age. Investigations of essential factors in maintaining optimal performance in daily life will be undertaken. These will include studies of the development of resistance to disease, the need for balanced schedules of rest and exercise, and the capacity of various organ systems to cope with normal and adverse conditions.

Further definitions of normal hormone production and action as they relate to biological growth and development will be sought. Of particular importance will be investigations of the endocrine glands, and their interaction with neural and environmental stimuli.

The problem of malnutrition will also receive special emphasis in 1969. A series of interrelated studies will be undertaken with undernourished and disadvantaged children to define the association between nutritional status and intellectual development. In addition, studies will be initiated to evaluate nutritional intervention programs applicable to this problem. Attention will also be given to nutritional factors in brain and nervous system development, as well as to those critical periods when improper nutrition may inflict the greatest damage.

In approaching the complexity of human development from the behavioral standpoint, research on maximizing the capacity of the individual to learn will receive primary emphasis. The success of our society now rests and will continue to rest on the degree to which individuals can learn new skills and adapt to new challenges. This will require expansion of our knowledge concerning how man learns and how the learning process can provide maximal fulfillment for each child. To the extent that functional illiteracy and impaired learning potential prevail, and to the degree to which the gifted persons are not given special opportunities to realize their full potential, our culture will fail to make maximal progress.

It is apparent that impoverished environments inhibit the development of learning and adaptive processes. The mechanisms for these effects are not known. A broader base of fundamental knowledge concerning psychological development and learning is needed. A greater understanding of the role of early stimulation and deprivation on cognitive development will be sought, as will the consequences of social deprivation on brain structure and function.

Special emphasis will be given to determining at what age inadequate intellectual development becomes permanent and irreversible. Attention will be given to the development of measures for evaluating present and future improvement on learning ability as new discoveries and techniques improve learning capacities.

Biological and behavioral research will be directed towards a better understanding of the factors contributing to normal development of speech and language functions and the role these skills play in the development of individuals as members of society. With this knowledge, reading and speaking disorders may be prevented or ameliorated and children will be able to acquire greater speech, language, and reading facility than at present.

A second area of concentration in behavioral studies is the problem of youth in a mass society. As the American society becomes more complex, as our cities become more crowded, as schools attempt to face problems of increasingly complex technical education and of heterogeneous student bodies, our understanding of how children and youth develop into contributing members of society must increase. For example, a better understanding is needed of how children respond to diverse and sometimes conflicting social influences arising from parents, peer groups, mass media, schools and other socializing forces. Particular attention will be given to examining ways in which various social institutions combine to influence the development of skills and values needed to meet, constructively, adult responsibilities. A better understanding will be sought of the factors lead-

ing to social and emotional problems among adolescents, particularly as expressed through aggressiveness, irresponsibility, and impaired character development.

*Adult development and aging*

Biomedical aging is a subtle process operating from early life and acting as a major determinant of human health. The mechanisms of biomedical aging are only beginning to be understood, but its consequence has long been known. That consequence is increased vulnerability to disease. That vulnerability as judged by the mortality rate, reaches a low point at 10 years of age and thereafter doubles every 8.7 years.

The results of biomedical aging are most distressing in persons over 65. There are 19 million of these persons in our country today making up almost 10 percent of the population. Although the results of biomedical aging are most distressing in persons over 65, aging itself begins with the attainment of maturity if not earlier. If man is to understand the processes involved, he must study them across most of the lifespan. As the major diseases are coming to be understood, ignorance of aging processes stands out in bold contrast. Comprehension of these processes will greatly deepen our understanding of the diseases that occur in man as he ages. Biomedical science will be incomplete until the biological aspects of aging are understood.

Research grants in 1969 will support work on biomedical research at the level of the entire organism and at the cellular level. Changes with age in the coordinated function of the individual and in the function of the various organ systems—cardiovascular, pulmonary, renal, etc.—will be investigated. Cross-sectional and longitudinal research, in which humans are intensively studied over a period of years, provides the ideal approach to such changes. It is important to realize that the alterations that occur in function across the years may not be immutable and independent of lifestyle and environment. Much needs to be done to distinguish the contributions of various factors to changes in function. It is known, for example, that half the people over 50 years of age have diabetic glucose tolerance curves by the commonly accepted standards. It is not known whether this is due to an immutable aging or other process. Culturally determined muscular inactivity and dietary practice may contribute most to the observed intolerance of older persons to carbohydrates.

Alterations with age in function at cellular and molecular levels will be studied. Some studies of cell function can be made in the intact organism, but incisive experimental analysis is difficult in whole organisms. The discovery that normal human cells are not immortal in tissue culture provides an analytic approach to cellular senescence that will be pursued.

Psychosocial research on aging is of major importance to the healthy function of the individual and of society. The situation here is more complex than in biomedical research. After the attainment of maturity the effectiveness of certain psychological functions diminishes with age. However, the accumulation of experience leads to continued improvement of some complex functions until relatively late in the lifespan. Research grants will support studies of age changes in intellectual performance and personality, and the factors that affect them favorably and unfavorably. Attention will be given to the psychological needs of the latter years of life and to the effect of the environment upon the life of the elderly. The problems of retirement and of housing are important in this connection. The psychological environment of man changes as he ages in ways that are not always favorable to continued psychological growth. The intellectual challenge of the school years may be replaced by work situations that provide no stimulation to further mental growth. Early, obligatory retirement may further impair the psychological environment.

The age structure of a society is one of the major determinants of how that society functions. Little research on the implications of that structure for the medical, social, and economic activities of the nation has been carried out. Research in this area will be encouraged.

*Mental retardation*

Mental retardation is unique because the biological, behavioral and social components of mental retardation are so closely interrelated. In recognition of this the Institute has helped develop a Mental Retardation Research Centers program whose primary objective is to provide qualified institutions with a facility and an environment in which a cohesive program of research and research training in mental retardation and related aspects of human development can be accomplished. As of June 30, 1967 the center construction grant

program was virtually complete with construction grant awards for centers having been made to the following twelve institutions: Albert Einstein College of Medicine; University of Washington; Children's Hospital, Cincinnati, Ohio; Walter E. Fernald State School, Waltham, Mass.; George Peabody College for Teachers, Nashville, Tennessee; University of California at Los Angeles; Children's Hospital Medical Center, Boston, Massachusetts; University of Kansas; University of North Carolina; University of Chicago; University of Colorado Medical Center, Denver, Colorado; and the University of Wisconsin.

When operational, the Mental Retardation Research Centers will carry the main thrust of the Institute's efforts to solve the problem of mental retardation, through developing a better understanding of the causes, prevention, detection, diagnosis and treatment of mental retardation.

The Institute is concentrating its research efforts on identifying the social and cultural factors underlying the causes of Mental Retardation. An overwhelming majority of the retarded (approximately five million children and adults) are concentrated in the lowest socioeconomic segments of society. Despite the fact that a significant proportion of this group has no discernible central nervous system abnormality, comparatively little formal study has been undertaken to differentiate from among the multiple variables those which have etiological significance. Current efforts to promote the intellectual growth of disadvantaged children have been focused largely on preschool enrichment approaches, early academic training and motivational techniques. The limited success attained thus far by these techniques encourages further study.

Research efforts will be directed toward the discovery of patterns, language development and communication styles, nutritional deficiencies, genetics, learning processes and other elements which may be essential to effective intervention programs. Examples of specific research in this area include: the modification of child rearing practices, parental attitudes and interpersonal behaviors within the family; the effect of positive reinforcement and incentive systems on learning and adaptive behavior; the development of methods and procedures to improve functions involving the integration of sensory input, attending behaviors, perception, motivation, symbolic and linguistic mediation; the role of intelligence in the process of socialization; innovation in methods and content of instruction in early childhood; a study of cognitive and learning processes, including the biochemical correlates of learning and memory and the search for psychopharmacological agents which may improve learning ability; genetic determinants of intellectual ability; a determination of the relationship of values, technology and social organization to patterns of care, training and rehabilitation for culturally disadvantaged children.

The Institute's second approach to attacking the problem of mental retardation, i.e. research aimed at early detection and diagnosis of the problem, will center around the epidemiology and identification of mental retardation. The earliest possible identification of children who are or who may become retarded is critical to preventive and ameliorative efforts. The development of new diagnostic procedures and the refinement of established procedures can assist in this objective. Adequate data do not exist on the incidence or prevalence of mental retardation in general or with respect to specific diagnostic classifications. Surveys are hampered by problems of definition and data collection activities have been directed toward specific subgroups rather than representative samples of the population. Clinical research to improve better understanding of the patterning and interaction of related variables is needed. Examples of specific research which the Institute plans to support in this area include: studies of birth cohorts, special population groups, and case materials, retrospective and prospective, with respect to seasonal factors, genetic conditions, epidemics, etc.; the development and analysis of extensive profiles on institutional populations as a basis for follow-up investigations on causal factors; and establishment of diagnostic procedures to identify early signs of central nervous system damage.

Research aimed at treatment and amelioration of mental retardation constitutes the Institute's third approach to the problem. Much evidence exists today that intelligence and adaptive behavior—the two dimensions by which mental retardation is defined—result from the subtle interaction of biological and social environmental factors. Both traits are alterable characteristics, subject to change through a variety of psychoeducational, therapeutic and social intervention procedures. The nature of these procedures, however, and the principles and mechanisms which underlie them, are as yet incompletely understood. The

research program will attempt to specify more precisely the treatment and intervention techniques that will maximize the retarded person's level of functioning and modify his impact on the family and community. Such studies must include the following: preschool enrichment; basic learning processes and methods of instruction: cognition and perception; sensory-motor integration; family behavior modification; social organizations, institutions and structures; and public, professional and parental attitudes.

DISTRIBUTION OF RESEARCH GRANTS

| | 1968 estimate | | 1969 estimate | | Increase or decrease | |
|---|---|---|---|---|---|---|
| | Number | Amount | Number | Amount | Number | Amount |
| 1. Noncompeting projects | 870 | $26,225,000 | 831 | $24,191,000 | −39 | −$2,034,000 |
| 2. Competing projects | 252 | 11,358,000 | 291 | 13,392,000 | +39 | +2,034,000 |
| 3. Subtotal regular program | 1,122 | 37,583,000 | 1,122 | 37,583,000 | | |
| 4. General research support | | 4,264,000 | | 4,082,000 | | −182,000 |
| 5. Scientific evaluation | | 100,000 | | 100,000 | | |
| 6. Categorical clinical research centers | | 500,000 | | 500,000 | | 500,000 |
| 7. Mental retardation centers | | | | 2,000,000 | | +2,000,000 |
| 8. Total research grants | 1,122 | 42,447,000 | 1,122 | 44,265,000 | | +1,818,000 |

RESEARCH GRANTS PROGRAM ANALYSIS

| | 1968 estimate | 1969 estimate | Increase or decrease |
|---|---|---|---|
| 1. Reproduction and population research | $8,084,000 | $8,084,000 | |
| 2. Perinatal biology and infant mortality | 9,268,000 | 9,268,000 | |
| 3. Growth and development | 12,523,000 | 12,523,000 | |
| 4. Aging | 3,303,000 | 3,303,000 | |
| 5. Mental retardation | 4,405,000 | 4,405,000 | |
| 6. Subtotal regular program | 37,583,000 | 37,583,000 | |
| 7. General research support | 4,264,000 | 4,082,000 | −$182,000 |
| 8. Scientific evaluation | 100,000 | 100,000 | |
| 9. Categorical clinical research centers | 500,000 | 500,000 | |
| 10. Mental retardation research centers | | 2,000,000 | +2,000,000 |
| 11. Total research grants | 42,447,000 | 44,265,000 | +1,818,000 |

*Fellowships*

Total fellowships:

| | |
|---|---|
| 1968 estimates | $4,102,000 |
| 1969 estimates | 4,193,000 |
| Increase or decrease | +91,000 |

INTRODUCTION

The fellowships program for the National Institute of Child Health and Human Development reflects a net increase of $91,000 in 1969 over 1968, including an increase of $223,000 to support an additional 12 noncompeting continuations and $69,000 for an additional 7 competing continuations. This is offset by a decrease of $201,000 from the 1968 level of new fellowship awards.

The net increase of $91,000 will be used for an additional 6 special fellowship awards; postdoctoral, research career and research career development awards will remain at the same level in 1969.

PROGRAM PLANS FOR 1968 AND 1969

The National Institute of Child Health and Human Development training committees recognize the fellowship program as a unique opportunity for the development of personnel for careers and research investigators. It is a highly flexible program providing individuals at different stages of development with support for research training in selected areas. As a mechanism it is well suited to support more senior individuals and is most effective in directing and develop-

ing scientists in the terminal phase of their training. This program is of considerable significance to the Institute as a means of encouraging individuals to develop a cross-disciplinary approach. Such an approach is most desirable for an Institute which is dedicated to the study of the organism through certain phases of its development, rather than the study of categorical diseases areas.

The type of fellowships awards funded by the National Institute of Child Health and Human Development in the past will again be given strong priority in 1968 and 1969 because of the ever-increasing demands of research in these fields. Of prime importance is the training of obstetricians, gynecologists, and pediatricians. One of the National Institute of Child Health and Human development's special research problems is a lack of trained clinicians—scientists who approach the investigation of health problems from the standpoint of human observation rather than controlled experiments. Gynecology, obstetrics and pediatrics are the clinical specialties which relate most frequently to the National Institute of Child Health and Human Development's particular interest in the health problems of mothers and children. There are too few pediatricians and obstetricians now, even to supply the nation's medical care needs. It is therefore essential that the total number be increased rather than any be diverted from clinical care to research.

DISTRIBUTION OF FELLOWSHIPS

| | 1968 estimate | | 1969 estimate | | Increase or decrease | |
|---|---|---|---|---|---|---|
| | Number | Amount | Number | Amount | Number | Amount |
| 1. Continuations: | | | | | | |
| a. Noncompeting | 131 | $2,515,000 | 143 | $2,738,000 | +12 | +$223,000 |
| b. Competing | 17 | 244,000 | 24 | 313,000 | +7 | +69,000 |
| 2. Supplementals | (6) | 5,000 | (6) | 5,000 | | |
| 3. New | 121 | 1,338,000 | 108 | 1,137,000 | −13 | −201,000 |
| 4. Total, fellowships | 269 | 4,102,000 | 275 | 4,193,000 | +6 | +91,000 |

FELLOWSHIPS BY TYPE OF PROGRAM

| | | | | | | |
|---|---|---|---|---|---|---|
| 1. Postdoctoral | 109 | $946,000 | 109 | $946,000 | | |
| 2. Special | 57 | 779,000 | 63 | 870,000 | +6 | +$91,000 |
| 3. Research career: | | | | | | |
| a. Career | 8 | 240,000 | 8 | 240,000 | | |
| b. Development awards | 95 | 2,137,000 | 95 | 2,137,000 | | |
| 4. Total, fellowships | 269 | 4,102,000 | 275 | 4,193,000 | +6 | +91,000 |

FELLOWSHIP PROGRAM ANALYSIS

| | 1968 estimate | 1969 estimate | Increase or decrease |
|---|---|---|---|
| 1. Reproduction and population research | $1,157,000 | $1,234,000 | +$77,000 |
| 2. Perinatal biology and infant mortality | 886,000 | 886,000 | |
| 3. Growth and development | 1,404,000 | 1,404,000 | |
| 4. Aging | 336,000 | 343,000 | +7,000 |
| 5. Mental retardation | 319,000 | 326,000 | +7,000 |
| 6. Total, fellowships | 4,102,000 | 4,193,000 | +91,000 |

*Training grants*

Total training grants:

| | |
|---|---|
| 1968 estimate | $9,762,000 |
| 1969 estimate | 10,012,000 |
| Increase or decrease | +250,000 |

INTRODUCTION

This activity provides for grants to institutions for support of graduate students in the fields of reproduction and population research, perinatal biology and infant mortality, growth and development, aging, and mental retardation.

The increase of $250,000 in 1969 over the 1968 level includes $102,000 to support one additional noncompeting continuation, $36,000 to support one additional competing continuation, and $112,000 to fund two additional new training awards.

PROGRAM PLANS FOR 1968 AND 1969

NICHD research training programs seek to produce researchers who will have the skills and the interest to expand our present inadequate understanding of the complex phenomena which characterize development of the human organism, not only in terms of his physical form and function, but also in terms of his mental, emotional, perceptual, intellectual, and social development. This knowledge is essential for rational solutions to the human problems which confront the NICHD, and for efficient and systematic approaches to such solutions. The mixture of basic, clinical and applied research requires highly trained scientists in both clinical and non-clinical disciplines. There is an acute shortage of highly trained professionals in each of the Institute's five major program areas.

*Reproduction and population research*

The field of reproduction research requires researchers trained in a wide range of disciplines. One of the most urgent needs is for scientists trained in reproductive biology—an area which encompasses endocrinology, biology, physiology, gynecology, and other disciplines. There is also a great need for behavioral scientists in the field, to determine those factors which influence such important decisions as the type of contraceptive method used, if any; the size of the family; and the effects of careful spacing of children.

In its approach to the population growth problem, the Institute is also supporting training in a broad spectrum of scientific research fields ranging from cell biology to demography.

*Perinatal biology and infant mortality*

The Institute serves as a focal point for the coordination, stimulation, and support of a broad program of research which will encompass all aspects of normal and abnormal reproduction, pregnancy and infant survival and well being. This research program necessitates trained scientists in such fields as immunology, since infectious disease is an important underlying condition of death in the neonatal period; genetics, since congenital malformations, defects and death in the fetus and newborn often stem from hereditary causes; and behavioral sciences, since such factors as maternal education and attitudes, urban-rural status, social status, family income, sanitation and housing have a high influence on infant death. Epidemiologic training is also needed to develop studies of sudden unexplained infant death, and to survey those segments of the population whose rate of infant death is greatest.

*Growth and development*

Since this research program is concerned with the period from birth to adulthood, the training needs must necessarily be expansive. Many biological and behavioral areas are called into play, including biochemistry, anatomy, physiology, nutrition, sociology, psychology and neurology. Since childhood, perhaps more than any other period, involves an interaction of many factors, the researchers must posses broad training in several disciplines. There is a great need for researchers who are competent to evaluate congenitive and perceptual development and personality functions as they relate to biological growth and optimal human development.

*Adult development and aging*

The most significant factor in the present lack of trained professionals engaged in aging research is the comparatively recent emergence of gerontology as a scientific discipline. The U.S. Public Health Service established a unit on gerontology only shortly before World War II, and gerontologists formed their own society barely twenty years ago.

No medical school has a department of gerontology, and the scientist interested in studying aging must look to the established discriplines, including biochemistry, psychiatry, pathology, physiology, and molecular biology for career advancement.

The Institute has in the past two years contracted with a major gerontological organization to investigate means of encouraging young scientists to seek additional training in gerontological fields and to promote better curricula for this type of training. A start has been made, but the training base is so small compared with the research needs that the problems confronting this field can be met only with major emphasis on gerontological training.

*Mental retardation*

The construction of the new Mental Retardation Research Centers is greatly increasing the demands for skilled professional personnel. The dearth of trained

manpower represents the most important single obstacle to the establishment and expansion of urgently needed facilities and for the implementation of research activities within them. This shortage extends to all disciplines and all kinds of research service and training activities. The NICHD, by its very nature, is concerned with many scientific disciplines, thereby necessitating the most comprehensive training base possible. This need for comprehensive training can be seen in the broad spectrum of scientific disciplines involved in the study of Mental Retardation, which includes virtually every biomedical and behavioral discipline.

DISTRIBUTION OF TRAINING GRANTS

| | 1968 estimate | | 1969 estimate | | Decrease or increase | |
|---|---|---|---|---|---|---|
| | Number | Amount | Number | Amount | Number | Amount |
| 1. Continuations: | | | | | | |
| a. Noncompeting | 119 | $8,699,000 | 120 | $8,801,000 | +1 | +$102,000 |
| b. Competing | 8 | 471,000 | 9 | 507,000 | +1 | +36,000 |
| 2. Supplementals | (1) | 55,000 | (1) | 55,000 | | |
| 3. New | 7 | 437,000 | 9 | 549,000 | +2 | +112,000 |
| 4. Scientific evaluation | (3) | 100,000 | (3) | 100,000 | | |
| 5. Total training grants | 134 | 9,762,000 | 138 | 10,012,000 | +4 | +250,000 |

TRAINING GRANTS (BY TYPE OF PROGRAM)

| | | | | | | |
|---|---|---|---|---|---|---|
| 1. Graduate | 134 | $9,662,000 | 138 | $9,912,000 | +4 | +$250,000 |
| 2. Scientific evaluation | (3) | 100,000 | (3) | 100,000 | | |
| 3. Total training grants | 134 | 9,762,000 | 138 | 10,012,000 | +4 | +250,000 |

TRAINING GRANT PROGRAM ANALYSIS

| | 1968 estimate | 1969 estimate | Increase or decrease |
|---|---|---|---|
| 1. Reproduction and population research | $3,094,000 | $3,173,000 | $+79,000 |
| 2. Perinatal biology and infant mortality | 925,000 | 925,000 | |
| 3. Growth and development | 2,800,000 | 2,800,000 | |
| 4. Aging | 1,874,000 | 1,922,000 | +48,000 |
| 5. Mental retardation | 969,000 | 1,092,000 | +123,000 |
| 6. Subtotal, regular program | 9,662,000 | 9,912,000 | +250,000 |
| 7. Scientific evaluation | 100,000 | 100,000 | |
| 8. Total training grants | 9,762,000 | 10,012,000 | +250,000 |

LABORATORY AND CLINICAL RESEARCH

| | 1968 estimate | | 1969 estimate | | Increase or decrease | |
|---|---|---|---|---|---|---|
| | Positions | Amount | Positions | Amount | Positions | Amount |
| Personnel compensation and benefits | 271 | $2,184,000 | 354 | $2,956,000 | +83 | +$772,000 |
| Other expenses | | 2,914,000 | | 3,737,000 | | +823,000 |
| Total | 271 | 5,098,000 | 354 | 6,693,000 | +83 | +1,595,000 |

*Introduction*

Seven laboratories and branches—Reproduction Research Branch, Developmental Biology Branch, Laboratory of Biomedical Sciences, Children's Diagnostic and Study Branch, Behavioral Biology Branch, Social and Behavioral Sciences Branch, and Gerontology Research Center—conduct the Intramural Research operations in the program areas listed below. The funds requested for laboratory and clinical research by these units represent a program increase of $550,000 in 1969 over 1968. Other increases include $383,000 for 1969 annualization of positions new in the 1968 President's Budget, $25,000 for 1969 annualization of the 1968 pay raise costs and $14,000 for one additional day of pay in

1969. Also included is an increased of $623,000 for centrally furnished services from the "National Institutes of Health Management Fund."

PROGRAM PLANS FOR 1968 AND 1969

The office of the Associate Director for Intramural Research will staff a clinical facility which will become available to the Institute during 1969. These clinical resources will have input from four of the five Institute program areas: Reproduction and Population, Perinatal Biology and Infant Mortality, Growth and Development, and Mental Retardation. However, the limitations of resources will make it necessary to place emphasis on only one of these program areas at one time. The remaining program area, Adult Development and Aging, has independent clinical resources.

*Reproduction and population*

Support will continue at the same level for studies on human menstruation and pregnancy, analyses of hormonal mechanisms affecting sperm and egg production, fertility and reproduction, production and metabolism of placental hormones, and related studies. Establishment of an obstetrical unit in a teaching hospital will move us a step closer to a comprehensive program of coordinated, clinical, laboratory and epidemiological studies of reproductive phenomena in man. Emphasis is being given to fertility control, sterility, gonadal development and pubescence, menopausal and post-menopausal phenomena, disorders of menstrual function and normal and abnormal pregnancies.

*Perinatal biology and infant mortality*

The current lines of attack deal with: implantation (ectopic pregnancy); abnormalities related to the pregnancy period including placenta praevia, abruptio placenta, hydatidiform mole and choriocarcinoma; the consequences of infectious episodes at different stages of embryonic and fetal life (including studies of the effect of virus infections, and studies of the development of the immune system); developmental pharmacological studies (development of liver systems for detoxifying drugs, short and long term effects of drugs on embryos and fetuses); and experimental evaluation of the contribution of the egg age to the hazards associated with increasing maternal age.

The Intramural Research Program will investigate possible permanent behavioral modifications produced by the administration of drugs and medicinals during embryonic and fetal development and analyze genetic and biochemical defects, many of which first come to light at birth.

*Growth and development*

Studies in this area range from the biochemical level of organization to the behavioral level. Current studies include fundamental investigations of mechanisms regulating carbohydrate metabolism (insulin, glucagon) the normal and modified development of behavior in embryos, the development of prenatal electrical activity in the brain, the development of verbal behavior in preschool children, the relationship between environmental deprivation and intellectual and personality development, and the inter-relationships between cognitive and personality functions in preschool children. Some of the latter studies are being conducted in the context of the Headstart program. During 1969 support for Growth and Development programs will remain at the 1968 level. This is the result of deliberate programming which makes provision for a period of consolidation, and for urgently needed growth in other areas of the Intramural Research Programs.

*Adult development and aging*

The new Gerontology Research Center will be occupied by existing programs during February and March 1968. By the beginning of FY 1969, the intramural research space in this building and the programs projected for this space should be approximately half staffed. Staffing of the programs and facilities of the Gerontology Research Center take high priority in the Intramural Programs of the Institute. The increase of 40 positions will permit interior expansion of: the longitudinal program (in depth studies of over 500 aging human males); studies in molecular biology which seek the basic mechanisms underlying the aging process; studies in cellular and comparative physiology which seek to define the biochemical concomitants of aging; and a range of basic investigations in animals which allow greater latitude in experimental design.

*Mental retardation*

The activities of the Intramural Research Program in the area of mental retardation are principally represented by the Children's Diagnostic and Study Branch. This clinically oriented unit is bringing to bear a battery of clinical specialties on a population of mentally retarded children in a three-step program which seeks to improve diagnoses, identify precipitating factors and, ultimately, to develop preventive and restorative procedures. During 1969, the resources of the unit and of this program area will be approximately the same as they were in 1968, and will permit the Intramural Research Programs to develop other areas.

COLLABORATIVE RESEARCH AND DEVELOPMENT

| | 1968 estimate | | 1969 estimate | | Increase or decrease | |
|---|---|---|---|---|---|---|
| | Positions | Amount | Positions | Amount | Positions | Amount |
| Personnel compensation and benefits | 34 | $333,000 | 39 | $381,000 | +5 | +$48,000 |
| Other expenses | | 1,197,000 | | 4,651,000 | | +3,454,000 |
| Total | 34 | 1,530,000 | 39 | 5,032,000 | +5 | +3,502,000 |

INTRODUCTION

This activity serves the important purpose of supplementing and complementing the Institute's research programs. It is one of the most effective ways for coordinating program development in the major areas of interest—reproduction and family planning, perinatal biology and infant mortality, growth and development, aging, and mental retardation.

Program liaison is maintained and furthered through support of inter-disciplinary research conferences and symposia and through Scientific Information Centers which are being established. In addition, public information activities insure that the Institute's programs and goals are appropriately reflected to interested segments of the public.

PROGRAM PLANS FOR 1968 AND 1969

The net increase of $3,502,000 will be used to expand the contract program in reproduction and population research and fertility control and to provide five positions for scientific staff to direct these programs. Maximum emphasis of the contract program will be concentrated in the following three research areas: 1. the medical effects of contraceptives, 2. the development of new contraceptives, and 3. the psycho-social aspects of family planning.

Current studies on the mechanism of action and medical effects of contraceptives and on the methodology needed for surveillance studies will be continued and expanded. Long-term studies are underway on actual and possible effects of oral contraceptives on the development of cervical dysplasia and on carbohydrate and lipid metabolism, and additional proposals are being developed for research on possible carcinogenic and diabetogenic effects as well as for studies of the effects of oral contraceptives on the outcome of subsequent pregnancies.

The funds will also be used to initiate a feasibility study for a coordinated program directed to the development of new contraceptive methods. A number of potentially effective fertility regulation techniques are at a stage where a concentrated research effort may prove especially fruitful and a task force is now engaged in identifying such areas and the research needed to bring them to fruition.

Contract research will be supported in the psychological and social aspects of family planning, including such areas as the social determinants of attitudes toward family size, motivational factors in the acceptability of family planning methods, and the development of methods to measure the magnitude of the problem of unwanted pregnancies.

The net increase of $3,502,000 for Collaborative Research and Development is made up of a program increase of $3,500,000, a built-in increase of $5,000 and a

decrease of $3,000 for centrally furnished services from the "National Institutes of Health Management Fund."

BIOMETRY, EPIDEMIOLOGY, AND FIELD STUDIES

| | 1968 estimate | | 1969 estimate | | Increase or decrease | |
|---|---|---|---|---|---|---|
| | Positions | Amount | Positions | Amount | Positions | Amount |
| Personnel compensation and benefits | 23 | $177,000 | 23 | $183,000 | ..... | +$6,000 |
| Other expenses | ..... | 1,863,000 | ..... | 1,863,000 | ..... | ..... |
| Total | 23 | 2,040,000 | 23 | 2,046,000 | ..... | +6,000 |

## Introduction

This activity supports the Institute scientific staff in planning and conducting epidemiologic and biometric investigations and conducts research in epidemiological and biometric theory, techniques and methods. It also collects and analyzes program statistics for various programs and executes statistical studies for use in program planning, development and evaluation.

The net increase of $6,000 includes a $4,000 increase for the annualization of the 1968 pay raise cost, a $1,000 increase for one additional day of pay in 1969, and $1,000 increase for centrally furnished services from the "National Institutes of Health Management Fund."

## PROGRAM PLANS FOR 1968 AND 1969

The need for sound epidemiologic and biometric studies in the area of reproduction is particularly great. Two epidemiological projects currently being conducted are studies of the characteristics of the human menstrual cycle. In one university, researchers began the menstrual history study in 1934. The study has continued until the present time, accumulating data of over 27,000 person-years of menstrual experience. At present, there are 2,200 women actively collaborating in the study. Data include information concerning duration of menstruation, and the influences of pregnancies, illness, surgery, drugs, and environment on the menstrual cycle.

The second study involves the menstrual cycles and pregnancies of Eskimo women. It will provide data comparable to the data in the long-range study mentioned above, and will help to assess environmental, cultural, and behavioral influences in the reproductive processes.

Extensive epidemiological studies are also being conducted in the field of Growth and Development. As a result of increasing evidence that severe malnutrition may retard intellectual development, the Institute has contracted for a field study in Guatemala to investigate the impact of nutrition on intellectual and physiological development. A highly qualified research team has developed new techniques for a multi-disciplinary study assessing physical and intellectual growth in village populations. The use of food supplements has been started within the pilot village. The project is expected to extend over a number of years to permit evaluation of the long-term effects of dietary improvement.

With the exception of a few clinical conditions, relatively little is known today about the frequency and distribution of most forms of mental retardation and the biological and environmental factors with which they are associated A few of the factors needing epidemiological assessment are: the role of infectious diseases, chromosomal abnormalities, risk factors in pregnancy, and biochemical abnormalities.

A biometric study of great significance is being carried out under a contract with the Western Interstate Commission for Higher Education. Data have been collected on approximately 24,000 residents in 18 institutions for the retarded in the western states. The data gathered comprise the most complete psychosocial profiles on retarded subjects ever collected. The analysis of these data, now underway, will hopefully generate meaningful hypotheses for more intensive study.

TRAINING ACTIVITIES

| | 1968 estimate | | 1969 estimate | | Increase or decrease | |
|---|---|---|---|---|---|---|
| | Positions | Amount | Positions | Amount | Positions | Amount |
| Personnel compensation and benefits | 5 | $43,000 | 5 | $43,000 | | |
| Other expenses | | 46,000 | | 46,000 | | |
| Total | 5 | 89,000 | 5 | 89,000 | | |

Lack of sufficient numbers of trained scientists has always been a crucial problem. The direct training program is an especially effective means of coping with this problem. The program is geared to the needs of our intramural research operations by providing supplementary or cross-disciplinary training for the Institute's scientific staff members or those who are planning to join the staff.

REVIEW AND APPROVAL OF GRANTS

| | 1968 estimate | | 1969 estimate | | Increase or decrease | |
|---|---|---|---|---|---|---|
| | Positions | Amount | Positions | Amount | Positions | Amount |
| Personnel compensation and benefits | 94 | $807,000 | 98 | $822,000 | +4 | +$15,000 |
| Other expenses | | 1,147,000 | | 1,164,000 | | +17,000 |
| Total | 94 | 1,954,000 | 94 | 1,986,000 | +4 | +32,000 |

This activity is composed of professional and supporting personnel who are responsible for the administration of the Institute's several grant activities. This involves planning and development of programs in research, training, and fellowships that will best serve to accomplish the desired results in the problem areas for which this Institute is responsible; the securing of review and evaluation of research and training grant applications for presentation to the National Institute of Child Health and Human Development Advisory Council; required Council staff assistance; liaison with the applicants, grantees, other components of National Institutes of Health, Public Health Service, advisory bodies, and interested organizations; continued surveillance of scientific activities and progress of the research and training grant programs; and recording and reporting of fiscal and scientific information relevant to all grant transactions.

The increase of $32,000 will provide for a program increase of $20,000 to meet increased staff costs due to the added workload in the grant areas, $6,000 for the annualization of positions new in 1968, $10,000 for the 1969 annualization of the 1968 pay raise costs, $3,000 for one additional day of pay in 1969, and offset by a decrease of $7,000 for centrally furnished services from the "National Institutes of Health Management Fund."

PROGRAM DIRECTION

| | 1968 estimate | | 1969 estimate | | Increase or decrease | |
|---|---|---|---|---|---|---|
| | Positions | Amount | Positions | Amount | Positions | Amount |
| Personnel compensation and benefits | 51 | $527,000 | 54 | $555,000 | +3 | +$28,000 |
| Other expenses | | 486,000 | | 523,000 | | +37,000 |
| Total | 51 | 1,013,000 | 54 | 1,078,000 | +3 | +65,000 |

This activity includes the Offices of the Director, Assistant to the Director for Population Research, Associate Director for Planning and Evaluation, Executive Office, Administrative Office and the Budget Office. These offices are responsible for the general administration, direction and coordination of the Institute programs, as well as for the review of current and proposed operations.

The increase of $65,000 will provide for a program increase of $20,000 to continue effective management of a growing organization, $6,000 for the annualization of positions new in 1968, $6,000 for the 1969 annualization of the 1968 pay

raise costs, $2,000 for one additional day of pay in 1969, and $31,000 for centrally furnished services from the "National Institutes of Health Management Fund."

NEW POSITIONS REQUESTED FISCAL YEAR 1969

| | Grade | Annual salary |
|---|---|---|
| Laboratory and clinical research: | | |
| Medical officer | GS-15 | $18,404 |
| Medical staff assistant | GS-15 | 18,404 |
| Scientist | FS-15 | 18,404 |
| Medical officer | GS-14 | 15,841 |
| Scientist (3) | GS-14 | 47,523 |
| Geneticist | GS-13 | 13,507 |
| Biochemist (2) | GS-12 | 22,922 |
| Biologist (2) | GS-12 | 22,922 |
| Chemist | GS-12 | 11,461 |
| Electrical engineer | GS-11 | 9,657 |
| Electrical technician (2) | GS-11 | 19,314 |
| Speech and hearing pathologist | GS-11 | 9,657 |
| Photographer | GS-9 | 8,054 |
| Biologist | GS-9 | 8,054 |
| Histopathologist | GS-9 | 8,054 |
| Chemist (2) | GS-9 | 16,108 |
| Biomedical laboratory technician (2) | GS-7 | 13,468 |
| Biology lab technician (2) | GS-7 | 13,468 |
| Biologist (3) | GS-7 | 20,202 |
| Social science analyst (2) | GS-7 | 13,468 |
| Chemist (2) | GS-7 | 13,468 |
| Research technician (3) | GS-7 | 20,202 |
| Physicial scientist technician (2) | GS-6 | 12,274 |
| Laboratory technican (4) | GS-5 | 22,260 |
| Clerk stenographer | GS-5 | 5,565 |
| Chemist (3) | GS-5 | 16,695 |
| Medical technician (2) | GS-5 | 11,130 |
| Clerk typist | GS-4 | 4,995 |
| Laboratory aids (3) | GS-4 | 14,985 |
| Medical technician (2) | GS-4 | 9,990 |
| Laboratory aids (3) | GS-3 | 13,398 |
| Animal caretaker (4) | GS-3 | 17,864 |
| Laboratory worker (2) | GS-3 | 8,932 |
| Laboratory helper (2) | GS-2 | 8,216 |
| Director grade (2) | CO | 17,838 |
| Senior grade (3) | CO | 21,397 |
| Full grade (10) | CO | 60,181 |
| Senior assistant grade | CO | 5,596 |
| Laboratory worker (2) | WB | 9,484 |
| Subtotal (83) | | 623,362 |
| Collaborative Research and Development: | | |
| Technical information specialist (2) | GS-11 | 19,314 |
| Editor writer | GS-7 | 6,734 |
| Clerk steno | GS-5 | 5,565 |
| Clerk typist | GS-4 | 4,995 |
| Subtotal (5) | | 36,608 |
| Review and Approval: | | |
| Health scientist administrator | GS-13 | 13,507 |
| Grants clerk (2) | GS-4 | 9,990 |
| Clerk typist | GS-4 | 4,995 |
| Subtotal (4) | | 28,492 |
| Program Direction: | | |
| Medical officer | GS-13 | 13,507 |
| Clerk stenographer (2) | GS-5 | 11,130 |
| Subtotal (3) | | 24,637 |
| Total new positions, all activities (95) | | 713,099 |

BIOLOGICAL AND BEHAVIORAL ASPECTS OF HUMAN DEVELOPMENT

Senator HILL. All right, Institute of Child Health and Human Development, Dr. LaVeck. Doctor, we are glad to have you here, sir. We are glad to have you proceed now.

Dr. LAVECK. Mr. Chairman, the National Institute of Child Health and Human Development seeks to obtain a better understanding of

the biological and behavioral aspects of human development from the beginning to the end of life.

Senator HILL. It is our newest Institute, isn't it?

Dr. LAVECK. Yes, sir; it is about 5 years old. We want all children to be born healthy, to survive their infancy, to grow up without handicaps, and to achieve their maximal potential. Important specific objectives include the reduction of infant mortality and the development of a sound scientific base for realistic family planning practices. We must be concerned with the process of intellectual development, and understand the aging process.

### INFANT MORTALITY

In 1967, more than 78,000 infants in the United States died during the first year of life—an infant mortality rate of 22.1 per 1,000 live births, or a drop of 6 percent in comparison with 1966. This represents the most significant drop in infant death rates in over a decade.

Senator HILL. How do you ascribe that?

Dr. LAVECK. There are a number of explanations for our relatively high infant mortality rate. A study was carried out by the National Center for Health Statistics, in which six of the countries that had more favorable rates were compared with the United States. The main factor that was elicited was that the rate of prematurity in this country was higher than in other countries. About 8.3 percent of infants in the United States are of low birth weight, as compared to 5 or 6 percent in countries with lower infant mortality rates.

Why we have a higher prematurity rate is probably related to the heterogeneity of our population and the pockets of poverty and minority groups that we have in this country. Factors such as poor nutrition, unavailable or underutilized medical care, and lack of access to family planning services contribute to high infant mortality and prematurity rates in these deprived populations.

Senator HILL. What country has the best rate?

Dr. LAVECK. Sweden.

Senator HILL. It has a very small population, doesn't it?

Dr. LAVECK. Compared to our country, yes.

Dr. SHANNON. Seven million, I believe.

Dr. LAVECK. We have found diet, drugs, environmental influences, heredity, maternal illnesses and social factors can have a profound effect on the well-being of the unborn child. But much more research is needed before we know the precise influence of these and other factors on the outcome of pregnancy.

### RH BLOOD FACTORS

However, one health hazard to many infants, the presence of Rh blood incompatability, which has caused the deaths of approximately 5,000 infants per year, may be eliminated in the next few years as a result of Institute-supported research. An anti-Rh preparation designed to prevent a mother with Rh-negative blood from becoming sensitized to her infant's Rh-positive blood has been developed and used successfully in a large number of cases.

Senator HILL. You just found that recently, didn't you?

Dr. LAVECK. That is correct. This preparation will soon become generally available.

INFANT RESPIRATORY SYSTEM DISORDERS

The newborn infant faces certain very specific hazards during his first days of life. The respiratory system must make the greatest degree of adjustment in adapting to life after birth. Approximately 20,000 newborn infants die each year from the respiratory distress syndrome. We do not know the cause of this disease. So far, no specific method of treating this disorder has proved to be reliable. Therefore, more research will be conducted and new treatment methods will be explored.

Senator HILL. This is a very compelling thing, isn't it?

Dr. LAVECK. It certainly is.

MENTAL RETARDATION

Not all infants with significant health problems die. Some, though surviving, develop handicapping disabilities. Mental retardation often stems from an abnormality originating during pregnancy, at birth, or shortly after birth.

Senator HILL. Once you get that mental retardation, there is nothing you can do about it, is there?

Dr. LAVECK. There are certain types of mental retardation which, if detected early, can be treated medically, but for the most part, educational management has the most to offer. Prevention is the key to the problem of mental retardation.

Mental retardation can also be caused by lack of appropriate stimulation at given periods of development. Over 100,000 infants born each year are destined to manifest evidence of mental subnormality later in life. During the past 3 years, 12 institutions have received awards from the National Institutes of Health for the construction of mental retardation research centers. These construction funds were made available through Public Law 88–164. The research and research training in these centers promises to make a significant contribution in our efforts to prevent, diagnose and manage mental retardation.

FAMILY PLANNING

The Institute is convinced that family planning services are effective measures to reduce both infant mortality and mental retardation. Mongolism, or Down's syndrome, is a good example of this point. Approximately one out of every 700 newborn infants has mongolism. For women who bear a child after they are 45 years old, however, the risk of having a mongoloid child is about one chance in 40. If family planning information and services were made available to older women, mongolism and other congenital malformations would be reduced.

We support research in reproductive biology, contraceptive methods, and social aspects of family planning. The Institute is aware that an array of contraceptive methods must be developed if the diverse needs of all populations are to be met. However, new methods should be based on a better understanding of reproductive biology.

Senator HILL. Which we don't have today, that understanding; is that right?

Dr. LAVECK. That is right.

After a sound scientific base has evolved, we will direct our efforts toward the development of new contraceptive techniques.

AGING RESEARCH

At the other end of the lifespan, the Institute is proud to report that the new Gerontology Research Center building, located at Baltimore City Hospital, has been completed, and is in use. When fully staffed, the new facility will provide space for approximately 400 research workers. It is the largest center for gerontological research in the world, and will provide regional, national, and international stimulus to gerontological research.

The opening of this new facility will permit the expansion of the longitudinal studies. These have been underway for nearly a decade, and have already resulted in findings indicating that decline in function with age is quite complex, and more subtle than was previously believed. The new facility will also permit the expansion of the Center's other programs of research related to alterations occurring in the human being during the aging process.

BEHAVIORAL SCIENCES

Mr. Chairman, the Institute is convinced that the behavioral sciences have much to contribute to our Nation's health. Thus our programs reflect the need to understand the particularly important behavioral events of both ends of the life spectrum, and the interpersonal, familial and societal circumstances that affect the developmental process in both the normal and the abnormal individual.

In the past year this conviction has proved productive. The National Fertility Study, supported by us, indicates that expectations of family size, for most American couples, remain much as they were in 1955. Through research at the University of Minnesota we have learned that children from lower-class families have positive attitudes toward schooling, but, like their middle-class peers, grow more negative as their school experience progresses.

COUNSELING OF PARENTS CONCERNING HANDICAPS

We have learned, through a study in the Institute's Mental Retardation Diagnostic and Study Branch, that parents of mentally retarded children gain much from appropriate counseling concerning their children's handicaps.

Senator HILL. It can be very helpful, can't it?

Dr. LAVECK. We have found it to be extremely helpful; and parents become much more realistic in their expectations for their child, with counseling.

HOUSING AND NUTRITION

We have also learned that good housing has a beneficial effect upon the social and psychological adjustment of older people.

The Institute's interest in the interface between the behavioral and biological sciences is nowhere more clearly demonstrated than in its research on the relationship between nutrition and intellectual development. Because of recent findings concerning the effects of diet on the development of intellectual capacity, the Institute is supporting a long-term study to determine what effect improved nutrition has on growth and development.

In summary, Mr. Chairman, in the 5 years since the Institute was established, and in the years to come, it has and it will make every effort to acquire new knowledge concerning developmental processes which, when applied, will improve the health of all our citizens, and the quality and vigor of their lives.

### 1968 APPROPRIATION AND 1969 BUDGET REQUEST

For our activities in the coming fiscal year, we are submitting a request for $75,394,000. This, compared with an operating level of $68,035,000 for 1968, represents an increase of $7,359,000. Of this sum, we are requesting $2,159,000 for grants, of which $1,818,000 is for research and $341,000 is for fellowships and training. For direct operations, which include collaborative research and development, we are requesting an additional $5,200,000.

I shall be happy to answer any questions.

### RESEARCH AND TRAINING GRANTS

Senator HILL. Well, you still have a reduction of some $5,175,000, don't you?

Dr. LAVECK. That is correct.

Senator HILL. How is that going to affect you?

Dr. LAVECK. The reductions are primarily in the area of research grants and training grants. At the present time in our Institute we are able to fund only about 50 percent of all approved research applications. This means we will have almost $9 million of unfunded meritorious projects at the end of this fiscal year; and by fiscal year 1969, it will be approximately $12,700,000.

Senator HILL. Projects that have been approved by your council?

Dr. LAVECK. That is correct.

### PERSONNEL TRAINING

Senator HILL. Well, we have been speaking about personnel, what about that? For training?

Dr. LAVECK. In training we will have approximately $650,000 of applications in fiscal year 1968 that will be approved, but not funded. We are funding 75 percent of all approved training grants at the present time.

By the end of fiscal year 1969, there will be $1.6 million of unfunded, approved applications.

Senator HILL. How much in terms of personnel will that affect?

Dr. LAVECK. In terms of total numbers of people?

Senator HILL. Yes.

Dr. LAVECK. This year about 105 individuals cannot be supported as trainees, which is based on an average of about seven trainees per training grant. Next year about 160 to 170 people will be deprived of training opportunities.

Senator HILL. Who would not receive the training.

Dr. LAVECK. That is correct.

Senator HILL. In spite of the need for it?

Dr. LAVECK. Yes.

Dr. SHANNON. The impact of training grants goes well beyond the simple training of people. They have been found to be an extremely useful device for stabilizing science in a university setting which accommodates research as well as the training of young individuals. The effect of a shortage of funds is not just a deficit in the number of individuals trained. It will have its impact on the medical curriculum and the general exposure of the developing physician to the sciences that Dr. LaVeck is supporting through his Institute.

Senator HILL. Which means it is more serious than it might appear on the face?

Dr. SHANNON. Yes, sir; it goes beyond the simple trainees.

BACKGROUND OF DR. LAVECK

Senator HILL. You have been all the way from Washington State to Washington, D.C.; is that right?

Dr. LAVECK. That is correct.

Off the record.

(Brief discussion off the record.)

Senator HILL. On the record.

You made a good witness, and offered very good testimony and we want to keep you right here.

I believe we have one other witness present and that is the regional medical programs.

Dr. SHANNON. They have left.

SUBCOMMITTEE RECESS

Senator HILL. Off the record.

(Brief discussion off the record.)

Senator HILL. On the record.

We will stand in recess until 10:30 in the morning.

(Whereupon, at 1:25 p.m., Tuesday, April 30, the subcommittee was recessed, to reconvene at 10:30 a.m., Wednesday, May 1.)

# DEPARTMENTS OF LABOR, AND HEALTH, EDUCATION, AND WELFARE, AND RELATED AGENCIES APPROPRIATIONS FOR FISCAL YEAR 1969

WEDNESDAY, MAY 1, 1968

U.S. SENATE,
SUBCOMMITTEE OF THE COMMITTEE ON APPROPRIATIONS,
*Washington, D.C.*

The subcommittee met at 10:30 a.m. in room 1224, New Senate Office building, Hon. Lister Hill (chairman) presiding.

Present: Senators Hill, Javits and Cotton.

## DEPARTMENT OF HEALTH, EDUCATION, AND WELFARE

### PUBLIC HEALTH SERVICE

### NATIONAL INSTITUTES OF HEALTH

### REGIONAL MEDICAL PROGRAMS

STATEMENT OF DR. ROBERT Q. MARSTON, DIRECTOR
ACCOMPANIED BY:
DR. JAMES A. SHANNON, DIRECTOR, NATIONAL INSTITUTES OF HEALTH
KARL D. YORDY, DEPUTY DIRECTOR, DIVISION OF REGIONAL MEDICAL PROGRAMS
CHARLES HILSENROTH, EXECUTIVE OFFICER, DIVISION OF REGIONAL MEDICAL PROGRAMS
NICHOLAS G. CAVAROCCHI, FINANCIAL MANAGEMENT OFFICER, DIVISION OF REGIONAL MEDICAL PROGRAMS
JAMES A. HICKEY, ACTING FINANCIAL MANAGEMENT OFFICER, NATIONAL INSTITUTES OF HEALTH
DR. WILLIAM H. STEWART, SURGEON GENERAL
CHARLES MILLER, CHIEF FINANCE OFFICER
JAMES B. CARDWELL, DEPUTY ASSISTANT SECRETARY, BUDGET

#### APPROPRIATION ESTIMATE

"REGIONAL MEDICAL PROGRAMS"

"To carry out title IX of the Act, [$58,814,000] *$68,922,000*, of which [$53,900,000] *$62,900,000* shall remain available until June 30, [1969] *1970*, for *such* grants pursuant to such title *as may be authorized by law. (Additional authorizing legislation to be proposed.)*"

#### APPROPRIATION LANGUAGE CHANGES

This appropriation estimate anticipates extension of the legislative authorization for appropriations which expires with fiscal year 1968.

## AMOUNTS AVAILABLE FOR OBLIGATION

| | 1968 | 1969 |
|---|---|---|
| Appropriation | $58,814,000 | $68,922,000 |
| Unobligated balance brought forward | 25,900,338 | 30,900,000 |
| Cutback required by H.J. Res. 888: | | |
| Reduction below obligation level in the 1968 President's budget: | | |
| Unobligated balance lapsing | —97,000 | |
| Unobligated balance carried forward | —26,000,000 | |
| Subtotal | —26,097,000 | |
| Reduction because of unanticipated carryover balances (unobligated balance carried forward) | —4,900,000 | |
| Total cutback | —30,997,000 | |
| Total currently authorized for obligations | 53,717,338 | 99,822,000 |
| Plus proposed release of reserves for increased pay costs | 69,000 | |
| Total available for obligation | 53,786,338 | 99,822,000 |
| Disposition of cutback: | | |
| To be used for pay cost in this account | 69,000 | |
| To be returned to Treasury | 28,000 | |
| To be carried forward for obligation in 1969 | 30,900,000 | |
| Total cutback | 30,997,000 | |

| | 1968 estimate | | 1969 estimate | | Increase or decrease | |
|---|---|---|---|---|---|---|
| | Positions | Amount | Positions | Amount | Positions | Amount |
| Grants: Regional medical problems | | $48,900,338 | | $93,800,000 | | +$44,899,662 |
| Direct operations: | | | | | | |
| Professional and technical assistance | 33 | 2,958,000 | 51 | 3,314,000 | +18 | +356,000 |
| Review and approval of grants | 42 | 712,000 | 56 | 905,000 | +14 | +193,000 |
| Program direction | 70 | 1,216,000 | 91 | 1,803,000 | +21 | +587,000 |
| Total obligations | 145 | 53,786,338 | 198 | 99,822,000 | +53 | +46,035,662 |

## OBLIGATIONS BY OBJECT

| | 1968 estimate | 1969 estimate | Increase or decrease |
|---|---|---|---|
| Total number of permanent positions | 145 | 198 | +53 |
| Full-time equivalent of all other positions | 6 | 6 | |
| Average number of all employees | 137 | 175 | +38 |
| Personnel compensation: | | | |
| Permanent positions | $1,346,000 | $1,828,000 | +$482,000 |
| Positions other than permanent | 51,000 | 51,000 | |
| Other personnel compensation | 15,000 | 15,000 | |
| Total personnel compensation | 1,412,000 | 1,894,000 | +482,000 |
| Personnel benefits | 134,000 | 188,000 | +54,000 |
| Travel and transportation of persons | 190,000 | 240,000 | +50,000 |
| Transportation of things | 9,000 | 12,000 | +3,000 |
| Rent, communications, and utilities | 43,000 | 63,000 | +20,000 |
| Printing and reproduction | 31,000 | 42,000 | +11,000 |
| Other services | 154,000 | 184,000 | +30,000 |
| Project contracts | 2,375,000 | 2,545,000 | +170,000 |
| Payment to "National Institutes of Health management fund" | 485,000 | 763,000 | +278,000 |
| Supplies and materials | 23,000 | 49,000 | +26,000 |
| Equipment | 30,000 | 42,000 | +12,000 |
| Grants, subsidies, and contributions | 48,900,338 | 93,800,000 | +44,899,662 |
| Total, obligations by object | 53,786,338 | 99,822,000 | +46,035,662 |

SUMMARY OF CHANGES

| | |
|---|---|
| 1968 enacted appropriation | $58,814,000 |
| Unobligated balance brought forward | 25,900,338 |
| Cutback required by H. J. Res. 888: | |
| Reduction below obligation level in the 1968 President's budget | −26,097,000 |
| Reduction because of unanticipated carryover balances | −4,900,000 |
| Proposed release of reserves for increased pay costs | 69,000 |
| 1968 estimated obligations | 53,786,338 |
| 1969 requested appropriation | 68,922,000 |
| Unobligated balance brought forward | 30,900,000 |
| 1969 estimated obligations | 99,822,000 |
| Total change | +46,035,662 |

| | Base | | Change from base | |
|---|---|---|---|---|
| | Positions | Amount | Positions | Amount |
| INCREASE | | | | |
| A. Built in: | | | | |
| 1. Annualization of new positions authorized in 1968 | | | | $90,000 |
| 2. Annualization of 1968 pay increase costs | | | | 16,000 |
| 3. 1 additional day of pay in 1969 | | | | 13,000 |
| Subtotal, built in | | | | 119,000 |
| B. Program: | | | | |
| 1. Grants | | $48,900,338 | | 44,899,662 |
| 2. Professional and technical assistance | 33 | 2,890,000 | 18 | 257,000 |
| 3. Review and approval of grants | 42 | 641,000 | 14 | 176,000 |
| 4. Program direction | 70 | 870,000 | 21 | 306,000 |
| Subtotal, program | 145 | 53,301,338 | 53 | 45,638,662 |
| C. Centrally furnished services from the National Institutes of Health management fund: | | | | |
| (a) Professional and technical assistance | | 68,000 | | 4,000 |
| (b) Review and approval of grants | | 71,000 | | 8,000 |
| (c) Program direction | | 346,000 | | 266,000 |
| Subtotal, management fund | | 485,000 | | 278,000 |
| Total net change requested | 145 | 53,786,338 | +53 | +46,035,662 |

EXPLANATION OF CHANGES

*Grants for regional medical programs.*—It is estimated that 24 of the 54 Regional Medical Programs will have entered their operational phase during 1968. The increase of $44,899,662 will be used primarily to initiate 30 new operational programs and to provide second or third year, funding to those programs already established.

*Professional and technical assistance.*—The program increase of 18 new positions and $257,000 includes: $50,000 for a contract program of operations research begun in 1967; $50,000 for contracts to be awarded to universities to increase the supply of trained personnel in the fields of continuing education, educational research, and evaluation of continuing education in the health sciences; $157,000 for additional positions necessary for providing assistance to regional personnel in the planning, development and operation of their programs.

*Review and approval of grants.*—The program increase of 14 positions and $176,000 is required to bring the functions of grants review and grants management to adequate staffing levels in 1969, during which all regions are expected to request operational grants.

*Program direction.*—The program increase of 21 positions and $306,000 will permit support of contracts to carry out planning and evaluation studies to identify and investigate issues related to future program developments and to formulate measures of performance by which regional operations may be evaluated: expansion in the communication and information program which link

the regional programs, the Division, and the general public; and increased requirements for centralized administrative services, including management analysis and contract administration.

JUSTIFICATION, REGIONAL MEDICAL PROGRAMS

| | 1968 estimate | | 1969 estimate | | Increase or decrease | |
|---|---|---|---|---|---|---|
| | Positions | Amount | Positions | Amount | Positions | Amount |
| Personnel compensation and benefits | 145 | $1,546,000 | 198 | $2,082,000 | +53 | +$536,000 |
| Other expenses | | 52,240,338 | | 97,740,000 | | +45,499,662 |
| Total | 145 | 53,786,338 | 198 | 99,822,000 | +53 | +46,035,662 |

GENERAL STATEMENT

The Regional Medical Programs seek to assist the Nation's health institutions and professions in capitalizing on the rapid advances of scientific medicine in the prevention, diagnosis, treatment, and rehabilitation of patients with heart disease, cancer, stroke or related diseases. The authorizing legislation asserts the grants are to assist in establishing regional cooperative arrangements among medical schools, research institutes, hospitals and other health institutions and agencies so that the health professions and their medical institutions will have available the latest advances in diagnosing and treating these diseases. Grant funds will support cooperative arrangements for research, training (including continuing medical education), improvement of patient care as well as the health manpower and health facilities of the Nation.

The budget request for 1969 of $99,822,000 is an increase of $46,035,662 over the funds available in 1968. This increase is to be used primarily for the support of additional operational grants and for continued support of the on-going activities in the 54 regions.

GRANTS FOR REGIONAL MEDICAL PROGRAMS

| | 1968 estimate | 1969 estimate | Increase or decrease |
|---|---|---|---|
| Grants for regional medical programs | $48,900,338 | $93,800,000 | +$44,899,662 |

*Introduction*

Grants are awarded to assist in the planning, establishment and operation of Regional Medical Programs for research and training (including continuing education) and for demonstrations of patient care in the fields of heart disease, cancer, stroke and related diseases.

In the two and one-half years since the President signed the Act, broadly representative groups have organized themselves to conduct Regional Medical Programs in 54 Regions using functional as well as geographic criteria. These Regions encompass all of the Nation's population and include combinations of entire states (e.g. the Washington-Alaska Region), portions of several states (e.g. the Intermountain Region which includes Utah and sections of Colorado, Idaho, Montana, Nevada and Wyoming), single states (e.g. the Georgia Region), and portions of states around metropolitan centers (e.g. the Rochester Region which includes the city of Rochester, N.Y. and 11 surrounding counties). Within these Regional Programs, a wide variety of organization structures have been developed in addition to the Regional Advisory Group required by the Law. These include executive and planning committees, categorical disease task forces, and community and other types of sub-regional advisory committees to coordinate cooperative arrangements among the Regions' health resources.

These regional cooperative arrangements, among representative health resources are a necessary step in bringing the benefits of scientific advances in medicine to people wherever they live in a Region. It enables patients to benefit from the inevitable specialization and division of labor which accompany the expansion of medical knowledge because it provides a system of working relationships among health personnel and the institutions and organizations in which they

work. This requires a commitment of individual and institutional spirit and resources which must be worked out by each Regional Medical Program. It is facilitated by voluntary agreements to serve, systematically, the needs of the public as regards the categorical diseases on a regional rather than more narrow basis.

Regions first receive planning grants from the Division of Regional Medical Programs, and then may be awarded operational grants to fund activities planned with initial and subsequent planning grants. These operational programs are the direct means for Regional Medical Programs to accomplish their objectives. Planning moves a Region toward operational activity and in concert with evaluation, is a continuing means for assuring the relevancy and appropriateness of operational activity. It is the effects of the operational activities, however, which will produce results by which Regional Medical Programs will be judged.

On November 9, 1967, the President sent the Congress the *Surgeon General's Report on Regional Medical Programs* submitted to the President through the Secretary in compliance with the Act. In preparation for this *Report* suggestions were sought from the 600 participants in a National Conference on Regional Medical Programs held in January 1967. Proceedings of this Conference were published recently. The *Report* details the progress of Regional Medical Programs and recommends continuation of the Programs beyond the June 30, 1968 limit set forth in the Act. The President's letter transmitting the *Report* to the Congress said, in part: "Because the law and the idea behind it are new, and the problem is so vast, the program is just emerging from the planning state. But this report gives encouraging evidence of progress—and it promises great advances in speeding research knowledge to the patient's bedside." Thus, in the final seven words of the President's message, the objective of Regional Medical Programs is clearly emphasized.

*Program for 1968 and 1969*

Two types of grants are authorized by the enabling legislation—planning and operational grants.

The achievement of any one objective of a Region may require a combination of activities, such as research, specialized training of allied health personnel, continuing education of physicians, experimentation to find the best methods to achieve desired results, and demonstration of the most efficient patient care. The law does not allow support of isolated projects, however meritorious, whether they be in continuing education, research, patient care demonstrations or training. As a result, a Regional Medical Program is not a collection of individual projects and represents far more than the sum of the parts. It is the linking together of these activities to accomplish the objectives of the Act through cooperative arrangements and interrelationships intended to improve care within a Region of all suffering from heart disease, cancer, stroke and related diseases.

Acceptance of the challenges posed by Regional Medical Programs is well demonstrated by the activities of Regions. One Region, faced with the not uncommon situation of a large number of hospitals wanting to establish coronary care units, was initially concerned with mechanics of building and equipping such units. Their attention shifted, however, to a consideration of how the Region might give the best diagnosis and treatment to all patients with myocardial infarction. What started as an emphasis on hardware in hospitals developed the potential of bringing the best talent in a Region together to consider a number of critical problems, including the need for trained manpower, the need for specialized resources in a community hospital, and the need to document for evaluation purposes what emerges from a possible dramatic change in the care of patients within a Region.

Another Region, finding itself with a number of small hospitals already having established coronary care units, has turned to the difficult but necessary task of studying the effectiveness of these small units, and the cost/benefit realities of such units in small hospitals.

Even the problems surrounding continuing education and training of health manpower forces Regional Medical Programs to consider other major issues. One Region has within it an expensive and excellent facility for the production of audio-visual materials, such as color motion picture films and television tapes. Because of the need for such materials by that Region, the production facility and the Region are working cooperatively. But attention has shifted from the mechanics of the production and distribution of teaching aids to the need for the determination of the proper content and use of such materials in teaching programs. The Region and the producer have jointly begun to study these prob-

lems in the specific terms of educational needs. In addition, they have recognized their unique ability to conduct such a study, which promises benefits to all regions.

On the other side of the country, a Region unable to produce its own audio-visual aids has decided to define carefully its need for program materials, and only then to secure them from a neighboring region. In these ways, inter-regional cooperative arrangements are being structured in order to solve elaborate hardware problems. The point to be made, however, is the switch from primarily a hardware problem to the larger issue of the proper use of educational aids within a program.

Many additional activities with great promise for achieving the objectives of the program were described at a Conference-Workshop held in January 1968. Over 700 persons involved in Regional Medical Programs attended and exchanged ideas and reports of progress through over 60 papers and numerous exhibits. The proceedings of the Conference-Workshop have just been made available.

Fiscal Year 1969 will be the first year of this program under new legislation, following an initial two and one-half years under the original "Heart Disease, Cancer, and Stroke Amendments of 1965." During the initial period, this appropriation has supported the establishment of 54 regionally-based programs devoted to planning activities. Of these, 24 will have initiated or will have qualified for operational programs based on cooperative efforts, to reduce the illness, disability, and premature deaths caused by these and related diseases. These programs already involve nearly every medical school in the country, research centers, hospitals, physicians, voluntary and public health organizations, allied health personnel and their representative societies, and others.

In 1969, in addition to planning activities in 54 Regions and operational programs in 24 Regions, it is expected that an additional 30 Regions will have initiated or qualified for operational activities. The specific activities now supported under Regional Medical Programs grants are as varied as the Regions themselves, and bear the stamp of imaginative response to local health needs that can only emerge through regional fact-finding, planning and decision-making.

As substantial as this beginning is, it is only a beginning. As the foundation for action has been established, the extent of the challenge has also emerged more clearly. Since this program was first proposed three years ago, the threats of heart disease and stroke have remained strong and still resistant to human skill and inventiveness. In these two and one-half years it has also become more apparent that the solution of these and other major health problems will require significant improvements in the organization and delivery of health services. Therefore, the great promise of Regional Medical Programs for the coming years lies in their demonstrating how medical capabilities can be more effectively organized to help solve these problems through new patterns of collaboration of all available health resources.

Ultimately, the overall success of any Regional Medical Program must be judged by the extent to which it can be demonstrated that the Regional Program has assisted the providers of health services in developing a system which makes available to everyone in the Region the best care for heart disease, cancer, stroke and related diseases.

Of the $93,800,000 available in 1969, $62,900,000 represents new obligational authority. An amount of $24,000,000 is needed to meet continuation requirements for grants awarded prior to the February 1968 Council. Applications totalling $14,500,000 will be presented to the February Council for review. Approximately $8,000,000 in new commitments for 1969 is anticipated as a result of Council action. We have in hand and have been informed by the Regions that applications in the amount of $28,900,000 will be presented to the May Council and it is anticipated that an additional continuation commitment will result in the amount of $15,000,000.

In summary, total continuation commitments are $47,000,000, leaving $46,800,000 available for support of 30 new operational awards as well as supplemental support of the initial 24 operational grants expected to be awarded by June 30, 1968.

It should be noted that the initial operational award represents the first step of operational activities designed to accomplish the objective of P.L. 89–239.

PROFESSIONAL AND TECHNICAL ASSISTANCE

| | 1968 estimate | | 1969 estimate | | Increase or decrease | |
|---|---|---|---|---|---|---|
| | Positions | Amount | Positions | Amount | Positions | Amount |
| Personnel compensation and benefits | 33 | $422,000 | 51 | $661,000 | +18 | +$239,000 |
| Other expenses | | 2,536,000 | | 2,653,000 | | +117,000 |
| Total | 33 | 2,958,000 | 51 | 3,314,000 | +18 | +356,000 |

Of the $356,000 increase requested, $100,000 will be used to support contract programs in two areas—(a) For a contract of operations research begun in 1967; this research is needed to develop new knowledge about systems of medical care and new insights into the relationships between the components of those systems, particularly on a regional basis. The descriptive models and other analytical techniques resulting from this work will ultimately be used by regional programs to improve the capability and efficiency of their particular systems of medical care, and (b) to increase the supply of trained personnel in the fields of continuing education, educational research, and evaluation of continuing education in the health sciences.

The balance of the program increase will support expanded field activities providing assistance to regional personnel in the planning, development and operation of their programs as well as to provide a vital communication link among the regions and the Division. The interchange information will enable each regional group to benefit from the experience and innovative solutions to problems from other areas.

Included in this increase is $90,000 for annualization of positions new in 1968; $2,000 for annualization of the pay raise effective in 1968; and $3,000 for one day over the normal work year. Also included is an increase of $4,000 for centrally furnished services from the "National Institutes of Health management fund".

REVIEW AND APPROVAL OF GRANTS

| | 1968 estimate | | 1969 estimate | | Increase or decrease | |
|---|---|---|---|---|---|---|
| | Positions | Amount | Positions | Amount | Positions | Amount |
| Personnel compensation and benefits | 42 | $439,000 | 56 | $574,000 | +14 | +$135,000 |
| Other expenses | | 273,000 | | 331,000 | | +58,000 |
| Total | 42 | 712,000 | 56 | 905,000 | +14 | +193,000 |

An increase of $193,000 and 14 positions is requested to bring the functions of grants review and grants management to adequate staffing levels in 1969, during which all regions are expected to have initiated or qualified for operational grants. The operational grants are inherently more complex than the planning grants, requiring more perceptive analysis and management. Included in the increase is $6,000 for annualization of the pay raise effective in 1968, plus $3,000 for one day over the normal work year. There is also an increase of $8,000 for centrally furnished services from the "National Institutes of Health management fund".

PROGRAM DIRECTION

| | 1968 estimate | | 1969 estimate | | Increase or decrease | |
|---|---|---|---|---|---|---|
| | Positions | Amount | Positions | Amount | Positions | Amount |
| Personnel compensation and benefits | 70 | $685,000 | 91 | $847,000 | +21 | +$162,000 |
| Other expenses | | 531,000 | | 956,000 | | +425,000 |
| Total | 70 | 1,216,000 | 91 | 1,803,000 | +21 | +587,000 |

A program increase of 21 positions and $306,000 will permit support of contracts to carry out studies to identify and investigate issues related to future program developments and to formulate measures of performance by which regional operations may be evaluated. This increase will also support additional positions required to create and maintain effective communication and information programs which link the regional programs, the Division, and the general public, and additional support for direct staff assistance to the Director to meet increased requirements for centralized administrative services, including management analysis and contract administration.

Also included is an increase of $8,000 for annualization of the pay raise effective in 1968 plus $7,000 for one day over the normal work year. There is also an increase of $266,000 for centrally furnished services from the "National Institutes of Health management fund."

NEW POSITIONS REQUESTED FISCAL YEAR 1969

| | Grade | Annual salary |
|---|---|---|
| Professional and technical assistance: | | |
| Management analyst | GS–14 | $15,841 |
| Medical officer | GS–14 | 17,953 |
| Public health program specialist (2) | GS–14 | 31,682 |
| Scientist | GS–14 | 15,841 |
| Medical officer | GS–13 | 16,207 |
| Public health program specialist | GS–13 | 13,507 |
| Clerk-stenographer (4) | GS–5 | 22,260 |
| Clerk-stenographer (3) | GS–4 | 14,985 |
| Director grade (2) | CO–06 | 23,420 |
| Senior grade | CO–05 | 10,220 |
| Senior assistant grade | CO–03 | 8,657 |
| Total (18) | | 190,573 |
| Review and approval of grants: | | |
| Chief of branch | GS–15 | 18,404 |
| Medical officer | GS–15 | 19,017 |
| Assistant chief of branch | GS–14 | 15,841 |
| Medical officer | GS–14 | 17,953 |
| Administrative staff assistant | GS–13 | 13,507 |
| Administrative staff assistant | GS–12 | 11,461 |
| Grants clerk | GS–5 | 5,565 |
| Secretary | GS–5 | 5,565 |
| Grants clerk (2) | GS–4 | 9,990 |
| Senior grade (4) | CO–05 | 40,880 |
| Total (14) | | 158,183 |
| Program direction: | | |
| Public health program specialist (2) | GS–14 | 31,682 |
| Administrative staff assistant | GS–13 | 13,507 |
| Information specialist | GS–13 | 13,507 |
| Public health program specialist (3) | GS–13 | 40,521 |
| Information specialist | GS–12 | 11,461 |
| Management analyst | GS–12 | 11,461 |
| Public health program specialist (2) | GS–12 | 22,922 |
| Personnel specialist | GS–9 | 8,054 |
| Secretary (4) | GS–5 | 22,260 |
| Clerk-typist (3) | GS–4 | 14,985 |
| Clerk-typist | GS–3 | 4,466 |
| Senior assistant grade | CO–03 | 5,596 |
| Total (21) | | 200,422 |
| Total new positions, all activities (53) | | 549,178 |

PROGRAM GOALS

Senator HILL. The subcommittee will kindly come to order.

Dr. Marston, we are glad to have you back with us. You may proceed now.

Dr. MARSTON. Mr. Chaiman and members of the committee, it is my privilege to appear before you again on behalf of the regional medical programs for heart disease, cancer, and stroke, which were authorized by Public Law 89–239.

On November 9, 1967, the President sent to the Congress the Surgeon General's report on regional medical programs transmitted to

the President by the Secretary of Health, Education, and Welfare as required by the law.

In that report the goal of regional medical programs is stated as follows:

> The ultimate objective of regional medical programs is clear and unequivocal. The focus is on the patient. The object is to influence the present arrangements for health services in a manner that will permit the best in modern medical care for heart disease, cancer, stroke, and related diseases to be available to all.

### Progress to Date

The report describes in some detail the substantial and impressive beginning which had already been made in achieving that goal up to June 1967, its date of publication, and we will have published within the next few weeks the provision of a conference-workshop on regional medical programs held January 17 to 19 which brings the Surgeon General's report in essence up to date and includes the evidence of the progress that the people themselves who are in the field have made.

Senator Hill. When do you expect to have that, Doctor?

Dr. Marston. It is in the page proof stage and we should have it within the next few weeks.

Senator Hill. If you can leave a copy of the page proofs with us it would be helpful.

Dr. Marston. I will be pleased to do that.

### Operational Activities

In brining those facts up to date, we are pleased to report that 54 regional medical programs have been organized, covering all areas and representing all the people of the Nation, including Puerto Rico. Each of these programs represents a cooperative effort among the health resources of the region they themselves have organized.

In each the purpose has been to develop and implement a program of action that will contribute to and capitalize on new medical knowledge and techniques, undertake needed research, create new diagnostic and treatment capabilities, and evolve a more effective organization of health resources that will improve their system for delivering to all the people of their region the full benefits of currently available knowledge and medical skills.

Thirteen of the 54 regional medical programs are actually carrying out operational activities which involve the care and treatment of people in their region.

From all indications, we expect that virtually all of the 54 regions will be engaged in these types of operational activities by the end of fiscal year 1969.

Senator Hill. What is delaying their beginning now?

Dr. Marston. At present, we have 13 which have been awarded. We have 11 more under review and in process and essentially all of the others are preparing applications and plans to move from planning to operational grants.

OPERATIONAL PROGRAMS

Activities already underway in the operational programs which will improve diagnosis and care of those afflicted with these diseases are described in the Surgeon General's Report. Many more innovative activities and projects were described at the recent January conference-workshop on regional medical programs which brought together more than 700 persons directly involved in the 54 regional medical programs.

Senator HILL. Did you have that here in Washington?

Dr. MARSTON. Yes, sir; those 700 persons were here in Washington.

They were able to exchange ideas and results not only on specific improvements in diagnosis, treatment, and professional education, but on ways to improve the cooperative organization of health resources in order to apply those resources to the needs of people.

Senator COTTON. Were those 700 people mostly doctors or what type of activity did they represent?

Dr. MARSTON. They were a cross section. Essentially all of the 54 program coordinators were present except one or two who, because of conflicts, could not be there. There were representatives of fairly large numbers of the regional advisory groups which have the legal veto power over any proposals that are sent in to us.

Senator COTTON. Are they mostly laymen?

Dr. MARSTON. They vary. On all of the regional advisory groups there are substantial numbers of laymen. This number has been increasing as the programs have evolved. They are an important group; there were more at this meeting than at the previous meeting. In addition they had actual experts in the area of heart disease, cancer, and stroke. The main contributions were from the National Institutes of Heart and Cancer and the Institute of Neurological Diseases and Blindness. There were panels in depth on these subjects. We were in session for 2½ days.

In summing up the 2-day conference-workshop, Dr. Lowell T. Coggeshall, vice president emeritus of the University of Chicago, noted that he had found "substance" in the programs.

"In medical science and practice—health care—the ultimate substance is advancement of knowledge or method that makes some worthwhile difference in the lives of people," he said in describing "substance."

THE CHALLENGE

The substantial activities covered in the report to the President and the Congress, documented further at the conference-workshop, and being demonstrated in the regions, are only the beginning of this important program.

As the foundation for action has been established, the extent of the challenge has also emerged more clearly.

Since this program began only some 2 years ago, the threats of death and disability from heart disease, cancer, and stroke have remained strong and resistant to human skill and inventiveness. In these 2 years it has also become more apparent that the solution of these and other major health problems will require significant improvements in the organization and delivery of health services.

Therefore, the great promise of regional medical programs for the coming years lies in their demonstrating how medical capabilities can

be more effectively organized to help solve these problems through new patterns of collaboration of all available health resources.

### REGIONAL COOPERATIVE ARRANGEMENTS

It is clear that a regional cooperative arrangement among the full array of the available health resources is a necessary step in bringing the benefits of scientific advances in medicine to people wherever they live in a region. Because it provides a system of working relationships among health personnel in the institutions and organizations in which they work, such an arrangement enables patients to benefit from the inevitable specialization and division of labor which accompany the expansion of medical knowledge. What is required to achieve this is a commitment of individual and institutional resources which must be worked out by each regional medical program.

When achieved, this approach provides a means for sharing limited health manpower and facilities to maximize the quality and quantity of care and service available to the region's population, and to do so as economically as possible.

### PERSONNEL

Regional medical programs now have engaged the services of nearly 2,000 non-Federal full-time or part-time staff in the field; also involved are more than 1,900 members of regional advisory groups composed of voluntary representatives of a cross section of medical leaders and informed laymen; and all of the medical schools, many hospitals, voluntary and public health organizations, and most organizations of health professionals.

In addition, approximately 1,200 people are serving on special task forces and subcommittees.

### EXTENSION OF AUTHORIZING LEGISLATION

To capitalize on these commitments that individuals and institutions have already made to the development of their own regional medical programs, and to realize the promise of the planning activities they represent in all parts of the Nation, the President has recommended that the authorizing legislation be extended for a period of 5 years.

Sufficient funds must also be provided to enable the translation of involvement into service, ideas into action, and cooperative planning into collaborative operation.

### 1968 APPROPRIATIONS AND 1969 BUDGET REQUEST

The appropriation request for the Division of Regional Medical programs totals $68,922,000 which, when combined with $30,900,000 for grants carried forward from fiscal year 1968, provides a total of $99,822,000 for fiscal year 1969 obligations, or an increase of $46,036,000 over the fiscal year 1968 operating level.

The request includes $62,900,000 for regional medical program grants, $3,314,000 for professional and technical assistance, $905,000 for review and approval of grants, and $1,803,000 for program direction.

I shall now be happy to answer any questions.

RETIREMENT OF SENATOR HILL

Senator COTTON. I would like to make an observation at this point. One of the greatest handicaps you are going to have in the next few years, and I know you know it and I wanted the record to show you know it and we in the Senate know it, is the lamentable loss we are going to have in the departure of the chairman of this subcommittee. No 10 men could possibly take his place in the vision and dedication that he has had for the cause of medical research and in the advancement of medical science and service to the people.

Every one of us regrets that he is voluntarily retiring.

I just want the record to show that I know you join in this belief and I know that you all share with me the feeling that it is going to take a long time to equal the contributions of Lister Hill.

Senator HILL. I want to thank the Senator for his most generous words. I certainly do appreciate those words deeply and I want to say that I certainly hope that there will not be retirement on behalf of "Cotton."

I know of the tremendous value you have been here and you must stay here.

I want to thank you for your most generous words and I want one promise and that is that you will stay.

Senator COTTON. I will do my best.

CARRYOVER FUNDS

Senator HILL. Dr. Marston, you have an awful slice from your original request—nearly $30 million. How much will that affect you?

Dr. MARSTON. Since we have authorization for carryover funds, I think we will be able to utilize these funds wisely during next year which will be the time of maximum movement from planning to operational grants in this program.

Senator HILL. How much do you have to carry over?

Dr. MARSTON. $30,900,000 was put in reserve.

Senator COTTON. Mr. Chairman, to be specific, you said on page 2 that you anticipate 54 regional medical programs and only eight of them are now carrying out operational activities.

What effect will reduction of your requests by the Budget Bureau have on implementing the remainder?

Dr. MARSTON. We have actually 13 operational grants now. The 5 additional have been awarded since this statement was prepared. With the 13 we have at present, we have 11 more in process so that we have 24 we can look at pretty definitely. We also are able to project funds for our planning grants. These continuations of our activities starting July 1 of this year, would amount to approximately $55 million. So, if we have the $93.8 million requested for grants, this would give us $38.8 million for those additional programs that will be moving into the operational phase during the coming year as well as broadening the previously approved operational programs.

These initial grants tended to be from the less complicated areas and are indeed the less expensive ones. This concerns us, because as we move into the urban areas, which are moving more slowly, they will probably require larger sums.

AUTHORIZING LEGISLATION

Senator HILL. Of course, you need the legislation authorizing this appropriation. You do not have any authorization as of today.

Dr. MARSTON. That is right.

Senator HILL. I think we will get that bill passed all right. I am sure you can get it passed in the House.

Dr. MARSTON. We have had our hearings in the House.

Senator HILL. As soon as we get the appropriations out of the way, we can have further authorizations.

Senator COTTON. Until you get these regional organizations, your program is not functioning adequately? In other words, you have a fire engine but you are not getting any water on the fire until you get these perfected.

OPERATIONAL ACTIVITIES

Dr. MARSTON. Actually, the Puerto Rican application is the last one for planning grants which comes before our council this month, which means in all areas of the country there has been a commitment of staff and resources to concentrate on how they are going to move into the operational phase.

It is in fiscal year 1969 that the 13 operational grants will be stabilizing their activities and expanding them. The 11 operational grant applications now in process of review will be going through the last stages of establishing their operational programs. The majority of the 30 regions that are now preparing their plans for operation will be making requests for funds to move into the operational phase.

So, fiscal year 1969 is a very critical year for the program.

Senator HILL. You have to go forward in fiscal year 1969. If you don't, the whole thing breaks down, does it not?

Dr. MARSTON. Yes, sir.

Senator HILL. Nothing could be more critical from the standpoint of your program than that you go forward in fiscal year 1969, is that not correct?

Dr. MARSTON. Yes, sir.

Senator HILL. Is there anything you would like to add, Dr. Shannon?

PROGRAM SUPPORT BY ORGANIZED MEDICINE

Dr. SHANNON. Organized medicine in the early days was quite suspicious of this program and how it would affect the normal physician-patient relationship. It might be of some interest to the committee if Dr. Marston were to give you copies of some of the general statements that have come out of the American Medical Association that are very strongly in support of this program at the present time.

I think it is a tribute to the way Dr. Marston has developed this program that the medical profession now sees it as an opportunity rather than as a threat.

The critical nature of the operation in fiscal year 1969 is such that if this does not go and really go well we will have lost a tremendous opportunity to modify, in a rational fashion, the delivery of medical services in this country.

Indeed, if we do not take advantage of this opportunity to do it in an orderly fashion, we stand a chance of having to face up to

revolutionary changes at a later time which, probably, would be most unfortunate as they would be forced upon the profession rather than by having the profession participate in developing their modification. So, in every sense of the word, fiscal year 1969 is an extraordinarily critical year.

I do want to say to the committee how important it has been to have the approach Dr. Marston has taken, over the period of his tenure in this program, which has permitted organized medicine to come around so that they are no longer fearful of its impact.

WORKSHOP TALKS

Senator HILL. Would you supply us with those talks?

Dr. MARSTON. Yes, sir. I think the best one is the talk that Dr. Wilbur, president-elect of the American Medical Association gave at this workshop.

Dr. SHANNON. It would be very nice at this point, Senator, if the record might encompass some of these very refreshing statements because, to us, they constitute a milestone in the evolution of this program.

Senator HILL. If you will supply those for the record, we will be very happy to have them. I remember when we passed the legislation that there were a good many questions about them. Do you feel the questions have now been resolved?

Dr. SHANNON. I think there are still some questions but I think, on balance, they have been resolved very satisfactorily. But there will always be questions.

Senator HILL. As Senator Cotton just said to me, it would be strange if there were not some questions.

Is there anything you would like to add, Dr. Stewart?

Dr. STEWART. No, sir; I think Dr. Marston covered it very well.

Senator HILL. Thank you very much.

I see you are a graduate of the Virginia Military Institute. You were not down there with George Marshall, were you?

Dr. MARSTON. Not quite.

Senator HILL. Was Dr. Blaylock head of the department of surgery when you were there?

Dr. MARSTON. Yes, sir. He was very kind to me when I was there.

Senator HILL. He died with cancer and he died at all too young an age. It was a tragic thing. He was a very wonderful man.

Doctor, we want to thank you very much for your splendid statement. We certainly appreciate it very much.

Dr. MARSTON. Thank you, sir.

(The statements follow:)

STATEMENT BY AMOS JOHNSON, M.D., MEMBER AND FORMER PRESIDENT, AMERICAN ACADEMY OF GENERAL PRACTICE AT 1968 CONFERENCE-WORKSHOP ON REGIONAL MEDICAL PROGRAMS, WASHINGTON, D.C.

Dr. JOHNSON. I guess I was chosen to talk to you here today to bring to you a message about remote areas and the provision of health care in these areas. And in order that you know how remote I am and back to what fundamental basis of primary medical care I go, I practice in my village where I was born, and I have been practicing there 34 years. When I went back to practice in my village, it had 642 people in it. But after World War II, we had a population explosion and we have got 700 people now.

It is my contention that people who live in, Dr. Egeberg, the Watts district of Los Angeles or, Dr. Trussell, the Harlem district of New York, are perhaps more remote from the standpoint of having adequate available health care for them than are most of the people who live in rural communities throughout the United States. There has come to be in my thinking another dimension of what constitutes adequate health care coverage. And that dimension relates to time. And I firmly believe that any person who is within 30 minutes of adequate health care facilities available is adequately covered for the matter of health care.

Now, we realize, those of us who come from small communities and rural communities, that every crossroad in every community wants a doctor just like they want a preacher and sometimes need an undertaker. And in my village, the man wanted to be convenient so he built directly across the street from me. But that is a little bit too close, and that stimulated me to upgrade my quality of care.

I firmly believe that every small community does not need a physician. And I believe that many of the small communities in this country who now have physicians will no longer have them when the ones who are there now pass on. I am sure my community will not have another one when I am gone. And I don't think they need one.

When I came there, people who lived 5 miles from my community were over 30 minutes away from my office. Now, we have paved roads running in every direction, a hospital 17 miles on each side of us, whereas we had a hospital 45 miles away when I started there. And by automobile or ambulance, a person can be in either one of these hospitals in 15 or 20 mintues if they are in a big enough hurry.

So I think it is axiomatic that any community that cannot support at least two physicians, a measure of group practice, can ill expect to retain one. And I think that the problem that we are going to have to face in this country and it is going to have to be faced at a community level, perhaps with some measure of stimulation from regional programs and other approaches to the provision of health care for people; is to stimulate these small communities to combine into a larger community.

In many instances, it is entirely possible to take four or five smaller rural communities, where each of the communities is within a measure of 20 or 30 miles of another community, and somewhere in the center identify a location where two, three, four, or five physicians can locate and do excellent work.

Well, now, a community that can support four or five physicians can also afford to have an attractive community where a physician and his family might want to move and to raise a family. Certainly not every crossroads can do this. I have regretted many, many times that I raised my children in the small community where I did because I had to send them off to preparatory school when they were about 8 or 9 years old, and I am sure I lost much of the contact that would have been good for me to have had with my family. And I don't think I would do this again.

But if we can, by working with the communities and allowing the consumers to have a part in the planning, get a half dozen communities to agree each to give up their little one community and form a larger community in which the community can support half a dozen doctors more or less, can support an excellent school system, can support excellent religious facilities, can support good cultural facilities, then, there is reason to believe that there will be physicians who will be willing to move into these areas.

But we do have to have a community adequate to be attractive to physicians if we are going to get physicians in there. And one key to attracting a physician and keeping a physician in this sort of a community is having a situation which is tolerable to the physician's wife, a little bit attractive to the physician's wife. There is no one factor more involved in where a physician lives, particularly as it involves smaller communities, than the satisfaction that his wife gets from living in that community.

Now, also, a group of physicians can reasonably expect to provide continuous and comprehensive care for their people around the clock and around the calendar, because one person can take night calls this week, another next week, and maybe you only have to take the night calls one week out of every month or every fifth week. The same thing with weekends. One physician can cover all of the emergencies for the entire group during one weekend, and the other three or four can have time off. And that will make life tolerable so that a person can live with his family and help to bring his children up and keep his family a closely knit unit.

So I think that the one thing that we must do—and maybe the Regional Program can be the stimulus—we must have some effort to consolidate the smaller communities and have medical care available within the time limit of 30 minutes.

Now, if we are going to do this, we have to have the type of physician who can earn a living in a small community. And that physician has to be trained a little more broadly than the presently conceived specialist. This physician has to be able to take care of something like 75 to 80 percent of all of the ills that beset mankind. And if we are going to have this physician, the medical schools are going to have to face up to the fact that they have to produce a family physician or a primary physician. And no place else except the medical schools can do this.

And if they are going to do it effectively, they must have an ongoing program providing this sort of care within the confines of the medical school and the hospital associated with the medical school in order that the medical students can identify with this system of the provision of health care. Otherwise, the medical students will not identify with it and will not go into it.

A little story about the ability of the Regional Programs to produce: We have seven counties in southwest North Carolina, in the Appalachian region, that are quite unique. They are mountainous counties, and they do not have too many resources. They have 110,000 people. They have 62 doctors. They have eight hospitals, two of which are accredited by the Joint Commission on Accreditation of Hospitals.

This community got a little bit of catalytic aid from the Regional Program interested in community planning. They organized a community planning corporation. The doctors organized an Academy of Medicine, all 62 of them. The hospitals agreed to have the Joint Commission on Accreditation of Hospitals come in and survey every hospital there with the idea in mind that, after the survey was done, there would be an effort to build in the center of this area which, incidentally is called the "State of Franklin," a facility that would upgrade the facilities available for every person in the community and those going to every hospital in the community—the X-ray treatment, the electrocardiographic work, laboratory work, multiphasic screening. And they agreed that the Joint Commission would work with this project with the idea in mind of doing some innovative work in this area and that ultimately, within a year or two, the situation would be so improved, as to the provision of quality care in this area, that the Joint Commission would agree to accredit all of these eight hospitals with their central unit—to upgrade them as one unit.

I have been on the Joint Commission now for 7 years, and I am working with it. And I think that that is going to be a demonstration project that all of the Regional Programs may well look to with pride. And it may cut a pattern whereby we can improve the quality and availability of health care for the people in the remote areas of this country.

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[From the North Carolina Medical Journal, May 1967 (Journal of the Medical Society of North Carolina)]

AN EDITORIAL

Members of the Medical Society of the State of North Carolina have no excuse for ignorance about the Regional Medical Program other than their own indifference, and this issue of the Journal is another document in support of that statement. The program has always seemed far away to some members, and opposed by many others who did not understand its objectives. No matter what one's attitude, the program is a reality, the Medical Society is a partner in it with the state's three medical schools, and individual physicians must keep abreast of it.

The deans of the three medical schools chose to make no statements in this special issue of the Journal because they want to put into relief the Medical Society's partnership in the program. This relief is to emphasize that the Regional Medical Program intends to reflect the needs of practicing physicians as they express those needs through their Medical Society representatives. The role of the medical schools is to do what they can to help meet those needs. The medical schools have not been appointed to second guess the practitioners, and will avoid such a function. The onus is clearly on the practicing physician outside the medical schools to help form the program as far as goals are concerned.

In the months and years ahead, these early times of the program will no doubt be regarded as the critical period, when the shape of things to come became apparent. Thus far the Medical Society has played a creative role and our state's program is out ahead of many others because of this attitude. The only sensible course is to continue to act intelligently and constructively.

## Statement by Dwight L. Wilbur, MD on Quality and Availability of Health Care Under Regional Medical Programs From the Perspective of the Development of Personal Health Service

Dr. Wilbur is President-Elect of the American Medical Association.

Read before the Conference-Workshop on Regional Medical Programs, sponsored by the Division of Regional Medical Programs of the National Institutes of Health, Washington, D.C., Jan. 18. 1968.

Reprint request to Program Services Dept., American Medical Association, 535 N. Dearborn St., Chicago 60610 (James R. Hickox).

This conference-workshop provides an excellent opportunity to consider the potential impact of the Regional Medical Programs authorized under Public Law 89–239 on the development of personal health services. It is especially fitting that those most active in conducting this complex and potentially highly beneficial activity be brought together at this time to review planning efforts of the last two years and to consider their translation into operational implementation.

In many respects this act is quite extraordinary. Its genesis and promotion as described in a communication in the *Atlantic Monthly*[1] are intriguing. The diverse interpretations among various observers of its long-term objectives suggest many misunderstandings and an uncertain but hopefully great future. The zeal and enthusiasm of the men and women involved in the program—including numerous medical leaders—reflect the dramatic appeal for many individuals of good will and high hopes. The vaguely defined authority of the act seems to many inadequate to bring about the innovation and organizational changes they seek.

To Battistella,[2] the act's promise is to facilitate ". . . the planning, organization, and delivery of health services within a functionally-based regional framework, capable of circumventing state-local political boundaries and orthodox health channels. Additional excitement centered on the possibility that, once launched and successfully demonstrated, the application of regionalism might spread to encompass a number of other problems pressing in on the health field, and might lead eventually to a complete reorganization of health services."

In another portion of his recent paper, Battitstella states:

". . . to have insisted upon a more comprehensive and idealistic version would have been politically naive and would have precluded the passage of any legislation at all. To this way of thinking, a slice of pie is better than no pie at all. Some of the bill's supporters take an evolutionary point of view, and suggest that a combination of escalating problems in the delivery of health services and rising expectations for better and more economical care, will inevitably trigger an expansion of the program. Eventually, they see the seeds planted by the Heart Disease, Cancer, and Stroke Act leading to a complete reorganization of all health services within a regional framework."

The report by Clark[3] also proposes a national blueprint and suggests various models which might be followed in establishing this nationwide program. Any impartial physician who studied the Clark-Battistella thesis would reach the conclusion that RMP was in fact designed to provide an instrument by which the organization and delivery of health care of the American people could be changed in a revolutionary manner.

These reports are well written and have the commendable characteristics of unequivocation and candor. Although one might disagree with the conclusions, one cannot impugn the authors' motivations. The fact remains, however, that the issues as presented by this school of thought are not designed to stimulate strong physician support of these programs.

Marston and his staff, on the other hand, and many of you who are active in the program, have sought through talks, articles, and actions to promote

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[1] Drew, E. B.: The Health Syndicate: Washington's Noble Conspirators, *Atlantic Monthly*, Dec. 1967.

[2] Battistella, R. M.: The Course of Regional Health Planning: Review and Assessment of Recent Federal Legislation, *Med Care* 5:149–161 (May–June) 1967.

[3] Clark, H. T., Jr.: The Challenge of the Regional Medical Programs Legislation, *J Med Educ* 41:344–361 (April) 1966.

a different basic concept of the program, that is, the creation of a local and regional climate which engenders voluntary cooperative action to improve the health care organizational patterns and delivery systems which currently exist. As Marston has so well expressed it, "The focus is on the patient; the mechanism is cooperative arrangements; the emphasis is on local initiative, flexibility, and decision-making; and the reason for the program is the relationship between science and service."

The two key assumptions on which the purposes of Public Law 89–239 rest, according to Mayer,[4] are

"(1) That there are differences in the quality of diagnostic and treatment capabilities available to different patients within this Nation, in the area of heart disease, cancer, stroke, and related diseases;

"(2) That through the mechanism of regional cooperative arrangements of the people, institutions, organizations and agencies involved in health in that region these differences can be lessened."

According to Mayer this program is designed to strengthen existing institutions rather than to create new ones. He stresses the obvious that this is not a national program but a regional one, and he underscores that word "cooperative." He points out further:

". . . it is important to understand that the regional medical programs are not simply another kind of mechanism of funding individual projects. It does represent a new kind of conceptualization in the approach to health care and education. Whether it is capable of serving this function only time will tell."

I applaud this point of view and the emphasis given to these aspects of the program by the Division of Regional Medical Programs. If the program in fact is clearly one designed to catalyze and to facilitate the development of better programs than now exist to serve patients and their physicians, it will undoubtedly receive enthusiastic cooperation from the medical profession and related groups. We know the law and its legislative history stress the voluntary cooperative nature of the program and that interference with existing patterns is specifically prohibited. Marston[5] said in a recent talk,

"These programs face the challenge of influencing the quality of health services without exercising Federal or State governmental control over current patterns of health activities."

Public statements of this type are encouraging evidence of the understanding by those responsible for directing this program of the profoundly complex problems and social and community interrelationships that confront all those who will be participating. The innate difficulties of achieving a consensus among a large number of disparate local agencies, all traditionally striving to maintain their independence and special prerogatives, are well known.

Rational decision-making by independent public and private entities on a voluntary basis, however, is an objective that is worth pursuing. Unlike many other countries, our nation has reached its preeminence in many areas of activity because of this unique combination of multiple independent focal points of activity cooperating on a voluntary basis to achieve a commonly desired goal. De Tocqueville identified this unique American ability to become associated with others to plan and operate programs in the absence of central governmental direction and control. If RMP maintains its current emphasis on the working together of regional groups, it will fulfill its purpose of improving the quality, accessibility, and availability of health care, physician and institutional performance, and consumer satisfaction. On the other hand, if RMP becomes an instrument for the establishment of national standards with the coercive compliance compelled by such standards, it will arouse nationwide resistance from physicians, institutions, and allied health professionals. What can be gained by cooperation and meaningful participation will surely be lost if the use of coercive power, which for the moment lies dormant in Public Law 89–239, becomes its dominant characteristic.

I have dwelt on these basic issues at some length because one cannot discuss this subject from the perspective of personal health services without first considering the basic issues involved in the development of the program as a whole. Change is expected by the vast majority of thinking persons; and the medical

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[4] Mayer, W. D.: Regional Medical Programs—A Progress Report, *J Med Assoc Georgia* 56:143–147 (April) 1967.

[5] Marston, R. Q., and Schmidt, A. M.: Regional Medical Programs: A View From the Federal Level. read before the Continuing Medical Education Section of the Association of American Medical Colleges, Oct. 27, 1967.

profession, like others, is changing its techniques and operational procedures constantly. Sometimes these changes are forced by external environmental factors which lead to improved prevention, diagnosis, and therapy of disease. At other times, changes are forced which are unacceptable to physicians and their patients. The current health manpower shortages and escalating health care costs are examples of external pressures that compel changes, some of which may be favorable and some undesirable. RMP is in a strategic position to bring about changes acceptable both to physicians and their patients that will improve performance and patient satisfaction without undermining patterns of behavior that are traditional, and, more significant, considered by the medical profession essential to the preservation of high-quality care.

The sensitivity of medicine to the possible establishment of national standards under RMP for the treatment of certain diseases was demonstrated recently when it appeared that RMP was moving toward such a development. I have been assured by Dr. Marston that no proposals for such national standardization have received any sympathetic hearing and that, on the contrary, it is his feeling that such proposals run counter to the spirit of the legislation and the manner in which it is being administered. I applaud this attitude, and I urge that it become a part of the fabric of your thinking as you conduct these regional programs.

Another aspect of the currently evolving RMP program that deserves commendation is its scientific spirit—that is, its willingness to depend upon observation and experimentation before reaching firm conclusions. The danger of national blueprints or models is their usual inflexibility. Your objectives are laudable, and they require implementation which permits ready change. It would be difficult to disagree with this statement from the *Report on Regional Medical Programs to The President and The Congress*,[6] of June, 1967:

". . . every person whose life and well-being may be in jeopardy from one of these diseases should have the full strength of modern medical science available to him through the cooperative efforts of the medical and related resources of the region in which he lives. These are the goals to which Regional Medical Programs are dedicated."

This Utopian ideal, however, will be realized in varying degrees depending on the ability of the medical profession and the health care industry to make available such services and facilities, and upon the patient population to utilize resources as they become available.

I am deeply impressed by a recent communication by Lahav,[7] "Methodologic Problems in Health Manpower Research," whose observations are especially germane as you develop methodology for effective implementation of this law. He identifies some of the countless variables that make health economic research so difficult and facile conclusions and recommendations so perilous. He notes, for example, that government-sponsored programs can contribute to a more rational distribution of medical and other health *facilities* but that their ability to effect a comparably rational distribution of health *personnel* is relatively small because, in a free society, distribution of professional manpower is predominantly a function of personal decisions made by individual practitioners.

In discussing rural health centers in rural northern Michigan, where McNerney and Riedel[8] found that their productivity was low in terms of unit cost and that they had difficulties in attracting and maintaining qualified professional and administrative personnel, Lahav noted that the difficulties in this situation could not be modified easily under conditions of "nonsocialized medicine" where practicing physicians had a large measure of independence. The keen observation that decision-making on a voluntary basis may tend to frustrate the impatient administrator with limited authority clearly applies to RMP. I urge a frank discussion of this question and your resolution of the problem in favor of voluntarism, for the gains that you will make in terms of flexibility and physician support will far more than offset any losses you may incur.

Another important point made by Lahav is his emphasis on the coordination of scarce resources rather than the mere creation of new ones. It may well be, as we strive together to create the best possible health care system for our nation, that the emphasis of RMP on cooperation, coordination, and regional planning will turn

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[6] Stewart, W. H.: Report on Regional Programs to the President and the Congress, Public Health Service, U.S. Dept. of Health, Education, and Welfare, June 1967.

[7] Lahav, E.: Methodologic Problems in Health Manpower Research, *New Eng J Med* 277:959–962 (Nov. 2) 1967.

[8] McNerney, W. J., and Riedel, D. C.: *Regionalization and Rural Health Care: An Experiment in Three Communities*, Ann Arbor: University of Michigan Press, 1962, p. 175.

out to be far more productive than programs designed simply to increase the output of health professionals. Certainly, the latter is necessary; but their placement in an efficient, rationally organized, and economically conducted system may be even more important. In this connection, the recent comments by Dr. Marston [9] when he was in Illinois are especially appropriate:

"As one views the current health scene, it seems inevitable that, as an increasing proportion of our national wealth is devoted to health and as the expectation for health services continues to rise, there will be marked pressures for the most effective allocation of health resources. These pressures will exert influences in such critical areas as the distribution of resources between short and long goals, that is, between biomedical research, for example, and the immediate delivery of service. Within service itself, there will be pressures for the distribution of effort between improvements in quality on the one hand and extensions of access to health care on the other; the allocation of resources for general purposes as opposed to targetive objectives; exploration of mechanisms to alleviate the acute shortage of all health talent; and the need to explore the division of responsibility between those health responsibilities carried out through the governmental sector and the responsibilities of the voluntary institutions and organizations."

I want now to turn to another subject of special interest to medicine: continuing education. The problems of medical care and continuing medical education are inseparable. In fact, continuing medical education offers the greatest potential for rapid widespread solution of the identified problems or difficulties in the general area of patient care. In the planning and early operational RMP programs, it plays a major role. The American Medical Association is especially anxious that this aspect of the evolving program be emphasized. Marston and Mayer, [10] in "The Interdependence of Regional Medical Programs and Continuing Education," indicate:

"The following 2 points concerning the development of continuing education activities within a given regional medical program are of prime importance, First, the Division of Regional Medical Programs can make grants for 2 purposes only (*a*) to plan or (*b*) to establish regional medical programs. It cannot make grants for the establishment of continuing education programs."

Understanding the preclusion of support of regional continuing education programs alone, we hope that special emphasis will be given to this aspect of a regional program, since to a significant degree the gap that may exist between science and service can be minimized by such continuing education. Incidentally, this problem of continuing the education of physicians and other health professionals in a rapidly changing scientific climate was considered at length by the recent Presidential Commission on Health Manpower on which I had the privilege of serving. You will recall that one of its rather controversial recommendations was that relicensure of physicians be considered as one means of stimulating physicians to review new information continuously. Whatever technique is used to assure a physician's up-to-dateness, the provision of continuing education through the development of core curricula and other techniques, and the utilization of communications technology now rapidly becoming available, must be pursued vigorously.

The RMP program has stimulated widely favorable reaction from the medical profession. As a whole, the medical profession at the beginning of 1968 is probably more deeply involved in the planning process to determine the nature of the RMPs than it has been in the planning of any previous federal program. Many of our most distinguished medical leaders are participating full or part-time in the regional programs. Many state and county medical societies are cooperating actively or in an advisory capacity and have expressed their enthusiastic support. Gullatt,[11] for example, in the *Oklahoma State Medical Association Journal* for April 1967, said:

"The Regional Medical Program has the potential of making remarkable improvements in the continuing education of physicians, an objective to which we have always been dedicated."

North Carolina prepared a special issue [12] devoted to RMP in May 1967. In an editorial in that issue, the following comment is made:

"In the months and years ahead, these early times of the program will no doubt be regarded as the critical period, when the shape of things to come

[9] Marston, R. Q., University Hour, sponsored by Alpha Omega Alpha, University of Illinois, Chicago, Oct. 4, 1967.

[10] Marston, R. Q., and Mayer, W. D.: The Interdependence of Regional Medical Programs and Continuing Education, *J Med Educ* 42:119–125 (Feb) 1967.

[11] Gullatt, E. M.: President's Page, *J Okla State Med Assoc* 60:164 (April) 1967.

[12] The Regional Medical Program, editorial, *N Carolina Med J* 28:198 (May) 1967.

became apparent. Thus far the Medical Society has played a creative role and our state's program is out ahead of many others because of this attitude. The only sensible course is to continue to act intelligently and constructively."

Frank Jones,[13] president of the Medical Society of the State of North Carolina at that time, said:

". . . the medical Society representing the physicians of North Carolina *is* involved in the Regional Medical Program. It was involved in a somewhat similar program *before* Heart, Stroke, and Cancer was birthed, and it will continue to be involved, working with the representatives of the public and the other deliverers of health care and the involved state governmental agencies in a continuing program directed toward quality care at all levels."

In the same journal, Musser.[14] executive director of the association established to conduct this program said:

"There is no question of the profession's ability to do the job. The important step is to direct our total talent and energy to it. The job—well done—will reassert and secure our leadership in health affairs and assure an ever improving state of national health."

In Georgia, Battey,[15] a member of the steering committee for the program, made the following statement:

". . . it is the intent and sincere desire of the members of the Georgia Regional Medical Program advisory group that this approach, during the planning phase, will seek out and find those interested individuals all over the state who will be anxious to take part in what may well be our greatest opportunity to achieve the best of medical care for all patients utilizing the regional and the truly cooperative approach."

In Missouri, a physician who initially had serious misgivings about this program is now conducting a valuable regional project on the management of cardiac emergencies. Under his direction certain deficiencies have been identified and many individuals and facilities are cooperating enthusiastically to remedy these deficiencies.

I am impressed also by the report in the *Onondaga County Medical Society Bulletin*[16] in New York recounting the specific projects being considered under their Regional Medical Programs. All available records are being analyzed to evaluate existing facilities; rural medical manpower is under study; a number of hospitals have opened their records for review of current handling of patients with heart disease, stroke, and cancer; communications among hospitals within a region are being appraised; interconnecting color television among these hospitals is being considered, as well as the educational television network; the transportation of laboratory specimens to central areas is under study; the use of helicopters for transport of the sick and, perhaps, physicians is a possibility; and an extensive library project is already underway. The strong support of the county medical society is implicit. This same attitude of study, inquiry, and active implementation exists in many other medical groups in the country.

Clearly, RMP has stimulated a healthy atmosphere of voluntary cooperative review of current health programs and a refreshing willingness to express self-criticism of a constructive type. In a sense, the program combines the better features of the liberal and conservative approaches to a creative society. The traditional liberal dependence on the federal governmental as a means of solving all problems is mitigated and redirected into a new type of program sponsored, it is true, by the federal government but emphasizing the use of local as well as federal funds and depending upon local regional decision-making and significant participation by the private nongovernmental sector. The conservative also can feel reasonably comfortable in the context of this program because the program is not intended to be a revoluntionary substitute or a national blueprint for existing patterns of behavior.

Rather, it builds upon the past and the present, adding new features, changing old ones, as local demands and resources make possible. Its flexibility, pragmatism and acknowledgment of regional variations particularly appeal to me as wise emphases.

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[13] Jones, F. W.: The Medical Society and the Regional Medical Program in North Carolina., *N Carolina Med J* 28:173–175 (May) 1967.

[14] Musser, M. J.: North Carolina Regional Medical Program, *N Carolina Med J* 28:176–182 (May) 1967.

[15] Battey, L. L.: Georgia Regional Medical Program, *J Med Assoc Georgia* 56:141–142 (April) 1967.

[16] Lyons, R. H.: Central New York Regional Medical Program, *Bull Onondaga County Med Soc* 31:7–11 (April) 1967.

This program can make a real contribution to personal health services if it continues to pursue what appears to be its main thrust today—to serve as a catalyst for and to facilitate those winds of change which blow in the right direction. If your zeal and enthusiasm are tempered with a sympathetic understanding of the traditions and basic motivations of those who now render health care, I predict that they will cooperate willingly with you, and that in this cooperation you will have the basic ingredient for success. Basically, we all have the same desire: to help the American physician to provide the best quality of care to the American people, in the American tradition.

[From the Journal of the Medical Association—Georgia (Journal of The Georgia Medical Association) April 1967]

STATEMENT BY J. W. CHAMBERS, M.D., LAGRANGE PROGRAM COORDINATOR, GEORGIA REGIONAL MEDICAL PROGRAM

A UNIQUE OPPORTUNITY FOR LEADERSHIP

The Regional Medical Program for Georgia provides the Membership of the Medical Association of Georgia a unique opportunity for leadership in "promoting the science and art of medicine and the betterment of the public health." However, the role of leadership can only be effectively assumed as physicians understand the Program.

TO BE SERVED

The legislation which established this program was the result of the report of the President's Commission on Heart Disease, Cancer, and Stroke, commonly called the DeBakey Report. However, Congress gave thoughtful consideration to many medical leaders and organizations before passing Public Law 89–239 in October, 1965. As a result, this law provides for local medical programs which can and will be developed by people in the areas involved for the people in the areas to be served. This is inherent in the legislation through the language of "co-operative arrangements," and "without interfering with the patterns, or the methods of financing of patient care of professional practices, or administration of hospitals."

The Regional Medical Program for Georgia has been planned carefully by Georgia people in a truly co-operative atmosphere during the past 15 months. This can best be judged by the membership of the Program's Georgia Advisory Group. The program is practical and will provide the tools for every Practitioner to improve not only his own medical capabilities but also to improve the quality of medical care provided for each and everyone of his patients.

This is a challenge for each member of the Medical Association of Georgia and may well be our greatest opportunity in our time for exhibiting responsible leadership.

REGIONAL MEDICAL PLAN: BOON OR BOONDOGGLE?

What is happening or going to happen in the 51 Regional Medical Programs established through funding granted by Public Law 89–239?

Are they paper programs which, in the long run, are useless and a costly dent in the taxpayers' pocketbook? Or are they more than a paper promise? Do you offer tangible evidence of improving ways and means to combat heart disease, cancer, stroke and related diseases?

*The AMA News*, seeking to determine what had been done and what the future held, talked to officials of the programs in the regions of Missouri, New Mexico, the Northlands, and the State of Ohio.

School Involved: The Missouri program, which is one of five already funded for operational purposes, is coordinated by the Advisory Council of MRMP with the U. of Missouri School of Medicine serving as the fiscal agent and covers an area involving an estimated 2.7 million persons.

Vernon E. Wilson, MD, executive director for health affairs at the university, is program coordinator, while George E. Wakerlin, MD, a former medical director of the AmericanHeart Assn., is planning director. Dr. Wilson is a member of the AMA Council on Medical Education.

About the MRMP Dr. Wakerlin says:

"In Missouri, the university handles the money (grants) but does not control the operation. We look upon the medical school as another organization that the Regional Medical Program deals with."

Patient Care Goal: And what is that program? Dr. Wilson says it has several goals. The "primary" one, he says, "is to deliver the highest percentage of quality patient care as close to the patient's home as possible."

Other goals, he said, include equal access for each patient to any needed national resource; maximum coordination between those who provide health care directly and those involved in supporting that care: development of programs to assist in early and effective detection of disease; integration of post-graduate education with detection and health care systems; improved lay health education; and the sharing of ideas "so that a minimum of waste will ensure as we seek to meet our respective responsibilities."

Dr. Wakerlin says the program, in its early stages, is directing its efforts toward helping the local physician through computers, telephone, television, engineering developments focusing on early diagnosis, and improved educational processes with increasingly effective exchange of communication between the community physician and the university medical center.

The region has 16 individual, but inter-related—and to some extent interdependent—projects well under way that emphasize three areas: the community level, the medical center level, and the level of research and development.

Pioneering Work: Dr. Wakerlin says the Smithville project is the "microcosm of what our entire program can become." Here, is this small community just north of Greater Kansas City, the region is pioneering new services whereby doctors and patients will benefit from computer-assisted x-ray diagnosis and other advanced techniques which may some day be available in the entire region.

Springfield, a city of about 100,000 in southwest Missouri, is the site of another kind of effort. There, through the cooperation of a number of physicians, several aspects of a comprehensive cardiovascular care program are being developed. The MRMP assisted substantially in the planning and training programs.

Speaking about the cardiovascular care project, Glenn Turner, MD, project director, said:

"I can name at least 33 patients who would have died in the last few months, but who are alive today because of the things the MRMP has made possible for us."

Other Results: Besides these two projects, the program has resulted in a number of electronically-engineered devices being produced for a variety of medical uses; compilation of a complete listing of all state organizations offering health services to patients suffering from heart disease, cancer or stroke; work on a multiphasic, automatic laboratory screening device for early detection of diseases; an automated and computerized method of taking patient histories; and computer-simulated experiments in changing hospital procedures, medical practices and compiling records without risk to human life.

The Missouri leaders also talk about the possibility of expanding the program to cover diseases other than heart disease, cancer and stroke. Dr. Wilson argues that the Regional Medical Programs "must escape the categorical label."

Equally clear, Dr. Wakerlin says, is the importance to RMPs of voluntary leadership. Like Dr. Wilson, he wants Congress to extend the program.

In summing up the program, Dr. Wilson asserts that as a direct result of it "thousands of Missourians already are receiving better medical care than was available to them only a year ago."

New Mexico Plan: New Mexico, currently working on its operational fund application, has Irvin E. Hendryson, MD, as program director. Dr. Hendryson, a member of the AMA's Board of Trustees, coordinates with the U. of New Mexico's School of Medicine a program involving an estimated one million persons.

Highly enthusiastic about his task and its possibilities, Dr. Hendryson says:

"Every time you turn around here you can see a need for something. You can see what has to be done and you can see that there is a lot to do. The biggest concern is that we're not doing enough. But the program gives every indication of helping the patient get the best possible care and of giving the taxpayer his full due."

Dr. Hendryson says New Mexico has done several things in the planning stage, with most of the money in this category being used for feasibility studies and pilot projects on:

A two-way telephone communications network through which an estimated 90% of the physician population in seven geographical areas has been exposed to programs of continuing education.

Completed eight "circuit rider" programs in which medical school teachers and private practitioners from the community have presented formal educa-

tional programs and provided consultation and ward rounds in the eight geographical areas visited.

Supported two programs developed by local physicians (in Santa Fe and Carlsbad) to train nurses in coronary unit care techniques.

Developed a computerized tumor registry including the teaching hospital for the U. of New Mexico Medical School and six private hospitals.

Supported conferences on strokes and heart diseases, as well as a conference-workshop for librarians for the purpose of developing a health-sciences information center.

Looking ahead, Dr. Hendryson says it is hoped the New Mexico Regional Program can:

Expand nursing training in the School of Nursing at the U. of New Mexico.

Establish a 24-hour library information service via the two-way communication system.

Establish improved programs of education for the physicians and lay public in the areas of emergency treatment and care.

Upgrade education programs in allied health profession fields, instituting a program for training certified laboratory assistants.

Institute a similar program to train physiotherapy assistants.

Establish a one-year training program for surgery technicians, involving such other facets as emergency room care and ambulance driving.

Conduct an in-depth study of the community-based rehabilitation center and recommend future courses of action, tying-in the center to the proposed school for physiotherapy assistants.

The Northlands Regional Medical Program, which covers an estimated 3.6-million inhabitants in the state of Minnesota, is sponsored by the Minnesota State Medical Assn. and is coordinated by J. M. Stickney, MD, consultant in medicine at the Mayo Clinic in Rochester.

Dr. Stickney, who was president of the Minnesota State Medical Assn. at the time of his appointment as RMP coordinator, is a member of the Minnesota delegation to the AMA House of Delegates.

The program's steering committee is composed of one representative from each of nine organizations: the U. of Minnesota Medical School, Mayo Clinic and Foundation, Minnesota State Medical Assn., Minnesota State Medical Assn. Foundation, Minnesota Hospital Assn., Minnesota State Dept. of Health, Minnesota Heart Assn., Minnesota Cancer Society, and the American Rehabilitation Foundation.

Planning Phase: Dr. Stickney says the Northlands program is "primarily" in the planning phase, noting that feasibility studies are being developed and programs planned.

"Our immediate objective," he said, "is to design better programs of continuing education for the practicing physician."

According to Dr. Stickney, the Northlands long range goal is "to continue to educate the physician and facilitate the way in which he can render care so that patients with heart disease, cancer and stroke will get the best possible medical attention."

And to speed up this goal, Dr. Stickney said conferences are being held with officials of Regional Medical Programs in surrounding states to determine possible areas for joint planning and cooperation.

In summing up the Regional Medical Programs, Dr. Stickney said he thinks the "fact that organized medicine has been so interested and supportive is evidence that we see great opportunities here for some significant improvements in the care of patients with these diseases."

Ohio Project: The Ohio State Regional Medical Prorgam, which covers 4½-million persons residing in the 61 counties which compose the central and southern two-thirds of the state, is coordinated by Neil C. Andrews, MD, operating out of headquarters at the College of Medicine, Ohio State U.

"The purpose of our program," said Dr. Andrews, "is to encourage the care of the patient in his own community by his own physician by providing that physician and other health related personnel with the latest advances in the diagnosis and treatment of heart disease, cancer, stroke and related diseases."

Dr. Andrews said he is hopeful the Ohio State program, currently in its planning stage, can become operational early this year.

The program, Dr. Andrews said, has two stages. The first he described as "based on past experiences of postgraduate education," including two-way radio network and one-way television network programming, aimed at furthering the education of physicians and nurses. The second stage, he said, is "aimed at ex-

tending continuing education to hospital administrators, dietitians and other allied health personnel."

**Task Forces:** To determine what the community wants, Dr. Andrews said, three central committees—called Task Forces—have been organized. The Cancer Task Force is under the chairmanship of Stuart S. Roberts, MD, and Robert Zollinger professor of surgery at OSU Medical School. The Stroke Task Force is under John Melvin, M.D., the assistant professor, Dept. of Physical Medicine, OSU School of Medicine. The Heart Task Force is led by Robert C. Kirk, Columbus cardiologist.

According to Dr. Andrews, the OSRMP has developed 12 local planning committees throughout its 61-county area. These committees will be charged with generating activities within the RMP's which have applicability within their community.

In addition, Dr. Andrews said, "we have under the aegis of our Regional Medical Program and working through our Division of Medical Education under Ralph Ingersoll, PhD, five PhD candidates who are being trained specifically to work in Regional Medical Programs."

Dr. Andrews said this kind of a training program is one of only three being conducted around the nation. The other two, he said, are operating at the U. of Chicago and the U. of Southern California.

**Candidates Help:** The five PhD candidates in the Ohio State program, Dr. Andrews said, are currently working on the OSRMP planning stage, as well as helping to write renewal and operational grant requests. The five candidates include a public health nurse, one person in communications, another who is a mathematician, and two who are in the college of education.

# National Institutes of Health

## STATEMENT OF DR. JAMES A. SHANNON, DIRECTOR

### GENERAL RESEARCH AND SERVICE

#### Appropriation Estimate

"GENERAL RESEARCH AND SERVICES, NATIONAL INSTITUTES OF HEALTH"

"For the activities of the National Institutes of Health not otherwise provided for, including research fellowships and grants for research projects and training grants pursuant to section 301 of the Act; and grants of therapeutic and chemical substances for demonstrations and research; [$81,141,000] *$87,500,000: Provided*, That funds advanced to the National Institutes of Health management fund from appropriations included in this Act shall be available for *the cost of sharing medical care facilities and resources pursuant to section 328 of the Act*, purchase of not to exceed [twelve] *nine* passenger motor vehicles for replacement only; and not to exceed $2,500 for entertainment of visiting scientists when specifically approved by the Surgeon General."

#### APPROPRIATION LANGUAGE CHANGE

A change in the language to include "the cost of sharing medical care facilities and resources pursuant to section 328 of the Act," will allow for agreements and arrangements with schools of medicine and with other health schools, agencies, or institutions, for such interchange of cooperative use of facilities and services on a reciprocal or reimbursable basis.

The change also includes authority for the purchase of 9 passenger motor vehicles for replacement only.

For replacement:

| Motor vehicle tag No. | Year | Location | Mileage | Purpose |
|---|---|---|---|---|
| Passenger cars (4): | | | | |
| HW 3933 | 1962 | Bethesda, Md. | 67,000 | Research personnel and research patients: collecting data and material and transportation to and from points where public transportation is not adequately available. |
| HW 4060 | 1963 | do. | 70,000 | |
| HW 4061 | 1963 | do. | 63,000 | |
| HW 4062 | 1963 | do. | 70,000 | |
| Station wagons (5): | | | | |
| HW 4308 | 1964 | do. | 74,000 | |
| HW 4310 | 1964 | do. | 64,000 | |
| HW 4311 | 1964 | do. | 63,000 | |
| HW 4314 | 1964 | do. | 64,000 | |
| HW 4315 | 1964 | do. | 69,000 | |

#### AMOUNTS AVAILABLE FOR OBLIGATION

| | 1968 | 1969 |
|---|---|---|
| Appropriation | $81,141,000 | $87,500,000 |
| Cutback from the 1968 President's budget required by H.J. Res. 888 | −1,996,000 | |
| Total currently authorized for obligation | 79,145,000 | 87,500,000 |
| Plus: proposed release of reserves for incresed pay costs | 190,000 | |
| Total available for obligation | 79,335,000 | 87,500,000 |

Disposition of cutback:

| | |
|---|---|
| To be used for pay costs in this account | $190,000 |
| To be returned to the Treasury | 1,806,000 |
| Total cutback | 1,996,000 |

OBLIGATIONS BY ACTIVITY

| | 1968 estimate | | 1969 estimate | | Increase or decrease | |
|---|---|---|---|---|---|---|
| | Positions | Amount | Positions | Amount | Positions | Amount |
| Division of Research Facilities and Resources | 154 | $62,006,000 | 170 | $67,415,000 | +16 | +$5,409,000 |
| Office of International Research | 78 | 12,430,000 | 78 | 13,354,000 | | +924,000 |
| Division of Computer Research and Technology | 101 | 4,555,000 | 108 | 4,784,000 | +7 | +229,000 |
| Engineering development | 5 | 344,000 | 5 | 1,347,000 | | +1,003,000 |
| International Center | | | 10 | 600,000 | +10 | +600,000 |
| Total obligations | 338 | 79,335,000 | 371 | 87,500,000 | +33 | +8,165,000 |
| Grants: | | | | | | |
| Research | | $64,758,000 | | $70,872,000 | | +$6,114,000 |
| General research support | | (639,000) | | (600,000) | | (−39,000) |
| Scientific evaluation | | (325,000) | | (325,000) | | |
| International centers for medical research and training | | (2,800,000) | | (2,300,000) | | (−500,000) |
| General clinical research centers | | (30,443,000) | | (35,677,000) | | (+5,234,000) |
| Special resource centers | | (10,850,000) | | (10,850,000) | | |
| Animal resources | | (5,100,000) | | (5,100,000) | | |
| Primate centers | | (10,500,000) | | (10,500,000) | | |
| Fellowships | | 1,580,000 | | 1,615,000 | | +35,000 |
| Training | | 318,000 | | 326,000 | | +8,000 |
| Direct operations: | | | | | | |
| Collaborative research and development | 2 | 1,974,000 | 2 | 2,978,000 | | +1,004,000 |
| International research | 68 | 3,303,000 | 68 | 3,316,000 | | +13,000 |
| International center | | | 10 | 600,000 | +10 | +600,000 |
| Computer research and technology | 101 | 4,555,000 | 108 | 4,784,000 | +7 | +229,000 |
| Training activities | 10 | 187,000 | 10 | 187,000 | | |
| Review and approval of grants | 115 | 1,506,000 | 128 | 1,608,000 | +13 | +102,000 |
| Program direction | 42 | 1,154,000 | 45 | 1,214,000 | +3 | +60,000 |
| Total obligations | 338 | 79,335,000 | 371 | 87,500,000 | +33 | +8,165,000 |

OBLIGATIONS BY OBJECT

| | 1968 estimate | 1969 estimate | Increase or decrease |
|---|---|---|---|
| Total number of permanent positions | 338 | 371 | +33 |
| Full-time equivalent of all other positions | 19 | 21 | +2 |
| Average number of all employees | 324 | 360 | +36 |
| Personnel compensation: | | | |
| Permanent positions | $3,353,000 | $3,629,000 | +$276,000 |
| Positions other than permanent | 207,000 | 214,000 | +7,000 |
| Other personnel compensation | 9,000 | 10,000 | +1,000 |
| Total personnel compensation | 3,569,000 | 3,853,000 | +284,000 |
| Personnel benefits | 370,000 | 383,000 | +13,000 |
| Travel and transportation of persons | 456,000 | 491,000 | +35,000 |
| Transportation of things | 83,000 | 97,000 | +14,000 |
| Rent, communications, and utilities | 189,000 | 201,000 | +12,000 |
| Printing and reproduction | 125,000 | 157,000 | +32,000 |
| Other services | 1,319,000 | 1,523,000 | +204,000 |
| Project contracts | 5,576,000 | 6,576,000 | +1,000,000 |
| Payment to "National Institutes of Health management fund" | 756,000 | 803,000 | +47,000 |
| Supplies and materials | 75,000 | 153,000 | +78,000 |
| Equipment | 161,000 | 450,000 | +289,000 |
| Grants, subsidies, and contributions | 66,656,000 | 72,813,000 | +6,157,000 |
| Total obligations by object | 79,335,000 | 87,500,000 | +8,165,000 |

*Summary of Changes*

| | |
|---|---|
| 1968 enacted appropriation | $81,141,000 |
| Cutback required by H.J. Res. 888 | −1,996,000 |
| Proposed release of reserves for increased pay costs | 190,000 |
| 1968 estimated obligations | 79,335,000 |
| 1969 estimated obligations | 87,500,000 |
| Total change | +8,165,000 |

| | Base | | Changes from base | |
|---|---|---|---|---|
| | Positions | Amount | Positions | Amount |
| INCREASES | | | | |
| A. Built in: | | | | |
| 1. Annualization of new positions authorized in 1968 | | | | +$44,000 |
| 2. Annualization of the 1968 pay raise cost | | | | +36,000 |
| 3. 1 additional day's pay | | | | +8,000 |
| B. Program: | | | | |
| 1. Research grants | | $64,758,000 | | +6,114,000 |
| 2. Fellowships | | 1,580,000 | | +35,000 |
| 3. Training | | 318,000 | | +8,000 |
| 4. Collaborative research and development | | 1,971,000 | | +1,000,000 |
| 5. International center | | | +10 | +600,000 |
| 6. Computer research and technology | 101 | 4,555,000 | +7 | +186,000 |
| 7. Review and approval | 115 | 1,390,000 | +13 | +67,000 |
| 8. Program direction | 37 | 563,000 | +3 | +20,000 |
| C. Payment to "National Institutes of Health management fund" for centrally furnished services: | | | | |
| 1. Collaborative research and development | | 3,000 | | +4,000 |
| 2. International research | | 129,000 | | +1,000 |
| 3. Computer research and technology | | 149,000 | | +2,000 |
| 4. Review and approval | | 116,000 | | +11,000 |
| 5. Program direction | | 344,000 | | +29,000 |
| Total program increases | | | +33 | +8,165,000 |
| Total net change requested | | | +33 | +8,165,000 |

EXPLANATION OF CHANGES

*Research grants.*—The increase of $6,114,000 includes $1,419,000 for regular research grants and $5,234,000 for general clinical research centers to support the rising hospitalization costs of the existing centers offset by decreases of $39,000 for general research support grants and $500,000 for International Centers for Medical Research and Training.

*Fellowships.*—$31,000 of the total increase of $35,000 will provide support for 6 added international postdoctoral fellowships for the Office of International Research. The remaining $4,000 will be utilized by the Division of Research Facilities and Resources to cover increased cost of stipends and supply allowances.

*Training grants.*—The increase of $8,000 will provide for the increased cost of stipends.

*Collaborative research and development.*—The program increase of $1,000,000 is to initiate contract efforts toward applying engineering and technological innovations to biomedical problems in the Engineering Development program.

*International centers.*—The $600,000 and 10 positions for this new program will provide for initial establishment costs of the International Center, including the assembly of staff, and for the start of the Scholars-in-Residence program and the International Conference and Seminar program.

*Computer research and technology..*—The increase of $229,000 and 7 positions will provide: additional support for research in and development of original computer systems to monitor critically ill patients, and establish a time shared computer system with optimum capabilities to support the medical management functions required in the operation of a large research hospital.

*Review and approval.*—The program increase of $67,000 and 13 positions are required for the scientific administration of the several grant programs, and for the processing and fiscal management of grants.

*Program direction.*—The increase of $20,000 and three positions will provide additional staff required for overall administration, planning and evaluation.

JUSTIFICATION

GENERAL RESEARCH AND SERVICES

| | 1968 estimate | | 1969 estimate | | Increase or decrease | |
|---|---|---|---|---|---|---|
| | Positions | Amount | Positions | Amount | Positions | Amount |
| Personnel compensation and benefits | 338 | $3,939,000 | 371 | $4,236,000 | 33 | +$297,000 |
| Other expenses | | 75,396,000 | | 83,264,000 | | +7,868,000 |
| Total | 338 | 79,335,000 | 371 | 87,500,000 | 33 | +8,165,000 |

GENERAL STATEMENT

The appropriation for General Research and Services finances the Division of Research Facilities and Resources, the Office of International Research, the Division of Computer Research and Technology, the Engineering Development activity, and the International Center for Advanced Study in the Health Sciences. Each of these is described individually in the following justification.

DIVISION OF RESEARCH FACILITIES AND RESOURCES

OBLIGATIONS BY ACTIVITY

| | 1968 estimate | | 1969 estimate | | Increase or decrease | |
|---|---|---|---|---|---|---|
| | Positions | Amount | Positions | Amount | Positions | Amount |
| Grants: | | | | | | |
| Research | | $57,198,000 | | $62,432,000 | | +$5,234,000 |
| General clinical research centers | | (30,443,000) | | (35,677,000) | | (+5,234,000) |
| Scientific evaluation | | (305,000) | | (305,000) | | (0) |
| Special research resources | | (10,850,000) | | (10,850,000) | | (0) |
| Animal resources | | (5,100,000) | | (5,100,000) | | (0) |
| Primate centers | | (10,500,000) | | (10,500,000) | | (0) |
| Fellowships | | 200,000 | | 204,000 | | +4,000 |
| Training | | 318,000 | | 326,000 | | +8,000 |
| Direct operations: | | | | | | |
| Collaborative research and development | 2 | 1,974,000 | 2 | 1,978,000 | | +4,000 |
| Review and approval of grants | 115 | 1,506,000 | 128 | 1,608,000 | +13 | +102,000 |
| Program direction | 37 | 810,000 | 40 | 867,000 | +3 | +57,000 |
| Total obligations | 154 | 62,006,000 | 170 | 67,415,000 | +16 | +5,409,000 |
| Unobligated balance reserve | 4 | 8,000 | | | −4 | −8,000 |
| Total, obligations and reserve | 158 | 62,014,000 | 170 | 67,415,000 | +12 | +5,401,000 |

RESEARCH GRANTS

| | 1968 estimate | 1969 estimate | Increase or decrease |
|---|---|---|---|
| General clinical research centers | $30,443,000 | $35,677,000 | +$5,234,000 |
| Scientific evaluation | 305,000 | 305,000 | 0 |
| Special research resources | 10,850,000 | 10,850,000 | 0 |
| Animal resources | 5,100,000 | 5,100,000 | 0 |
| Primate centers | 10,500,000 | 10,500,000 | 0 |
| Total, research grants | 57,198,000 | 62,432,000 | +5,234,000 |

INTRODUCTION

The primary mission of the Division of Research Facilities and Resources is to provide the Nation's scientific community with the resources and the research facilities essential for sustaining and advancing the National biomedical research and research training program. The Division's programs underpin a broad spectrum of science by supporting services that are essential to the total panorama of biomedical research activities.

The programs administered by the Division provide support for clinical research centers where physicians and scientists can study human disease; for

computer centers and other special research resources that form a most important technological base for modern research; for critically important laboratory animal facilities and resources essential to a wide variety of specialized biomedical research efforts; and for several other types of major biomedical research resources.

GENERAL CLINICAL RESEARCH CENTERS

The clinical centers provide the facilities and resources in which the Nation's clinical investigators can study human diseases to increase the understanding of the nature and natural history of disease; to extend the capability of medical science; to treat and manage disease; and to apply at the bedside the fundamental biological knowledge acquired in basic research porgrams.

Each center is a physically discrete research ward where scientists from many disciplines work together carrying out intensive, exacting research and typically consists of eight to thirty beds; a staff of nurses and technicians; a complement of laboratories and other supporting facilities. Research at these centers include major disease areas such as cancer, cardiovascular renal-diseases, infectious diseases, organ transplantation, the process of aging and diseases contributing to high infant mortality rates.

*Program plans in 1968 and 1969*

The $30,443,000 available in 1968 for the General Clinical Research Centers program will provide support for the existing program. This includes at this time 91 centers. The $35,677,000 requested for 1969 will provide continuing support for the program. A large portion of the increase of the $5,234,000 will be used to meet the sharply rising costs of hospitalization and wages in existing centers. Such medical costs have been escalating at a rate substantially greater than the increase in costs in other areas of the economy. As these items comprise the major portion of support funds, it is vital that provisions be made to meet such funding needs if the centers are to continue at an effective operating level. In addition, if funding permits, new centers will be established in institutions whose applications have been adjudged worthy by the peer review system.

The following are a few of the many projects conducted in General Clinical Research Centers during the past year:

*Metabolism during starvation.*—Following the first 48-hour period of complete starvation the body depends primarily upon metabolism of broken down fat stores to meet its energy requirements. The source of energy for brain metabolism during starvation has been an unresolved mystery because it has always been thought that the brain depends exclusively upon glucose for energy, and the amount of glucose available falls markedly during prolonged fasting. Scientists at Peter Bent Brigham Hospital have demonstrated that the brain develops the ability to metabolize certain fat breakdown products during starvation, and moreover, that cerebral function is completely normal during this period. These findings have great significance for human medicine, but also are of importance in other areas of human stress. In prolonged space flight, for example, it would be possible for an individual with good fat stores to survive for many weeks on no caloric intake without impairment of cerebral function.

*Skin disease.*—Patients with extensive psoriasis a skin disease affecting five to ten million people in the United States, have been investigated in the Clinical Research Center at The Mount Sinai Hospital in New York. Dramatic improvement in the disease has been obtained in most patients through the use of a diet poor in tryptophan, an amino acid found in many varieties of foodstuffs. These studies are being continued in the center utilizing carefully formulated controls. It is hoped that by dietary manipulations such as this or similar ones, cures may be obtained in a large portion of patients suffering from this disease.

*Infant mortality.*—Infants born without the thymus gland suffer from recurrent, disabling infections, do not grow normally, and usually die at a young age. Research workers at the University of Miami have successfully transplanted a thymus gland from an aborted fetus to an infant born without a thymus gland. Subsequent to this operation, the infant has had no more infections, he has begun to thrive physically, and immunologic tests performed serially have pointed toward persistently normal thymus function.

*Cancer.*—Although several types of drugs are available for the treatment of inoperable breast cancer, there is no accurate means of predicting in advance which drug will be the most effective choice in an individual patient and the

physician must often wait weeks to months to determine the effectiveness of the drug selected.

Research workers in the General Clinical Research Center at Jefferson Medical College have developed a heat-sensitive electronic detector system which continuously records temperatures over tumor and normal breast tissue. Changes in metabolic activity due to drug therapy have been demonstrated, and this promises to be a useful technique both in selection of the most appropriate drug for a particular patient and in investigation of the effectiveness of new antitumor drugs.

*High blood pressure.*—Among patients with lifelong high blood pressure, a group was found by workers at the University of California's Clinical Research Center at the San Francisco General Hospital to have markedly increased production of several hormones secreted by the adrenal gland due to excessive output of ACTH (adrenocorticotropin) from the pituitary gland. The production of these hormones was then blocked by administration of similarly structured natural hormones, with complete cure of the hypertensive condition. As a result of this discovery patients with previously severe high blood pressure and serious disability have been able to resume active lives.

SCIENTIFIC EVALUATION

The $305,000 requested for 1969 will support the study sections, and preliminary review committees used by the Division to provide scientific merit review of grant applications.

These study sections and committees, composed of outstanding authorities in the various fields of medical research, are responsible for the scientific peer evaluation of all research grant applications and their recommendations are provided to the appropriate National Advisory Council.

SPECIAL RESEARCH RESOURCES

This program provides support to enhance the biomedical research capability of the nation through applications of large scale equipment and instrument-oriented resources to areas of multidisciplinary research endeavor. Many areas of such research (such as determination of molecular structure or genetic codes) are substantially dependent upon computer resources, specialized instrumentation and/or commercially unobtainable biological materials. Since facilities to fulfill these needs are usually too costly or too extensive in capability to be assigned or managed by a single investigator, a Special Research Resource is established for use by a community of scientists; the basis for organization can be institutional, regional (city, state, section), or national. The needs of universities, hospitals, and other institutions for computer resources and centralized instrumentation facilities, for laboratories devoted to large-scale preparation of commercially unavailable biological materials, and other Special Research Resources is growing rapidly as the sophistication, capabilities, and costs of modern research increases. The progressive quantification of the biological sciences is reflected in the increasing requirements for specialized equipment, such as computers and analytic biochemistry instruments. Computing devices have served biomedical research not only in mathematical and statistical applications but also in process control functions where the experimental procedures themselves as well as the data are monitored and modified automatically.

Closely associated with instrumentation per se is the dependence upon continuing progress in the design of new instruments and the development of new applications and modifications of existing ones. The recognition of a need for new instruments and applications does not generally occur without an interdisciplinary effort involving biological scientists, physical scientists, and engineers. The opportunities for such interactions are by no means common in most biomedical research institutions. However, the necessary collaborative efforts are aided considerably by the mechanism of research resources devoted to the problems of biomedical instrumentation.

*Program plans in 1968 and 1969*

The $10,850,000 available in 1968 will provide support for a program currently composed of 51 centralized resources of which 42 are computer centers, six analytical biochemistry instrumentation resources and three biomaterials and information sciences resources. The same amount requested for 1969 will provide continuing support for the program.

ANIMAL RESOURCES

The rapid growth of biomedical research has imposed a substantial requirements for laboratory animal resources which will provide animals of the quality and the quantity needed for all branches of specialized medical research. In addition, certain species of animals are becoming increasingly important for the development of model systems and continued efforts will have to be made to provide such animals, properly conditioned and in sufficient numbers, for this type of experimental use.

Of great importance is a program of grants in the specific field of laboratory medicine to provide important data and information concerning the major animal diseases. Such research grants will focus increasingly on improving the health of laboratory animals needed for medical research and research training. Included in the research program would be the acquisition of biomedical and physiological data on laboratory animals, both in normal and diseased states and under various environmental influences. This information provides essential background information to the research worker and also provides the basis for improved standards of animal care.

Of equal importance is the need in the laboratory animal field to strengthen institutional laboratory animal resources. Demands made on animal resources by basic and programmed research and the national concern that research animals be given optimal care at all times make it imperative that all institutions engaged in medical research have adequate programs of reserch animal care. Grants will be made to assist in the initiation of such programs by providing for certain renovations, key personnel, and for specialized equipment such as animal surgery equipment, anesthesia machines and cage cleaning machines. Diagnostic laboratories to provide early detection of animal diseases and identification of inapparent infections which are disastrous to research studies are necessary to any good institutional animal resource program.

*Program plans in 1968 and 1969*

The $5,100,000 available in 1968 will provide support for a program currently consisting of 34 ongoing resources and enable the establishment of about 23 new ones.

The passage of PL 89–544 in 1966 provided that certain animals be provided humane care and treatment. The impact of this requirement is now becoming evident in the increasing requests from institutions for equipment and extensive renovation. The $5,100,000 requested for 1969 will provide support for a program expected to include 45 continuations and an estimated 20 new grants for animal resources, including renovation of institutional facilities to meet the new standards.

PRIMATE CENTERS

The primate centers are a unique resource which provide support for facilities, animals, and research so that resident and visiting scientists can perform studies with non-human primates. Research on primates in many respects most nearly approximates carrying out studies in man and is invaluable as a prelude to clinical investigations. Such studies require the maintenance of large numbers of primates under laboratory conditions.

The program for primate centers was established by Congress in 1959 to provide optimal facilities and environment in which resident and visiting scientists of many disciplines could conduct research on those human health problems that could be studied by utilizing the subhuman primates as the biological model.

Significant accomplishments have already been realized in infectous disease studies, reproduction and population control, and mental retardation, to name only a few. Equally important is the rapidity with which information on the colonization, breeding and maintenance of the primates in a research environment is being accumulated and disseminated. In addition, this program is providing previously unavailable leadership in the development of institutional primate resources for support of medical research.

*Program plans in 1968 and 1969*

Since the construction of the six regional centers and one national center has now been completed, the $10,500,000 requested will provide continuing support for operation of the seven primate centers. The ongoing programs include the establishment of methods of breeding and of maintaining healthy stocks of non-human primates of all ages over long periods of time; the determination of

the suitability of various species for different kinds of investigations; and the continuing evolution of the proper research resources environment to undertake these studies.

Plans for 1968 and 1969 provide for continuing support of the seven primate centers as follows:

| | 1968 estimate | 1969 estimate |
|---|---|---|
| Regional primate research centers: | | |
| 1. Medical Research Foundation of Oregon, Portland, Oreg | $1,850,000 | $1,850,000 |
| 2. University of Washington, Seattle, Wash | 1,350,000 | 1,350,000 |
| 3. University of Wisconsin, Madison, Wis | 1,700,000 | 1,700,000 |
| 4. Emory University, Atlanta, Ga | 1,400,000 | 1,400,000 |
| 5. Tulane University, New Orleans, La | 1,450,000 | 1,450,000 |
| 6. Harvard University, Boston, Mass | 1,350,000 | 1,350,000 |
| National Center for Primate Biology: | | |
| 7. University of California, Davis, Calif | 1,400,000 | 1,400,000 |
| Total | 10,500,000 | 10,500,000 |

FELLOWSHIPS

| | 1968 estimate | 1969 estimate | Increase or decrease |
|---|---|---|---|
| Total fellowships | $200,000 | $204,000 | +$4,000 |

*Introduction*

At the present time, numbers of individuals trained in laboratory animal science and medicine are inadequate for the needs of the biomedical science research community. Under this program scientists with demonstrated ability in such areas as the laboratory animal sciences will be able to pursue special problems in experimental anesthesiology, pathology, virology, primatology, biochemistry, in order to meet the needs in this expanding field.

*Program plans in 1968 and 1969*

The $200,000 available in 1968 will provide support for 20 fellowships at the postdoctoral level. The $204,000 requested for 1969 will provide support for the 13 continuing fellowships and seven new fellowships.

DISTRIBUTION OF FELLOWSHIPS

| | 1968 estimate | | 1969 estimate | | Increase or decrease | |
|---|---|---|---|---|---|---|
| | Number | Amount | Number | Amount | Number | Amount |
| 1. Continuations: a. Noncompeting | 4 | $41,000 | 13 | $130,000 | +9 | +$89,000 |
| 2. New | 16 | 159,000 | 7 | 74,000 | −9 | −85,000 |
| 3. Total fellowships | 20 | 200,000 | 20 | 204,000 | | +4,000 |

FELLOWSHIPS (BY TYPE OF PROGRAM)

| | | | | | | |
|---|---|---|---|---|---|---|
| 1. Postdoctoral | 13 | $119,000 | 12 | $125,000 | −1 | +$6,000 |
| 2. Special | 7 | 81,000 | 8 | 79,000 | +1 | −2,000 |
| 3. Total fellowships | 20 | 200,000 | 20 | 204,000 | | +4,000 |

TRAINING GRANTS

| | 1968 estimate | 1969 estimate | Increase or decrease |
|---|---|---|---|
| Total training grants | $318,000 | $326,000 | +$8,000 |

*Introduction*

The increased use of animals in medical research programs, not only in total numbers, but also in the variety of species, and the necessity of using animals raised under controlled conditions, have resulted in a great demand by medical research institutions for professional support by specialists in laboratory animal medicine.

*Program plans in 1968 and 1969*

The $318,000 available in 1968 will provide for seven training grants at the graduate level in the field of laboratory animal medicine. The $326,000 requested in 1969 will continue the seven current grants.

The program will include graduate training in pathology, microbiology, surgery, physiology, genetics, and other fields related to laboratory animals.

DISTRIBUTION OF TRAINING GRANTS

| Graduate | 1968 estimate | | 1969 estimate | | Increase or decrease | |
|---|---|---|---|---|---|---|
| | Number | Amount | Number | Amount | Number | Amount |
| 1. Continuations: | | | | | | |
| (a) Noncompeting | 4 | $197,000 | 7 | $326,000 | +3 | +$129,000 |
| (b) Competing | 2 | 90,000 | ---- | ---- | −2 | −90,000 |
| 2. New | 1 | 31,000 | ---- | ---- | −1 | −31,000 |
| 3. Total training grants | 7 | 318,000 | 7 | 326,000 | 0 | +8,000 |

COLLABORATIVE RESEARCH AND DEVELOPMENT

| | 1968 estimate | | 1969 estimate | | Increase or decrease | |
|---|---|---|---|---|---|---|
| | Positions | Amount | Positions | Amount | Positions | Amount |
| Personnel compensation and benefits | 2 | $29,000 | 2 | $31,000 | ---- | +$2,000 |
| Other expenses | ---- | 1,945,000 | ---- | 1,947,000 | ---- | +2,000 |
| Total | 2 | 1,974,000 | 2 | 1,978,000 | ---- | +4,000 |

This activity supports studies carried out primarily through research contracts with industry, universities and other Federal and non-Federal institutions.

*Program plans in 1968 and 1969*

The funds available in 1968 and 1969 will be used to provide contracts in the areas of pharmacology-toxicology, special research resources and laboratory animal care.

Contracts for pharmacology-toxicology will be used primarily for the development of computer-based techniques for manipulating chemical and biological information so as to accelerate the realization of systems for handling numerical and other data related to the interactions between living systems and exogenous drugs and poisons, as well as endogenous chemical compounds. Such efforts will include development of an adequate body of test data on compounds which have fairly specific biological effects and computer techniques designed to manipulate and process large files of pharmacological information.

The increase of $4,000 is for centrally furnished services from the "National Institutes of Health management fund".

REVIEW AND APPROVAL OF GRANTS

| | 1968 estimate | | 1969 estimate | | Increase or decrease | |
|---|---|---|---|---|---|---|
| | Positions | Amount | Positions | Amount | Positions | Amount |
| Personnel compensation and benefits | 115 | $1,222,000 | 128 | $1,290,000 | +13 | +$68,000 |
| Other expenses | ---- | 284,000 | ---- | 318,000 | ---- | +34,000 |
| Total | 115 | 1,506,000 | 128 | 1,608,000 | +13 | +102,000 |

This activity supports the scientific and administrative staff of the Division's special research grant programs, General Research Support programs and the Health Research Facilities construction program. This includes program planning and development; review and evaluation of grant applications for presentation to the National Advisory Research Resources Council, the National Advisory Council on Health Research Facilities and the National Advisory Health Council. Other duties of this activity include liaison with applicants, grantees, other components of the NIH, the PHS, advisory bodies, and interested organizations.

The increase requested will provide 13 positions and $67,000 for assistance in program management.

Included in the net increase are mandatory increases of $8,000 for the annualization of new positions in 1968, $4,000 for one additional day's pay in 1969 and $12,000 for annualization of the 1968 pay raise costs. There are also increases of $11,000 for centrally furnished services from the "National Institutes of Health management fund."

PROGRAM DIRECTION

| | 1968 estimate | | 1969 estimate | | Increase or decrease | |
|---|---|---|---|---|---|---|
| | Positions | Amount | Positions | Amount | Positions | Amount |
| Personnel compensation and benefits | 37 | $435,000 | 40 | $456,000 | +3 | +$21,000 |
| Other expenses | | 375,000 | | 411,000 | | +36,000 |
| Total | 37 | 810,000 | 40 | 867,000 | +3 | +57,000 |

This activity is responsible for the overall direction, administration, planning, evaluation and data analysis of the several programs of the Division of Research Facilities and Resources. The requested program increase of $20,000 will be used for increased operating costs and support of three positions for program administration.

Included in the net increase are mandatory increases of $5,000 for the annualization of new positions in 1968, $2,000 for one additional day's pay in 1969 and $3,000 for annualization of the 1968 pay raise costs. There is also an increase of $27,000 for centrally furnished services from the "National Institutes of Health management fund."

## Office of International Research

OBLIGATIONS BY ACTIVITY

| | 1968 estimate | | 1969 estimate | | Increase or decrease | |
|---|---|---|---|---|---|---|
| | Positions | Amount | Positions | Amount | Positions | Amount |
| Grants: | | | | | | |
| Research | | $7,560,000 | | $8,440,000 | | +$880,000 |
| General research support | | (639,000) | | (600,000) | | (−39,000) |
| Scientific evaluation | | (20,000) | | (20,000) | | |
| International centers for medical research and training | | (2,800,000) | | (2,300,000) | | (−500,000) |
| Fellowships (International postdoctoral) | | 1,380,000 | | 1,411,000 | | +31,000 |
| Direct operations: | | | | | | |
| International research | 68 | 3,303,000 | 68 | 3,316,000 | | +13,000 |
| Training activities | 10 | 187,000 | 10 | 187,000 | | |
| Total obligations | 78 | 12,430,000 | 78 | 13,354,000 | | +924,000 |
| Unobligated balance reserve | 3 | 1,675,000 | | | −3 | −1,675,000 |
| Total obligations and reserve | 81 | 14,105,000 | 78 | 13,354,000 | −3 | −751,000 |

RESEARCH GRANTS

| | 1968 estimate | 1969 estimate | Increase or decrease |
|---|---|---|---|
| Regular projects | $4,101,000 | $5,520,000 | +$1,419,000 |
| Special program | 3,459,000 | 2,920,000 | −539,000 |
| Total research grants | 7,560,000 | 8,440,000 | +880,000 |

| | 1968 estimate | 1969 estimate | Increase or decrease |
|---|---|---|---|
| Research project grants to former international postdoctoral fellows | $237,000 | $130,000 | −$107,000 |

*Introduction*

This program has been designed to facilitate optimum utilization of research training received in the United States by promising young foreign biomedical investigators previously supported by NIH international Postdoctoral Fellowships. The program provides some of the resources needed by these highly talented and carefully selected individuals in commencing independent research careers in their home countries. The applications for modest research project grants, limited ordinarily to $2,500 for each of three years and not renewable, receive careful review by both the International Fellowship Review Panel and the National Advisory Health Council. The grants usually provide for subprofessional technical assistance, equipment and supplies, and serve not only to protect the training investment made in the foreign scientist by encouraging the inauguration of his independent research career on return to the home country, but also to stimulate continuation and development of a productive collaborative relationship begun earlier between the Fellow and his American preceptor. In many cases, Fellows develop a fresh interest in problems which are of pressing and immediate concern to the health of the American people and are strongly motivated to continue efforts along these lines following completion of their training in the United States. These grants promote such efforts. Furthermore it is becoming increasingly clear that progress in the health sciences recognizes no national boundaries, and all nations share in the afflictions common to all and therefore as a matter of self-interest are compelled to show concern for and activities directed toward solution of common health problems. This program, along with the international fellowship program, supports research and training in *all* the related sciences ranging from heart disease to cancer, chronic infectious diseases, nutritional and metabolic problems, epidemiology of mental and behavioral disorders, development of new surgical techniques, understanding of the genetic basis for health and development, and community and environmental health problems.

*Program Plans in 1968 and 1969*

The mode of support for former fellows is under study. Commitments made in 1967 or earlier for three-year periods will be honored. To fulfill these commitments, we plan to make 94 awards for $237,000 in 1968 and 52 awards for $130,000 in 1969.

| | 1968 estimate | 1969 estimate | Increase or decrease |
|---|---|---|---|
| Research project grants (United States-Japan program) | $3,864,000 | $5,390,000 | +$1,526,000 |

*Introduction*

In 1966 President Johnson and Prime Minister Sato, mindful of the many areas of human health which are of mutual concern to the peoples of the U.S. and Japan agreed to undertake a greatly expanded program of cooperation in medical science. As a first step to implement this agreement, they agreed to convene a conference of the foremost medical scientists from the United States and Japan to work out the details of the new program. The U.S.-Japanese Joint Planning Committee held a planning conference in Tokyo. This was followed by a Joint Committee Meeting in Honolulu during August 17–19, 1966.

The program is concerned with the diseases of mutual importance to the health of the peoples of the U.S. and Japan. These diseases or categories of diseases include: cholera, tuberculosis, leprosy, virus diseases (arbovirus, respiratory virus, smallpox, and rabies), parasitic diseases (schistosomiasis and filariasas), and malnutrition.

Primary emphasis is placed on medical research as the basis for advanced knowledge necessary to effective action. Field research may be undertaken when deemed necessary or desirable but primary emphasis is on laboratory research.

The United States and Japanese Governments have appointed members to constitute a U.S.-Japan Cooperative Medical Science Committee. The United States delegation to this Committee is appointed by the Secretary of State for a period not to exceed four years. The delegation, in addition to representing the U.S. at meetings of the Joint Committee, advises the Secretary of State on the scope, direction and other broad aspects of the program and develops plans and proposals to assure that the program meets all the purposes for which it was established. It has designated the six areas of research mentioned above and established Panels in each disease category to implement the research program.

Appointments to Panels have been made by the Director, NIH, and each Panel consists of five members. Consultants may be nominated by each Panel for appointment by the Committee in keeping with the scientific requirements.

The United States and Japan maintain separate secretariats. The Office of International Research, National Institutes of Health, functions as the U.S. secretariat.

The United States and Japan share the costs of the program. Projects of U.S. scientists are supported by the United States and those of the Japanese scientists by Japan.

The National Institutes of Health, based on the availability of funds and delegated authority under P.L. 86–610, provides for the support of scientific projects, is responsible for the organization, funding, and conduct of all scientific meetings held in the United States, provides financial support to the United States Panel members, consultants for attendance at meetings related to the U.S.-Japan Cooperative Medical Science Program, and provides and funds the U.S. secretariat.

*Program Plans in 1968 and 1969*

The allowance of $3,864,000 for grants in 1968 will provide for approximately 88 research grants in the areas of cholera, leprosy, tuberculosis, virus diseases, infectious diseases and malnutrition. The requested amount of $5,390,000 in 1969 will provide for the continuation of 86 of these research grants and the provision for about 36 new and competing continuation research project grants.

| | 1968 estimate | 1969 estimate | Increase or decrease |
|---|---|---|---|
| International centers for medical research and training | $2,800,000 | $2,300,000 | −$500,000 |

*Introduction*

International Centers for Medical Research and Training (ICMRT) promote collaborative research and research training between U.S. universities and selected foreign institutions and investigators. Five International Centers now in operation provide unusual field experience and exceptional biomedical research opportunities for American physicians and scientists. These university-sponsored Centers derive their financial support from research grants awarded by the National Institutes of Health. The five universities and their overseas affiliates are as follows:

| *United States University* | *Foreign Affiliate Institution* |
|---|---|
| Johns Hopkins University | All India Institute of Hygiene and Public Health and the Calcutta School of Tropical Medicine, Calcutta, India |
| University of California | Institute for Medical Research, Kuala Lumpur, Malaysia, and the University of Malaya, Singapore |
| Tulane University | Universidad del Valle, Cali, Colombia |
| Louisiana State University. | University of Costa Rica, San Jose, C. R. |
| University of Maryland | Institute of Hygiene and Lahore General Hospital, Lahore, W. Pakistan |

*Program Plans in 1968 and 1969*

Further efforts to involve a greater number of scientific disciplines of the grantee institutions in the existing ICMRT's is underway. Program Directors have been encouraged to broaden their programs whenever possible through additional health-related research projects mounted upon ICMRT administrative structure, but financed by private foundations, by other federal agencies or by means of independent NIH grant awards to individual university investigators for discrete, well-defined investigations. Therefore, a variety of projects, other than those discussed, are being undertaken at the ICMRT sites. Other sources of participation and subsidy may thus contribute substantially to the development of comprehensive, multidisciplinary programs for the study of all health problems, as well as those devoted to medicine in the tropics. A continuing review of their scientific accomplishments and future programming is made by the Committee on International Research. It is apparent through review that these ICMRT organizations are now providing for American scientists research and training opportunities which cannot be duplicated in the United States. An intensive review of the programs in each center has led to the conclusion that the program is maturing. The support given in the past was intended for stimulation which would ultimately develop into an autonomous operation by the university. Critical review of the present operation has developed recommendations toward this objective.

DISTRIBUTION OF RESEARCH GRANTS

| | 1968 estimate | | 1969 estimate | | Increase or decrease | |
|---|---|---|---|---|---|---|
| | Number | Amount | Number | Amount | Number | Amount |
| 1. Noncompeting continuations | 146 | $2,493,000 | 141 | $3,912,000 | −5 | +$1,419,000 |
| 2. Competing projects | 36 | 1,467,000 | 36 | 1,467,000 | | |
| 3. Supplementals | (20) | 141,000 | (20) | 141,000 | | |
| 4. Subtotal, regular | 182 | 4,101,000 | 177 | 5,520,000 | −5 | +$1,419,000 |
| 5. General research support grants | | 639,000 | | 600,000 | | −39,000 |
| 6. Scientific evaluation | | 20,000 | | 20,000 | | |
| 7. ICMRT | | 2,800,000 | | 2,300,000 | | −500,000 |
| 8. Total, research grants | 182 | 7,560,000 | 177 | 8,440,000 | −5 | +880,000 |

FELLOWSHIPS

| | 1968 estimate | 1969 estimate | Increase or decrease |
|---|---|---|---|
| Fellowships (international postdoctoral) | $1,380,000 | $1,411,000 | +$31,000 |

*Introduction*

The International Postdoctoral Fellowships Program offers a unique opportunity for the sharing of scientific information on an international basis by permitting foreign investigators to work for a period of a year or two in collaboration with, and in the laboratories of, American colleagues in the United States. This program provides U.S. scientists access to the ideas of vigorous young investigators with stimulating and different viewpoints. In addition, since Fellows return to do independent research in their home countries, a basis is provided for the future collaboration between investigators here and those in different environmental settings.

*Program Plans in 1968 and 1969*

This program will be continued in 44 countries in 1969. Each country, through a nominating committee composed of prominent scientists of that country, submits its recommendations for fellowships. These nominations are competitively reviewed by the International Fellowship Review Committee at the NIH. On the advice of the International Fellowship Review Committee the period of fellowships support has been lengthened to two full years. It was pointed out by the Committee that a fellow has his most productive time on the project during the second year. The additional funds requested for this program will provide for about 6 more continuations in 1969 while keeping the number of new Fellows at a constant level.

DISTRIBUTION OF FELLOWSHIPS

| | 1968 estimate | | 1969 estimate | | Increase or decrease | |
|---|---|---|---|---|---|---|
| | Number | Amount | Number | Amount | Number | Amount |
| Continuations (noncompeting) | 63 | $401,000 | 69 | $432,000 | +6 | +$31,000 |
| New fellowships | 100 | 979,000 | 100 | 979,000 | | |
| Total Fellowships | 163 | 1,380,000 | 169 | 1,411,000 | +6 | +31,000 |

INTERNATIONAL RESEARCH

| | 1968 estimate | | 1969 estimate | | Increase or decrease | |
|---|---|---|---|---|---|---|
| | Positions | Amount | Positions | Amount | Positions | Amount |
| Personnel compensation and benefits | 68 | $969,000 | 68 | $981,000 | | +$12,000 |
| Other expenses | | 2,334,000 | | 2,335,000 | | +1,000 |
| Total | 68 | 3,303,000 | 68 | 3,316,000 | | +13,000 |

*Introduction*

The Office of International Research is responsible for coordination, policy formulation, and analysis of the National Institutes of Health International programs and activities. Included are responsibilities for administration of the U.S.-Japan Cooperative Medical Science Program, the NIH Special Foreign Currency Program, International Centers for Medical Research and Training Grants, Visiting Scientists Program, International Postdoctoral Fellowships Program, International Research Career Development Program, and Overseas Offices located in Rio de Janeiro, Brazil; Paris, France; Toyko, Japan; and New Delhi, India.

*Program Plans in 1968 and 1969*

In 1968 and 1969 it is planned to continue operations of the international programs listed above at approximately the same levels.

This request will provide funds for review and approval of international Postdoctoral Fellowships, Project Research Grants for Returning International Fellows, and special grants for International Centers for Medical Research and Training. This activity supports the review and advisory committee evaluating these grants and fellowships, and the staff which analyzes, processes and manages the grants and fellowships.

The request also supports the activities of NIH offices at four overseas locations: Paris, Rio de Janeiro, Tokyo and New Delhi. The four overseas offices provide information on scientific interests, capabilities and rseources abroad and make recommendations on NIH policy and program development. They provide basic information which is used by the analytic activity next described.

Support is also provided for an analytic activity which advises NIH management and the several Institutes on the extent, scope, and direction of scientific programs in relation to activities abroad. This activity also collates information on medical research efforts of other countries so that program decisions can take account of these efforts.

The request also provides for staff to operate and coordinate the NIH program utilizing U.S., owned foreign currency (P.L. 480 program).

The request also provides funds for contracts, staff support, and conferences for the U.S.-Japan Cooperative Medical Science Program. Contracts provide for directed scientific effort in the areas of cholera, leprosy, tuberculosis, parasitic diseases, virus diseases and malnutrition. Conferences and workshops to stimulate both program and scientific progress in these areas are also supported.

Both Japanese and American scientists provide scientific leads and ideas to each other, which are immediately acted upon in their own research projects.

The increase of $13,000 which is requested includes $10,000 for annualization of pay raises in 1968, and $2,000 for one more day of pay in 1969, and $1,000 for centrally furnished services from the "National Institutes of Heath management fund."

TRAINING ACTIVITIES

| | 1968 estimate | | 1969 estimate | | Increase or decrease | |
|---|---|---|---|---|---|---|
| | Positions | Amount | Positions | Amount | Positions | Amount |
| Personnel compensation and benefits | 10 | $120,000 | 10 | $120,000 | | |
| Other expenses | | 67,000 | | 67,000 | | |
| Total | 10 | 187,000 | 10 | 187,000 | | |

*Introduction*

The International Research Career Development Program (IRCDP) was started in Fiscal Year 1963 by the National Institutes of Health to develop competence in the Public Health Service in medical research related to problems of an international nature which cannot ordinarily be undertaken in the United States and to provide opportunities for promising young scientists to work abroad as members of the U.S. biomedical research groups. A variety of unusual or unique opportunities exist in foreign countries for pursuing studies of substantial importance to medical science in general and to the health of U.S. residents in particular. Investigations in the field of geographic pathology and epidemiology on an international basis are likely to provide important clues to the causes of certain diseases which cannot be studied adequately in more restricted environments.

*Program Plans in 1968 and 1969*

The period of training is for two years, and approximately five new IRCDP associates are appointed each year. Each assignment is tailored specifically to the background and interest of the associate, as well as the projected needs of the Public Health Service. In 1969 no new associates will be appointed so that a phasing out of this type of overseas assignment will be accomplished. The five positions will then be available for appointment of fellows to study under international agreements such as the US-Japan and US-Italy Cooperative Medical Science Agreements. The intent here is to provide manpower resources which will add to the attacks on diseases of mankind without adding to dollar payments outside the U.S. The new associates will be international in the sense that they will take training in and work on biomedical problems which inernational agreements have spotlighted for joint effort.

DIVISION OF COMPUTER RESEARCH AND TECHNOLOGY

| | 1968 estimate | | 1969 estimate | | Increase or decrease | |
|---|---|---|---|---|---|---|
| | Positions | Amount | Positions | Amount | Positions | Amount |
| Personnel compensation and benefits | 101 | $1,129,000 | 108 | $1,236,000 | +7 | +$107,000 |
| Other expenses | | 3,426,000 | | 3,548,000 | | +122,000 |
| Total | 101 | 4,555,000 | 108 | 4,784,000 | +7 | +229,000 |

*Introduction*

The Division of Computer Research and Technology conducts a continuing program in computation as a necessary general research support to the NIH Institutes and Divisions. The planning, conduct and management of the high quality research programs at NIH generates a wide variety of tasks in applied mathematics, computer operations and computer programming and in the design and creation of special purpose, computer-based data handling systems.

*Program Plans in 1968 and 1969*

In 1967, recognizing the increasing demands for advanced computation, NIH began to install modern computing equipment. This change is now essentially complete: new equipment has been installed and the reprogramming tasks are about at an end. During the past calendar year, the performance of the new equipment has improved significantly: unit cost of computing is at least one-third less and in some applications has been reduced to one-half. The throughput (jobs

completed per unit time) capability of the system has increased 7 to 10 times that of a year ago.

This progress has been brought about by improved reliability and stability in the computing equipment and the development of better computer operating systems by the Division staff in cooperation with the equipment manufacturer. For the remainder of 1968 and during 1969, the effort will be focused on developing the necessary responsiveness of the central equipment to permit linking, via remote terminals, selected laboratories and clinics to the central facility.

Concomitant with equipment development has been a highly successful effort to recruit an adequate number of key personnel in the areas of applied programming. With the improved equipment and new staff, DCRT has initiated several collaborative biomedical studies with investigators in the several Institutes and Divisions. Excellent progress has been made in the general area of analyzing physical biochemistry data: mass spectrometric and spectrophotometric data on important biological molecules are analyzed routinely on the computer in support of studies on chemical structure and biological activity. DCRT's expanding program includes two major activities in these important physical chemistry studies: first, the design and implementation of small, laboratory systems to provide expanded, rapid, accurate acquisition and editing of data for the same unit cost; and secondly, the undertaking of difficult theoretical studies on chemical structure which can lead to better understanding of the pharmacological actions of these compounds.

Collaborative studies with the cardiac surgeons in the National Heart Institute have led to the creation of mathematical routines suitable for the rapid analysis of certain hemodynamic functions important to reconstructive cardiac surgery. This effort will be continued including the development of a direct data link between the central computer facility and the surgical suites to provide timely analysis at greatly reduced cost.

A number of tasks in support of clinical research and delivery of clinical care are now underway. Administrative functions in support of patient care are being processed by the computer. In depth studies to identify the information elements essential to clinical study and care of patients are being conducted in an effort to identify an economical solution to the information handling problems of hospitals. Increasing costs of equipment has forced DCRT to seek a solution using the central computer facility supported by telephone line links. This important, complex problem will be of continuing concern for some time to come.

Continuing financial and personnel support has been given to the automation of the clinical laboratories in the Clinical Center. These scientists have made considerable progress: a number of the several hundred procedures have been automated. Continued support in 1969 is planned. Much of this development effort should be transferable, directly or with subsequent modification, to the care of patients in other hospitals.

A collaborative project with the Neurology Institute involving computer analysis of the normal and pathological anatomy of neural tissue is underway. This effort, known generally as image processing, is representative of collaborative efforts that will be undertaken with several other Institutes and Divisions. Progress has been made in specifiying the needed computing equipment and a number of analytical routines for handling the photographic images has been formulated and tested using the central facility equipment as well as off-site computing equipment. The key mathematical staff to support this large, difficult task has been recruited. A project with the National Cancer Institute involving computer processing of the natural English diagnostic statements of pathology is proceeding well. Testing for routine use of this computer-based system will begin late in 1968. The long-range goal of this project is the expansion of these mathematical and logical algorithms to process clinical discharge summaries and ultimately, clinical records. This will enable the clinician to process both the non-numeric data essential to laboratory and clinical research and the delivery of clinical care and services.

The Division is requesting an additional seven (7) positions and $229,000 for 1969. The new positions and $66,000 will be used throughout the Division's major programs to complement the present staff resources required to sustain efforts initiated in 1968 and in prior years and to develop an effective time-shared computer system as the next step in more efficient use of the central facility. Adequate staff is needed to continue progress toward the development of software for responsive man-machine communication systems. Another need is for continued developmental efforts in the central facility to make the general-purpose computer more accessible to the user. Finally, and most important, staff will be

required to design a time-shared computer system for the support of medical management functions required in the operation of the NIH Clinical Center. The technology required to develop an operational time-shared system for hospitals is still lacking and efforts must be intensified to make progress in this area. Part of the problem rests not with the computer technology but with the difficulty in arriving at specific definitions of existing hospital functions and in the rapid changes which are taking place in these functions.

The remaining program increase of $120,000 will be used to meet the normal growth in the demand for the computer services and to provide for automated support of clinical laboratories, including the development of more efficient means of monitoring critically ill patients. Included in the requested net increase is $31,000 for the annualization of positions new in 1968 and $10,000 for the annualizations in 1969 of the 1968 pay raise cost. There is also an increase of $2,000 for centrally furnished services from the "National Institutes of Health Management Fund".

ENGINEERING DEVELOPMENT

OBLIGATIONS BY ACTIVITY

| | 1968 estimate | | 1969 estimate | | Increase or decrease | |
|---|---|---|---|---|---|---|
| | Positions | Amount | Positions | Amount | Positions | Amount |
| Direct operations: | | | | | | |
| Collaborative research and development | | | | $1,000,000 | | $1,000,000 |
| Program direction | 5 | $344,000 | 5 | 347,000 | | +3,000 |
| Total obligations | 5 | 344,000 | 5 | 1,347,000 | | +1,003,000 |
| Unobligated balance, reserve | 1 | 3,000 | | | −1 | −3,000 |
| Total obligations and reserves | 6 | 347,000 | 5 | 1,347,000 | −1 | +1,000,000 |

The efforts of this activity are directed towards applying engineering and technological innovations to biomedical problems. The budget request proposes an increase of one million dollars to permit a wider range of program activities including the funding of a number of collaborative research and development projects. At the suggestion of the Congress, the NIH will go forward with the development of a new organizational structure which will consolidate the operations necessary to manage the technical and research programs of the fields of biomedical engineering—a new and complex discipline created by pioneering teams of exceptional engineers and biomedical scientists—and medical engineering development. This new central organization, budgeted for 5 positions in 1968 and 1969, will provide coordination for existing biomedical engineering activities of the NIH. It will include participation from the individual Institutes and Divisions so as to insure an appropriate NIH-wide integration of effort and thereby provide a more centralized focus for both the leadership and the engineering and scientific competences necessary for supporting a wide range of collaborative research and development projects at NIH.

Essential to a program of targeted research is the ability to map out a route to a desired objective, identifying the paths to be followed and the sequence of steps to be taken in its attainment. In the furtherance of this approach, NIH has engaged the National Academy of Engineering—in an advisory capacity—to assist program management in delineating the organizational, functional and operational relationships that may be needed and how much relationships may be utilized to create the most effective interplay of the many disciplines required for the effective application of engineering and technical innovations to program problems.

The amount requested will make it possible to augment the engineering and scientific staffs in the new unit and to utilize the contractual mechanisms for targeted research projects which, heretofore, have not moved forward due to the lack of resources needed to obtain the necessary competences for a number of highly integrated developmental projects relating to programs of research. In order to move ahead in a very complex area, it is necessary to develop imaginative new coupling devices and to establish a central point where a broad range of talents may interact and engage in a collaborative exchange of ideas, methodologies and techniques. The increase will provide additional support to a key

area of special program effort and bring to bear the specific applications of modern engineering technology in bio-medicine and health in such areas as—

(*a*) Instrumentation,
(*b*) Artificial internal organ replacement,
(*c*) Automation and its integration into the hospital environment,
(*d*) Isolation and containment facilities,
(*e*) Patient monitoring devices and systems,
(*f*) Hospital information systems.

If additional support is available for bioengineering and medical engineering development, it will significantly hasten the transmission of new knowledge, developed in the applied areas of these programs, to the various components of the nation's health care system.

$1,000,000 of the total increase will provide for the initiation of contracts and $3,000 for centrally furnished services from the "National Institutes of Health management fund."

INTERNATIONAL CENTER

| | 1968 estimate | | 1969 estimate | | Increase or decrease | |
|---|---|---|---|---|---|---|
| | Positions | Amount | Positions | Amount | Positions | Amount |
| Personnel compensation and benefits | | | 10 | $64,000 | +10 | +$64,000 |
| Other expenses | | | | 536,000 | | 536,000 |
| Total | | | 10 | 600,000 | +10 | +600,000 |

*Introduction*

The proposal for the establishment of an International Center relating to the biomedical and behavioral sciences at the National Institutes of Health has a number of antecedents. The earliest formal expression of such a possibility culminated in the International Health Research Act of 1960 (P.L. 86-610).

It was the continuing hope of the late Representative John E. Fogarty of Rhode Island, through many years of his career, to create, at NIH, a Center dedicated to international cooperation and collaboration in health, medical and biological research. This idea was presented by Congressman Fogarty before the Third National Conference of World Health in September 1963.

Following Congressman Fogarty's death last January, Representative Melvin Laird, of Wisconsin, proposed to the Congress the establishment of an International Study and Conference Center at NIH as a memorial to John E. Fogarty. In February 1967, the President, in his message to the Congress on Education and Health in America, stated that he was seeking the funds to establish an International Center for Advanced Study in the Health Sciences at NIH. In consequence, $500,000 was included in the 1968 HEW appropriation bill for planning funds to construct the "John E. Fogarty International Center for Advanced Study in the Health Sciences" at the National Institutes of Health as a suitable memorial to the interest and contribution of Congressman John E. Fogarty to the medical sciences generally and the programs of NIH particularly. This new organizational element is being established to develop and operate a number of essential NIH functions with general international character.

The John E. Fogarty International Center represents the continuing effort of the NIH to promote maximum effectiveness of the NIH research establishment at Bethesda by mobilizing and developing research potential wherever it may be, toward the advancement of research in the life sciences.

Since the search for new knowledge knows no national boundaries, the ability of NIH, through the programs of the International Center, to initiate research into health problems of international scope is only a natural extension of NIH's long term objectives.

The initial function of the Fogarty Center will be to create the environment, and provide the means, to assemble scholars, scientists and innovative minds for advanced study of the development of science as it relates to health and its implications and applications for the future.

Until such time as construction of a new International Center facility is completed Stone House (Building 16) will be restored to serve as a base for the initiation of the Center. Apart from the long term utility of this building to the program, its early availability will make it possible to institute a significant part of the Center's program during the fiscal years 1969 and 1970.

Plans for the new Center construction include conference facilities, living quarters for scholars in residence, guest-type rooms for visiting conference participants, food service facilities, lounges, and office space for the Center staff.

*Program Plans*

In addition to being a Center for Advanced Study and the locus for the conduct of an organized program of international conferences and seminars concerned with the life sciences, the Center will undertake other programs aimed at extending international cooperation in the advancement of the health sciences:

*I. Scholars in Residence Program*

The International Center will be equipped with flexible facilities on the NIH reservation which would be suited to the assembly of outstanding scientists and scholars from the U.S. and abroad, invited to the Center for varying lengths of time. The central location and planned programs would serve to promote the continuing interaction of the scholars with each other and their hosts, and would minimize outside distractions. The facilities would include space for scholars of international distinction to pursue individual or small group projects which have a bearing on the health of society. Removed for a time from the immediacy of daily problems, they could give thought to long-range issues, including assessments on the state of the art and philosophical and social concepts relative to the thrust of science and its applications. In this connection a continuing series of studies would be made on such matters as the further direction of fundamental biomedical science, the implication of the advance of science and technology for the future of medical education and medical services, the isues surrounding increasing capability for biological manipulation. In addition, distinguished scientists will be invited to interact more closely with intramural NIH research activities.

*II. International Conference and Seminar Program*

The development of a well-organized international conference and seminar program centered in the contemporary status of the life sciences, as well as the facilities to house such a program will be a primary aim of the Center. Under this program the Fogarty Center will organize and sponsor a series of working conferences on current directions in medical, biological and behavioral sciences, and their relationship to health and the advance of well being. The objective is to purposely bring together international experts and to offer the appropriate forum for creative discussion of a wide range of matters of importance to the advancement of the sciences relevant to health and their relationship to society. Selection of appropriate subjects and assignment of priority will be decided by the Director and staff of the Fogarty Center with the assistance of an Advisory Committee. During the forthcoming year conference programs on the subjects of "The Science Base for Medical Education in the Future," "The Study of Disease in Controlled Populations," and the scientific, legal, and ethical issues of organ transplantation are contemplated.

Follow-up action based on the conclusions of these conferences and seminars will be sought through NIH Institutes and, should international action be necessary, through collaborative arrangements with other countries or by one of the international agencies with health science programs.

III. *International Fellowship and Exchange Program*

A. *Senior Scientist Exchange Program*

Provision will be made for a series of awards on an international basis to encourage the exchange of senior teachers and scientists among universities and research institutions in foreign countries and the U.S. This program would make it possible to place distinguished scientists in posts throughout many countries and in the U.S. for a period of one to five years in order that the broadest scientific influence can be exerted by such outstanding individuals.

B. *International Postdoctoral Fellowship Program*

This program provides a series of awards on an international basis to support the study and training of promising foreign postdoctorate students in the health sciences in the U.S. The Postdoctoral Fellowships Program has been in existence at NIH for over 10 years and will be transferred to the Fogarty Center from the Office of International Research.

IV. *Foreign Visitor Reception*

The influx of visitors and delegations from foreign countries has become a pressing problem for NIH and has created a crucial need for a reception center. The Fogarty Center will serve as the focal point for reception and guidance of scholars in residence, visiting scientists and guests. A well developed reception program would allow us to gain the maximum benefit from foreign scientists visiting the NIH, while at the same time acquainting them with U.S. scientific and cultural facilities.

*Budget Request*

In order to initiate, on a modest scale, the new programs outlined above and to assemble the necessary staff to operate them, $600,000 and 10 new positions are requested.

NEW POSITIONS REQUESTED, FISCAL YEAR 1969

| | Grade | Annual salary |
|---|---|---|
| International Center: | | |
| Director of Office | GS–15 | $18,404 |
| Administrative officer | GS–14 | 15,841 |
| Public health program specialist | GS–13 | 13,507 |
| Public health program specialist | GS–12 | 11,461 |
| Administrative assistant | GS–9 | 8,054 |
| Conference management officer | GS–9 | 8,054 |
| Secretary | GS–7 | 6,734 |
| Secretary (2) | GS–5 | 11,130 |
| Clerk-stenographer | GS–5 | 5,565 |
| Total (10) | | 98,750 |
| Division of Research Facilities and Resources: | | |
| Review and approval of grants: | | |
| Scientist (2) | GS–15 | 36,808 |
| Scientist (3) | GS–14 | 47,523 |
| Scientist (4) | GS–13 | 54,028 |
| Clerical assistant | GS–6 | 6,137 |
| Clerical assistant (3) | GS–5 | 16,695 |
| Subtotal (13) | | 161,191 |
| Program direction: | | |
| Public health program specialist | GS–13 | 13,507 |
| Administrative staff assistant | GS–13 | 13,507 |
| Clerical assistant | GS–6 | 6,137 |
| Subtotal (3) | | 33,151 |
| Total (16) | | 194,342 |
| Division of Computer Research and Technology: | | |
| Research mathematician | GS–13 | 13,507 |
| Systems analyst | GS–12 | 11,461 |
| Engineer | GS–11 | 9,657 |
| Mathematician | GS–9 | 8,054 |
| Computer programer | GS–7 | 6,734 |
| Secretary (2) | GS–6 | 12,274 |
| Total (7) | | 61,687 |
| Total new positions (33), all activities | | 354,779 |

Senator HILL. Dr. Shannon, we will be pleased to hear from you.

Dr. SHANNON. This appropriation provides support for five noncategorical areas of activity. These are: the activities of the Division of Research Facilities and Resources; the Office of International Research; the Division of Computer Research and Technology; Engineering Development; and the John E. Fogarty International Center for Advanced Studies in the Health Sciences.

I should like to speak to each of the five elements of the "General Research and Services" appropriation separately, and to summarize the total request at the end.

### DIVISION OF RESEARCH FACILITIES AND RESOURCES

Mr. Chairman, I propose to address myself first to the programs of the Division of Research Facilities and Resources. The mission of this division is, as you know, not to finance research as such, but rather to provide the Nation's scientific community with a basic complement of facilities and resources indispensable for sustaining and advancing the country's research and research-training activities.

### Clinical Research Programs

These resource programs underpin a very broad spectrum of science by delivering services needed by scientists across the total panorama of biomedical research. The general clinical research program, inaugurated in 1960, provides the facilities and resources in which clinical investigators can study human diseases—to increase the understanding of the nature and natural history of disease, to extend the capability of medical science to treat and manage disease, and to apply at the bedside the fundmental biological knowledge acquired in basic research programs.

Since 1960, clinical research centers have become an important national resource. There are presently 91 of them in 31 States, the District of Columbia, and Puerto Rico. Sixty-two of the Nation's 94 medical schools are operating clinical research centers, and applications have been submitted or are being prepared by an additional eight schools.

This young program has become pivotal to the success of patient-oriented research. Last year, over 1,200 scientific articles were published, reporting new insights into such far-ranging subjects as infant mortality, heart disease, diabetes, cancer, and organ transplantation.

### HEART TRANSPLANT

Senator Hill. I see where our last heart transplant did not turn out.

Dr. Shannon. I was distressed to read that, Senator Hill, but you may recall that when it was first announced it was stated that the operational procedure required some 8 or 9 hours. The patient was some 63 or 64 years old. I think that when we talk about heart transplants and other complicated cardiovascular surgery, we should realize, although our scientists have moved a long way to permit the use of very audacious techniques, that a basic understanding of the physiology of the organ, when it is submitted to such trauma, is grossly lacking. This in turn limits what one can do.

Operational procedures that go reasonably well in youngsters aged 20 and 30 are increasingly difficult as one gets to an older age. Unfortunately, it is the people in the older age groups who have the most need for that type of surgery.

Again, it emphasizes the need, for very practical purposes, for a fundamental understanding of the basic biological processes that underpin the functions of these organs.

This is the type of work that cannot be contributed to by the surgeon, however technically superior he may be. It requires the intense involvement of the biochemist, the physiologist, the molecular biologist, and so on.

These are the people upon whom we must depend for very dramatic advancements. We have to continue to think about a real understanding of the underpinning of the basic life processes as the wherewithal that permits dramatic advancement.

I have had many hours to roll this over in my mind.

### Open Heart Surgery

When you get into open heart surgery, you get into variables that do not ordinarily come before the average physicians. You carry the patient for a matter of hours by external devices in order to sustain bodily activity. It is usual to lower body temperature so that the blood supply to the brain and other vital organs is not such a demanding need. This carries with it a series of hazards that ordinary surgery does not.

### clinical research

Over 2,700 scientists used these resources and 1,700 medical students and 3,100 physicians received training in research techniques.

Senator Hill. Wasn't that a pretty good showing?

Dr. Shannon. Indeed it is, Senator Hill, but I would point out that only 62 of the Nation's 94 medical schools are operating clinical research centers.

I wish I could say that 94 out of 94 medical schools were operating clinical research centers because it is my belief that sound clinical investigation must underpin the development of a sound educational enterprise. It must be the basis of the development of medical care services. It is a responsibility that, without resources such as this, cannot be discharged by a medical school.

I think we have done very well, beginning in 1960, but I think we have a substantial way to go.

### Nonparticipating Medical Schools

Senator Hill. With respect to these 32 who are not participating, is their nonparticipation due to lack of funds or what?

Dr. Shannon. It is in part due to lack of funds but it is in part also due to lack of science sophistication which perhaps reflects an inadequate scientific staff. I would be inclined to see if one could develop, through the use of developmental grants, this type of activity in each medical school—supply them with funds to staff them even as we supply the centers for mental health with the funds to staff their activities. These centers are absolutely essential for sound clinical foundation for the education process. I think that a school without resources such as this is not a complete school.

This is my conviction.

Senator Hill. Then it is most important that we encourage these schools to have these centers, is it not?

Dr. Shannon. Indeed so, Senator.

### special research resources program

The special research resources program provides support to enhance the biomedical research capability of the Nation through application of large-scale equipment and instrument-oriented resources to areas

of multidisciplinary research endeavor. Many areas of such research—for example, determination of molecular structure or genetic codes—are enormously dependent upon computer resources, specialized instrumentation and/or commercially unobtainable biological materials.

Since facilities to fulfill these needs are usually too costly or too expensive in capability to be assigned or managed by a single investigator, a special research resource is established for use by a community of scientists; the basis for organization can be institutional, regional, or national.

### RESOURCES SUPPORT AND PARTICIPATION

The Division of Research Facilities and Resources currently supports 51 resources under this program: 42 computer centers, six analytical biochemistry instrumentation resources, and three biomedical resources.

These resources have participated in an impressive number of significant scientific accomplishments in the past year. The recent synthesis of DNA by Dr. Arthur Kornberg was materially facilitated by the supply, in reagent quantities, of enzymes essential for the critical experiments.

Senator HILL. That was quite a step forward, wasn't it?

Dr. SHANNON. Indeed it was, sir.

### ANIMAL RESOURCES

The biomedical scientific community continues to require high quality laboratory animals with known characteristics. The Division of Research Facilities and Resources is meeting some of these needs through support of the national primate research center program and other animal resource programs.

The seven primate research centers now have their research programs well underway. The normal biology and diseases of many species of nonhuman primates are under investigation. These animal are used as the models most closely resembling the human primate for research in reproductive biology, mental retardation, growth and development, genetics, and the experimental counterparts of human disease.

In addition to primates in medical research, institutions require a large variety of species and strains of laboratory animals of high quality. The animal resources program of DRFR provides assistance to grantee institutions: to establish and maintain colonies of animals particularly essential for research, to conduct research in laboratory animal medicine, to improve the care and welfare of research animals in line with provisions of recent animal care legislation, to investigate new animal models germane to health problems, to operate training programs for the expansion of the pool of competent laboratory animal care experts.

### BUDGET REQUEST

To provide continuing support for these important programs, $67,415,000 is requested. This includes $35,677,000 for the clinical centers, $10,850,000 for the special research resources; $10,500,000 for the primate centers——

Dr. SHANNON. Seven of these were authorized to be distributed regionally, two in the Northwest, one in the New Orleans area, one in the Boston area, one in Wisconsin, and one in Atlanta.

### PRIMATE RESEARCH CENTERS

Senator COTTON. What do you mean by primate centers?

Dr. SHANNON. These are resources that permit a broad range of primates to be handled not only for the benefit of scientists at that institution but for the benefit of scientists as a whole.

It is too costly to provide complete primate resources in each of 90-odd medical schools and research institutions and hospitals.

Senator COTTON. You mean they are regional centers?

Dr. SHANNON. That is correct.

I believe they have been extraordinarily successful in doing the job they set out to do. We had great aspirations for these centers but when they were established, initially, they were established more on a skeleton basis than on a basis to satisfy their total need.

I think the time is long since passed——

Senator HILL. We put the money in for this purpose.

Dr. SHANNON. That is correct. This was to get them started, Senator Hill.

The task now is to develop them to their full potential. I would hope—looking forward 4 or 5 years, hopefully a period of time when restraints are less severe than they are now—that this program could go forward to give us very broadly developed national resources. To say that they are that now would be to overstate it. A good start has been made but much still remains to be done.

### RESEARCH IN DRUG MANUFACTURE

Senator COTTON. Is it the research that is done to determine the side effects, if that is the proper term, of all of these new drugs? Is that part of the research in these centers or is much of that done by the manufacturers of the drugs themselves?

What is the situation on that?

Dr. SHANNON. The primary responsibility for the conduct of that type of research is with the manufacturer of the drug, but I would like to mention a very special example.

As you know, there is increasing use of the so-called pill to control fertility, and there is also increased appreciation that this is not without some hazard. I suspect that the hazard of the pill is less than the hazard of pregnancy itself but nonetheless there are side effects.

### STUDY OF ANTIFERTILITY AGENTS ON PRIMATES

One of the very large pharmaceutical manufacturers has now completed negotiations with a university that runs one of these regional centers to use the primate center as the core around which additional resources would be developed for a joint program to study the influence of these antifertility agents on primate physiology.

This is highly desirable. This is something we fully favor and fully support. This is the first example of broad use by an industrial firm, at their own expense, of one of these national resources.

### Industry-University Cooperation Advantages

Senator Cotton, I think we have as much responsibility to provide basic support for the pharmaceutical industry to facilitate the advances that only they can make as we do to our universities. So, we welcome this type of collaboration providing it is on such terms and conditions as not to impair the fundamental mission of the university and providing also that the cost of the work is supported by industry.

They could not themselves develop the type of science environment that they can find within a university to conduct this type of activity.

Senator Cotton. It is also timesaving, is it not, because if you follow the procedure that the drug company conducts research and attempts to perfect a new pill, a wonder drug, or whatever the parlance is, they go through all of this research.

Then they make application to put the drug on the market. If the Government researchers' acquaintance with the subject starts then, in order to be safe, they have to review and then retrace the steps and conduct an independent research survey to find out if that particular drug is safe.

So, if the two participate to a degree in the initial production, it might mean that certain beneficial drugs would be available to the patient a month if not years earlier; is that correct?

Dr. Shannon. Senator Cotton, you are defining precisely the terms and conditions under which we operate the biologics control agency at the National Institutes of Health. This degree of cooperativeness has not evolved in the area of drug development—as contrasted to biologics development—and I can well understand the many reasons why not.

In recent years—particularly through the development of these clinical research facilities and the development of these primate centers—very broad national resources have been created that now permit a more rapid development of some of these medicinals by pharmaceutical houses to the advantage of the American public. It would be difficult for me to give you precise figures as to the numbers used for therapeutic trials for a large variety of drugs because they have become all-pervasive in the entire clinical community.

Insofar as true clinical investigation is concerned, in terms of the expansion of the number of people who are competent to study drugs, these centers greatly facilitate the development of drugs. I think we are just beginning the utilization of these resources for such purposes.

### Restrictive Patent Practices in Pharmaceutical Industry

Senator Cotton. We in the Congress are under constant crossfire and I suppose that this is one of the problems. X Drug Company is engaged in trying to produce a certain drug and the drug company, if it goes into the expense of producing the drug wants to benefit by it, which is within reason and a very legitimate wish. However, we then run into the situation brought to us by our esteemed colleague, Senator Long of Louisiana, and formerly by Estes Kefauver, that Congress is being called upon to say if Government scientists participate in any way in the researches that lead to the production of the drug, X Drug Company loses all its patent rights on it, so that the drug company resists that participation for fear they will lose the benefits of their particular toil.

Have you a brief comment on that because we are constantly under fire on that and it is hard for Congress to know just what to do.

Dr. SHANNON. Senator Cotton, I have much more than a brief comment on that. I testified before the McClellan committee 2 years ago on this problem. I think restrictive practices relative to the pharmaceutical industry, under concepts of overzealous acquisition of patent rights because of the incidental relationship of Federal programs to industrial activity, are not in the best interests of the American taxpayer. What I would be very glad to do at this point is to give you a copy of that presentation before Senator McClellan and, if it would suit the purpose of this committee at this point in time, it might be included in the record.

I feel very strongly about this issue. My view is that it is true that there are members of the pharmaceutical industry who have made unwise decisions. I don't think for this reason one should castigate the entire industry.

I think the more important point is that the pharmaceutical industry, within our type of economy, has made, and continues to make, tremendous contributions to the health of the Nation. I think it is the responsibility of Government to find ways and means of both strengthening that industry and making the broadest use of the industry that is possible within what one might call appropriate regulation—and this is a regulated industry—but not to undermine it, as an industry, to correct the defects, if indeed there are major defects there. I think the Government should be very broadly supportive of what is an essential activity in the health field.

I have very strong feelings and I may be thought prejudiced. I was in the pharmaceutical industry for 3 years from 1946 to 1949, Senator Cotton. I do not believe that experience has made me a captive of industry. I view myself as being a captive of the American people, and it is in this sense that I speak.

GOVERNMENT PATENT POLICY

Senator HILL. Will you supply such a statement and we will have it appear in full in the record at this point.

(The statement follows:)

Dr. SHANNON. Senator McClellan, and members of the committee, I appreciate the opportunity afforded by your invitation to appear before this committee and discuss the relationships of patent policies to NIH programs, especially as it concerns research financed by multiple sources or situations where additional private funds are necessary for the full development of an invention. At the outset, I would emphasize that the NIH as one of the Bureaus of the Public Health Service, is a component of the Department of Health, Education, and Welfare, and functions within the patent regulations set forth by the Department.

I understand that the Department's patent policies and its position on the legislation before this committee have already been presented. For this reason, I will limit my statements to the two areas of concern mentioned in your invitation.

I would first like to address myself to situations where additional private funds are necessary for the full development of an invention made under Federal support, since I believe the policy problems attending these situations are a major public concern.

Senator McClellan, I would like to say parenthetically that while I talk about drugs in this particular statement, this also would include biologics and the whole range of related materials, but for simplicity I will limit my specific comments to therapeutic agents.

The NIH supports research activities through grants, contracts, and within its own laboratories which may result in the discovery of potential therapeutic agents. Before one of these agents can reach the marketplace for public consumption, it must travel a long road, usually measured in years, from discovery to complete development. This road includes the actual discovery of the potential therapeutic agent, the preliminary screening to determine if the agent has possible therapeutic utility, different stages of animal testing, preliminary tests in humans, and, finally, full-scale clinical testing of the agent. The newly discovered agent may be a completely new chemical entity or an old chemical either of which is shown to be useful as a therapeutic. The developmental process in either case is governed by the Federal food and drug laws which require evidence of careful testing before the agent can be cleared for the market.

In most instances the NIH or its grantees do not participate in the full development of a therapeutic agent up to the point where it is made available commercially. We view our role in he Nation's medical research effort as complementary to the activties of the other elements within our society, both public and private, that also support research and development related to health. It seems to us that the interests of the American people are best served when the various elements of this medical research structure can interact. The most effective interrelationship results when the particular capabilities of the various elements, Federal and non-Federal, can be utilized to the fullest extent.

Generally speaking, the NIH scientist or grantee will be involved, if at all, at one of four points in the development process:

(*a*) NIH funds may be involved in the organic synthesis of a compound and perhaps in a portion of its screening in a biological system. We may participate in animal and clinical testing but will not usually, except in psychopharmacology and cancer chemotherapy, pursue this to a definitive conclusion.

More generally the chemist, given freedom of action, would approach the pharmaceutical industry which has extensive capability to undertake the entire development and testing process and is able to accumulate all the data from different stages of developemnt necessary for FDA acceptance.

(*b*) NIH funds may also be involved in support of research which involves the probing of biological mechanisms with chemical agents. Out of such investigation may well come new knowledge on novel uses for a compound, but in general such an investigator will rarely have the capability of followthrough as is the case with a wholly new therapeutic agent.

(*c*) NIH funds more recently support broad clinical investigation and such work has a heavy commitment to the assessment of therapeutic activity, either in absolute or comparative terms, of a number of chemical substances. Out of this type of work in the past has come wholly new therapeutic uses that have had broad impact on clinical medicine.

Without regard to NIH programs, I have in mind in this respect the discovery of the tranquilizing properties of reserpine when this drug was in use as a blood pressure lowering agent and the discovery of energizing properties of isoniazide when the drug was being explored as an antitubercular agent.

(*d*) Finally, NIH has, in the past, supported and/or participated in the extensive type of field trial which firmly establishes the net benefit to be derived from a given compound under well-defined clinical conditions, and will no doubt do so in the future.

The first three of these types of studies can be expected to yield patentable discoveries and consequently the rate of evolution to an effective therapeutic agent generally available to the public will be determined by the terms and conditions which facilitate the interplay of the resources of the Federal Government, the university scientists, and the pharmaceutical industry.

Although NIH support of an investigator may stop at an early stage of development or cover only a part of the complicated sequence of drug development, our departmental patent policy requires that his invention be reported to the Surgeon General for his disposition, that is, the Surgeon General's disposition, since the invention in most instances is complete within the definition of the U.S. Patent Office. The Surgeon General's disposition generally results in title to the Government in accordance with the provisions of the Department's regulations, the title provisions of the President's memorandum and the Executive order governing disposition of employee inventions.

The Uncertainties involved in after-the-fact determinations have created barriers for collaboration by the drug industry with NIH-supported scientists in bringing potential therapeutic agents to the point of practical application. The industrial firms want some guarantee of exclusive patent rights as compensation

for and protection of their possible investment, which may be considerable before FDA clearance can be obtained. Because, as I understand it, there is some question as to whether we can or should extend such a guarantee, it is often difficult to motivate industry to undertake the perfection and marketing of the NIH-supported inventions, and by an NIH-supported invention I have in mind those which were made under circumstances wherein a part or all of the support was derived from the National Institutes of Health.

We, of course, support the basic policy, that title to health and welfare inventions generated primarily with Federal support should reside in the Government. It does seem to us as persons responsible for the largest Federal medical research program that there does need to be clarification of the situation with regard to the issuance of licenses to inventions held by the Government. One possible solution might be the granting of short periods of exclusivity in such situations as I have discussed—that is, where it is found to be necessary to develop an invention to the point of practical application and there is no other way to obtain the needed industrial cooperation. Compounds which show some promise in early stages of investigation may be of no benefit to the public and may not serve the public interest unless clinical testing is undertaken and the resulting drug is cleared by the FDA and indeed marketed. We also believe that it seems sensible to be able to involve industry in the testing and marketing phases of drug development since these firms already possess capabilities in these areas that would have to be duplicated elsewhere to accomplish these necessary purposes.

The Department is in the process of reviewing its entire patent policy and practices that relate to this matter.

Passing on now to the second area on which you wish my comments, I would note that one of the common characteristics of scientific research activities performed in universities is receipt of joint and simultaneous support from Government and nonprofit organizations, and not infrequently from industry. In the biomedical sciences, the Government support is most frequently provided in the form of a grant from the NIH. Funds from these different sources of support are often commingled with the result that a given research project may be financed and dependent upon several different sources of income at the same time. Where the private sources of support impose no conditions upon their grant relating to inventions, the HEW regulations requirement that the NIH grantees report all their inventions to the Surgeon General for his disposition poses no technical problem. However, where, as in the case of the American Cancer Society and the American Heart Association, cosponsors maintain patent policies requiring their grantees to agree to assign all invention rights to them, the grantee who accepts support for the same research activity from both the NIH and such other sponsors has undertaken conflicting obligations he cannot fulfill. It is difficult to solve problems of conflict after the fact on the basis of priority as between the cosponsors. Neither is it a satisfactory solution to suggest that the grantee be limited to acceptance of support from only a single source which imposes such an obligation.

I believe it is in the public interest to encourage support of research from the private sector of our economy and to discourage exclusive reliance upon Government-financed support. In order to further this objective, it may be necessary to relieve universities and their research workers from the dilemma created by conflicting obligations to assign patent rights.

At the present time, it is my understanding that the patent regulations of our Department do not take into consideration the equities of cosponsors in making disposition of inventions arising from research financed by multiple sources, and the Surgeon General must make his determination solely on the basis of our support. As I have mentioned, I do understand that these regulations have been under review for some time with this matter being given consideration by the Department.

Thank you very much for this opportunity to appear before you. I would like to emphasize that I am obviously not a patent expert, but I would be glad to answer any questions from my perspective as the director of a large Federal research activity.

1968 APPROPRIATION AND 1969 BUDGET REQUEST

Dr. SHANNON. We digressed, Senator Hill, when we were talking about primate centers. I will pick up the reading of the statement with the amounts for the other programs contained in this appropriation.

Five million one hundred thousand dollars is for the animal re-

search resources and $530,000 for training and fellowship programs related to animal resources; $305,000 for scientific evaluation; and $4,453,000 for direct operations, including collaborative research and development through contracts of scientific communication and information on pharmacology-toxicology, and the administrative support for the health research facilities and general research support grants programs.

All of these requests are at the same level as in fiscal year 1968, except for a $5,234,000 increase primarily to meet the burgeoning hospitalization and personnel costs of the clinical centers program, a $12,000 increase to cover increased stipends in the training grants in laboratory animal medicine, and $163,000 increase for direct operations. I shall be happy at this point to answer any questions on this portion of the request.

### Budget Reductions

Senator Hill. How much did the Budget Bureau cut you on these items?

Dr. Shannon. There were substantial cuts, Senator. For the Division of Research Resources and Facilities, we requested $79,217,000. HEW requested of the Bureau of the Budget $67,821,000. The Bureau of the Budget allowed most of that—they allowed $67,458,000.

Senator Hill. How much did the reductions affect you?

Dr. Shannon. The reductions were fairly well distributed. The major reduction was in research grants and this primarily in terms of clinical center operations, as I recall.

### OUTPATIENT STUDY

We felt—and our initial budget request reflected this view—that the time had been reached when the general clinical centers should be extended to encompass outpatient study.

Senator Hill. It is more economical to have outpatient operations.

Dr. Shannon. One has to provide some separate center for them. I would hazard a guess that, in a period of 5 or 10 years, our most productive work will be in those diseases that require study on an outpatient basis rather than on an inpatient basis. We will move out of the hospital setting into a community-type clinic setting for the study of many diseases. Our proposals this year reflect that conviction.

### OFFICE OF INTERNATIONAL RESEARCH

This office has been the focal point in my office for the administration of the international activities of the National Institutes of Health with responsibility for policy formulation, program analysis, and coordination of activities including liaison with science offices at the State Department and the White House.

The programs of the Office of International Research include: support of five international centers for medical research and training: the international postdoctoral fellowship program; the international research career development program: the United States-Japan cooperative medical science program; and the special foreign currency program.

### Progress of Science Overseas

In addition, the Office of International Research maintains an awareness of the progress of science abroad through a small overseas staff stationed in Paris, Rio de Janeiro, Tokyo, and New Delhi.

Senator Hill. Where are these centers located?

Dr. Shannon. At the present time, in Lahore, West Pakistan; Huila, Colombia; San Jose, Costa Rica; Calcutta, India; and Kuala Lumpur in Malaysia.

These are run, respectively, by such prestigious universities as Johns Hopkins, University of California, the University of Maryland, the University of Tulane, the University of Louisiana.

### Training of Scientists

They provide an opportunity to study disease in an exotic setting and, more particularly, they provide for the training of young scientists in unique surroundings.

I would emphasize that, in past decades, as we increased our national commitments overseas, we found that we had preciously few well-trained people to satisfy the medical needs of those overseas commitments.

Senator Hill. Do you mean they are just not available?

Dr. Shannon. That is right and this is a small effort to supply a cadre of highly trained individuals.

Senator Hill. You do not have too many available at this time, do you?

Dr. Shannon. No, sir.

### 1968 Appropriation and 1969 Budget Request

The appropriation request for these activities in 1969 is $13,354,000, compared with an operating level of $12,430,000 for fiscal year 1968.

Senator Hill. How much did you request this year?

Dr. Shannon. We requested $17,948,000. The Department, agreeing with the importance of these programs, requested of the Bureau of the Budget $17,686,000. But when this was viewed against fiscal restraints imposed by the Bureau of the Budget, it was reduced to $13,954,000. I can't argue with the cut but I must admit that some things which are quite important will not be done.

### Reorganizing International Activities

With the establishment of the John E. Fogarty International Center, I am reorganizing the international activities of the National Institutes of Health. This will involve transfer of some functions to the the National Institute of Allergy and Infectious Diseases and will require some redistribution of funds and modification of the current budget.

This will be done within the funding levels indicated in this statement. I shall submit a proposal on this to the committee shortly. If there are any questions on this section I shall be happy to answer them now.

We are trying to move programs out of the Office of the Director of the NIH and into the institutes and the Fogarty Center whose activities will begin some time this summer.

DIVISION OF COMPUTER RESEARCH AND TECHNOLOGY

During the past year the Division of Computer Research and Technology achieved significant growth and a stable, reliable facility has emerged.

This is something we have been trying to achieve for some 4 or 5 years. I would like to take note of the fact that Dr. "Scotty" Pratt is the one who has been responsible for the evolution of a highly effective organization. The cost per unit job for computer service and mathematical consultation to NIH staff has been reduced by a third to a half and the number of jobs completed per unit time has risen by 7 to 10 times.

The individual and collaborative efforts of the DCRT scientific staff comprise a varied research program. Physical chemical data on the composition and primary structure of the biologically important molecules—the proteins and nucleic acids—are analyzed routinely using the computer. Our theoreticians have made significant progress in calculating the conformational structure—the three dimensional structure—of these molecules as a necessary step to understanding how these compounds act in living systems.

A rigorous mathematical basis for naming chemical compounds is being sought preliminary to attempting correlation of chemical structure with biological activity.

Clinical data are being evaluated mathematically as part of examining certain physiological properties of the hemodynamics of obstructive heart disease or the demonstration of right or left cerebral dominance on physiological function.

The statisticians are analyzing a vast array of clinical laboratory data to assist the clinical pathologists establish standards and deviations in normal and diseased subjects for a host of important clinical laboratory determinations.

During the past year, the mathematical, statistical and data processing needs for a number of epidemiological studies have been satisfied.

This record of activity during the year is not exhaustive, rather it is representative and shows the considerable progress made by the Division.

BUDGET REQUEST

In support of this program, an increase of $229,000 and seven positions is requested. I shall be happy to answer any questions on this portion of the report.

Before going on to engineering development, Senator Hill, I would like to point out that computers and science within about a 10-year period will probably constitute about 20 percent of the cost of all scientific research performed. This gives some indication of the extraordinarily rapid growth of the capability of these machines in facilitating research.

Such projects as the perinatal studies, some studies being performed in parallel with the heart-drug study, and broad epidemiological studies would not be possible were it not for the availability of these machines.

In addition to that, they permit a highly sophisticated analysis of the highly complex molecular structures.

ENGINEERING DEVELOPMENT

The potential contributions to health and medicine from advances in physical sciences and the application of the principles and practice of engineering sciences to biomedical research and health care give promise of spectacular advances.

These contributions can range from development of new, natural, and synthetic materials, sophisticated and miniaturized instrumentation, and electronic devices, to computer technology and systems analysis concepts.

A critical factor in major program expansion is the determination of when a field or a particular biomedical problem area has reached an optimal point for exploitation.

Developments such as the artificial heart, the artificial kidney, communications systems within particular social settings—for example, hospitals and regional medical programs—make imperative a centralized entity for the effective support and overall guidance of those derivative activities which can be profitably undertaken on a centralized engineering development basis.

The NIH, therefore, proposes to initiate action within the funds available to establish a small ongoing unit to provide this direction.

INTERPLAY OF ENGINEERING IN BIOLOGY AND MEDICINE

Last year, the NIH negotiated a contract with the National Academy of Engineering for a study of engineering in biology and medicine to assist in our further examination of the potential of this area. The Academy established a Committee on the Interplay of Engineering in Biology and Medicine to examine the future role of engineering concepts and technology in regard to—

Advancing the understanding of biological systems;

Developing research instrumentation, diagnostic and therapeutic devices, and artificial organs; and

Designing and developing large-scale systems encompassing major social functions such as health services as well as their subunits such as hospitals.

The Academy Committee is also examining the question of how to convert the ill-defined region which lies between engineering and medicine into recognized fields of activity and is now in the process of a detailed study of several institutional complexes involving bioengineering activities which can serve as prototypes for further development of the necessary organizational entities to further this important field.

BUDGET REQUEST

For the activities in engineering development, we are requesting $1,347,000, including $1 million to initiate contractual support in fields such as instrumentation and artificial internal organ replacement. If there are any questions on this activity, I shall be glad to answer them now.

Senator HILL. How much money did you ask for that purpose?

Dr. SHANNON. I think that is what we asked for, sir. This, Senator Hill, is really to start an activity. This will not fully exploit it and, as

in the past, we would actually prefer that this be started at a modest level until we get our feet wet.

Eventually, I think this should turn out to be a very important item worthy of broad support.

Senator HILL. But you feel you need to go more slowly and carefully at this time?

Dr. SHANNON. This is very complex, it involves the interplay of universities and industry and requires a very careful selection of the problems. I would prefer to go quite slowly and carefully on this.

### JOHN E. FOGARTY INTERNATIONAL CENTER FOR ADVANCED STUDY IN THE HEALTH SCIENCES

The Department of Health, Education, and Welfare appropriations bill for fiscal year 1968 included $500,000 in planning funds to construct the John E. Fogarty International Center for Advanced Study in the Health Sciences at the National Institutes of Health as a suitable memorial to the interest and contribution of the late Representative John E. Fogarty to the medical sciences generally and the programs particularly.

As you are well aware, the establishment of such a memorial was recommended to the Congress by Representative Melvin Laird, of Wisconsin, following Mr. Fogarty's death in January 1967.

### CONSTRUCTION PLANS AND RESTORATION OF STONE HOUSE

Present plans for the new construction authorized for the Fogarty International Center envision a complex of structures on the NIH campus in the proximity of Stone House which will be restored to serve as a base for the initiation of the Center.

Senator HILL. Stone House has been there for many years, has it not?

Dr. SHANNON. Yes; it has been used for conference space. We plan to restore it as it originally was. We think we can go forward with the renovation not later than the end of August this year.

Apart from the long-term utility of this building to the program, its early availablity will make it possible to institute a significant part of the Center's program during the fiscal years 1969 and 1970.

Plans for the new Center construction include conference facilities, living quarters for scholars in residence, guest-type rooms for visiting conference participants, food service facilities, lounges, and office space for the Center staff.

### INITIAL FUNCTIONS

The initial function of the Fogarty Center will be to create the environment and provide the means to assemble scholars and scientists capable of original thinking for advanced study of the development of science as it relates to health and its implications and applications for the future.

The interaction resulting from the assembly of outstanding people, working individually, in small groups, or in large conference settings, will, hopefully, yield new findings and concepts which may advance the solution of pressing health problems. A major focus of attention will be on the socioeconomic matrix within which contemporary biomedical science is imbedded. The substance of scientific research will

be dealt with both in its practical aspects and in its philosophical considerations.

### Comparable U.S. Centers

I might point out there are two comparable centers in the United States at the present time.

Senator Hill. Where are they?

Dr. Shannon. One emphasizes physical sciences and is at Princeton and the other, in a comparable setting at Stanford, concentrates on the behavioral sciences.

### Study of Entire Array of Scientific and Social Problems

We feel as we move increasingly into a technological society that there must be an opportunity to stand back and appraise where we are going and what are the consequences of some of the advances. We hope to create a center in which the entire array of scientific and social problems affecting medicine and health might be viewed, away from the operating level, by distinguished scholars not only from the United States but also from abroad.

### Plans for Well-Organized International Conference and Seminar Programs

The devolpment of a well-organized international conference and seminar program centered on the current status of the life sciences, as well as the facilities to house such a program, will be a primary aim of the Center. During the forthcoming year conference programs on such subjects as "The Science Base for Medical Education in the Future," "The Study of Disease in Controlled Populations," and the scientific, legal, and ethical issues of organ transplantation are contemplated.

### Scholars-in-Residence Program

A scholars-in-residence program is also planned for the Fogarty Center. These individuals would concentrate their attention on broad, major problems which have a bearing on the health of society. A major focus of attention will be the assessment of the state of the art and philosophical and social concepts relative to the thrust of science and its application for human well-being.

### International Fellowship and Exchange and Reception Program

Through an international fellowship and exchange program, the Fogarty Center would provide for a new senior scientist exchange program and the existing international postdoctoral fellowship program which will be transferred to the Fogarty Center from the Office of International Research.

The influx of vistors and the delegations from foreign countries has become a pressing problem for NIH and has created a crucial need for a reception center. The Fogarty Center will serve as the focal point for reception and guidance of scholars in residence, visiting scientists, and guests.

A well-developed reception program would allow us to gain the maximum benefit from foreign scientists visiting the NIH, while

at the same time acquainting them with U.S. scientific and cultural facilities.

### Budget Request

In order to initiate, on a modest scale, the new programs outlined above and to assemble the necessary staff to operate them, we are requesting $600,000 and 10 new positions in the President's budget for fiscal year 1969.

I shall be happy at this point to answer any questions on the Fogarty Center.

Senator Hill, I believe that this is what we requested. It is a modest program with a very modest beginning until we get more acquainted with the field.

Senator Hill. But considering everything, you think it is a good beginning?

Dr. Shannon. Yes, sir.

### BUDGET REQUEST FOR GENERAL RESEARCH AND SERVICES

In conclusion, Mr. Chairman, the request for "General Research and Services" for 1969 is $87,500,000 compared with an operating level of $79,335,000 in 1968. The total request combines those for the five elements of this appropriation as follows:

Division of Research Facilities and Resources: $67,415,000.
Office of International Research: $13,354,000.
Division of Computer Research and Technology: $4,784,000.
Engineering development: $1,347,000.
International center: $600,000.

### Reductions

Senator Hill. What is your overall reduction on these items?

Dr. Shannon. The original request to the Public Health Service was $104,487,000. It was reduced by the Public Health Service to $90,480,000, which was increased by the Department to $91,041,000. Then it was reduced by the Bureau of the Budget to $87,500,000—a reduction of $3,541,000 from the Department's request.

### EFFECTS OF REDUCTIONS

### Disease Study in Outpatient Department

Senator Hill. What is going to be the effect of this?

Dr. Shannon. With the programs we have here, there are only two areas that I am at all worried about. The first is that I think we should go forward with substantial sums for the study of disease in outpatient departments of the General Clincial Research Centers.

This would require substantial work but I think, looking toward the future, that it is very important.

### Animal Resources

Second, I am very much afraid, with the possibility of new animal legislation, that unless we can find some way of helping institutions to provide more adequate animal facilities, we may be in very deep trouble. Indeed, some scientific institutions may have to close.

We have tried in some very thoughtful comments on proposed animal legislation to indicate this need, to consider the consequences of animal legislation, to point out the purpose for which animals are being used, and to take a balanced view on what the consequences are.

Dr. Kennedy will talk about this in a moment when he will present a proposal for $8,600,000 for "Health research facilities construction." I can say that we are not going to produce many animal facilities with that.

The animal resource program also has a bottleneck in the lack of adequate personnel.

I think that any conscious investigator using experimental animals, quite apart from any other reasons, would feel that he cannot do good research unless, he has well-tended animals.

It is in the public interest that animals receive very good care. There are many areas throughout the country with very good science programs where the animal facilities are not adequate and where trained animal caretakers are so scarce that people are employed who do not have the competence.

I look on this as an impediment to science—quite apart from one's natural concern for the care of animals.

Senator HILL. You look at it as far as results in your biological research is concerned.

Dr. SHANNON. That is right.

Senator HILL. You have to have the right equipment to do the right job.

Senator Javits?

Senator JAVITS. I have two things I would like to ask you, Dr. Shannon. In the report of the committee on the last appropriation, August 1, 1967, there is the following paragraph:

EFFORTS TO ADVERTISE NIH TO AMERICAN PUBLIC

"At next year's hearings, the committee will expect to have positive evidence of a serious effort on the part of NIH and its component institutes to tell their story to the American people. The committee is convinced that every American will find the story well worth hearing."

Have you testified to that?

Dr. SHANNON. No, I have not, Senator Javits, but we have prepared a fairly extensive statement of precisely what we have done and on some of the consequences of the recent reorganization in helping us to tell the story.

SPECIAL REPORT ON NIH PUBLIC INFORMATION ACTIVITIES

I think that most of the points are covered in this special report on NIH public information activities.

What I would suggest, sir, if it is not presumptious of me, is that if you would wish to comment and ask questions after you have had a chance to look at this, I would be very glad to reply for the record.

Senator JAVITS. First, I ask unanimous consent that this may be included in the record.

Senator HILL. Yes, we will put it in the record in full.

Senator JAVITS. The other thing I would like to point out is that you are supposed to do this in such fashion "that every American will find it a story well worth hearing."

Can you conceive of every American reading this and asking you questions? The question I would like to ask you is: What are you going to do about popularizing this for the people who are spending a billion dollars a year for research in the Federal establishment and why is it worth the money to them?

(The information follows:)

SPECIAL REPORT: NIH PUBLIC INFORMATION ACTIVITIES

The report on this subject last year was primarily a description of the evolution of NIH public information activities and a summary of the special efforts made to emphasize better service to the media serving the general public. That report, as a result, tended to downplay the range, depth, and scope of information efforts carried on by the several Institutes and Divisions of NIH.

Our report this year describes progress in central management and the development of new and expanded mass media outlets for NIH information. It also relates to the approaches taken by each of the reporting Institutes and Divisions to inform the public of its activities.

OFFICE OF INFORMATION

The information arm of the Office of the Director, NIH, concerned itself in the past year with (1) emphasis on expanded services to news media, (2) development of over-all information objectives, and (3) realignment of functions in an effort to enhance the effectiveness of (1) and (2) above.

*Organization.* For the past several years, a two-unit entity titled the Office of Research Information functioned by means of a Public Information Section and Scientific Reports Section, and served primarily as a staff arm for coordinating and handling information activities that did not relate directly to an Institute or Division of NIH.

Drawkbacks resulting from this arrangement were—

the name, Office of Research Information, was a misnomer and attracted numerous inquiries from the scientific community for assistance or advice unrelated to the office's true function;

the tendency to allow impetus for straightforward public information activity to originate either from the Institutes or Divisions or more generally from outside (media) sources;

the creation of a false dichotomy between "public information" and "scientific reports," which resulted in a tendency to treat the functions of the Scientific Reports Section as internal and not for the public;

the screening from visibility of the three main avenues for providing information to the public: news, features, and publications;

the over-burdening of the assistant director of the office with dual responsibility: day-to-day operation of the Scientific Reports Section, and assisting the director.

To overcome these deficits the office was reorganized as the Office of Information and three distinct branches for news, features, and publications and reports were formed. The assistant director of the office has been given responsibility, among other duties, for program development and evaluation. A Chief of the Publications and Reports Branch has been recruited, and the re-distributed functions of the News and Features branches are being supervised by incumbent staff members.

*Objectives.* A review of NIH information activity for the past several years confirms that there has been a large number of projects through which information was provided to many publics, including the mass media. However, it is apparent that each of these activities has been conducted largely on an *ad hoc* basis, with little concern for the over-all purpose or objective. The specific information objectives of each Institute and Division are—and must be—unique in some respects and closely related to the mission of the Institute or Division. There are, however, certain general objectives that relate to all elements of NIH and provide the framework for goal-related planning of activities. For example, it is in the public interest to—

point up the importance of sustained support for health research activities

spotlight the beneficial results of NIH-sponsored research

identify NIH as an important national resource in the improvement of health, and

inform the general public of the processes by which tax funds are appropriated and utilized through NIH programs.

The past year has been marked by planned activity to knit the NIH information effort into a meaningful whole along the lines sketched above.

*Expanded Service to Media.* The News Service for Professional Journals—begun in 1961 on a limited scale and by 1967 extended to serve some 60 journals—has now been given expanded distribution to include non-professional news media, and has been renamed *News from NIH.* Total subscription list has grown since August, 1967, to 152, with a combined circulation figure in excess of 50 million, plus 82 newspapers served by six news syndicates.

Similarly, NIH Features—a service offered and widely used by professional journals and medical news publications around the world—has been expanded to include a wide array of photo and feature services for magazines and newspapers throughout the country. Special feature articles for magazines and photo features for wire services and feature syndicates are also prepared and distributed. New services for radio and television are being developed to supplement the regular monthly packets and recordings that go out to about 1,500 radio stations across the country. Special one-minute public service announcements about NIH publications, involving color slides and special copy for television, are in production. Short documentary films for TV are in the planning stage. A new program is introducing a new series of "Research for Health" columns in reproduction proof format to 2,500 weekly and small daily newspapers.

*NIH-Departmental Press Briefings.* A series of Departmental press briefings by NIH scientists began August 17, 1967, with a presentation on the establishment of a Lung Cancer Task Force. The series has continued on a once-a-month basis and has provided a forum for the discussion of topics such as NIH's artificial kidney program, biomedical engineering, the NIH primate research centers, and changing concepts of diabetes. These press briefings—designed to give greater visibility to NIH and its spokesmen—have been remarkably successful, as reflected in nationwide press coverage. We expect the educative impact of disclosing in this way the pervasive nature of NIH support of the important work underway in NIH laboratories will be cumulative. For this reason, the Departmental Press Briefings have continued into 1968.

A summary of the numbers of press release, publication, inquiry, and related information for all components of NIH in 1967 is attached.

Individual summaries of Institutes and Divisions receiving direct appropriations follow.

## NATIONAL CANCER INSTITUTE

The impact of cancer as the second leading cause of death in the United States gives rise to a growing public demand for information and guidance on the problems of malignant disease and the research effort to bring them under control. The demand is met by the National Cancer Institute's Research Information Branch with information on all lines of scientific study for dissemination through the news media and directly to individuals and special interest groups. The Chief of the Branch advises the Director and staff on all aspects of public interest in the Institute's research and related programs.

The possibility of preventing certain forms of cancer through recognition and control of causative factors, and advances in treatment gained largely through improved drug therapy currently hold the center of public attention. The directions given research in these two main areas are described, and the results of investigations are interpreted and reported in a continuous effort to improve public understanding of the whole cancer problem and the progress of research.

*Smoking and cancer*

Lung cancer, which will cause 55,000 deaths in 1968, is related to cigarette smoking and is therefore considered a preventable disease. Two lines of attack on the problem are emphasized: 1) public education on the hazards of smoking, and 2) scientific inquiry into the possibility of producing a less hazardous cigarette. The Research Information Branch began planning a public education program on the scientific aspects of smoking and cancer when the Institute was urged by the National Advisory Cancer Council to undertake it. This will be coordinated with related activities of the Public Health Service's National Clearing House for Smoking and Health, and Cancer Control Program, through a committee of which the Chief of the Research Information Branch is chairman. It will also be coordinated with related activities of voluntary health agencies.

The Branch arranged a news conference at which the appointment of a Lung Cancer Task Force as directed by the President was announced. The Task Force chariman, Dr. Kenneth M. Endicott, Director of the National Cancer Institute, described the group's initial plans for research on a less hazardous cigarette and other aspects of the lung cancer problem to representatives of the printed and broadcast media. This led to arrangements by the Research Information Branch for several subsequent interviews with Dr. Endicott for articles and broadcasts. Gene Bylinsky developed a comprehensive article, *The Search for a Safer Cigarette*, for *Fortune*, and Louis Hutchinson did an article for the *Chicago Tribune*. Arrangements were made for station WAVE–TV, Lousville, Kentucky, to interview Dr. Endicott for a program that included statements by Surgeon General William H. Stewart and others.

A resolution adopted by the National Advisory Cancer Council calling for cooperation by health agencies in support of the Federal Communication Commission's fairness ruling on cigarettee advertising was given wide publicity through a news release prepared by the Branch.

*Leukemia and virus cancer research*

Continued improvement in drug treatment of leukemia patients and the outlook for identification of a viral cause of the disease were emphasized in public information activities. The Research Information Branch helped staff the news room at a scientific meeting on clinical aspects of acute leukemia and Burkitt's tumor in Boston, where several effective news stories on research accomplishments by National Cancer Institute investigators and others were generated. The meeting was covered by *Time*, *Business Week*, the *Washington Post*, *Journal of the American Medical Association*, *Medical World News*, and *Antibiotic News*. The Branch also assisted a writer for the *Saturday Evening Post* in developing an article on acute leukemia therapy. A news release announcing the growth, for the first time, of blood cells from a chronic myelogenous leukemia patient in long-term culture brought follow-up inquiries to the Brnach from a variety of publications including the *Journal of the American Medical Association*, *Philadelphia Inquirer*, *Washington Post*, *Science Service*, and *Chemical and Engineering News*. With assistance from the Branch staff, a writer from the French National Radio-Television Station prepared a program on the work of the Institute's Viral Leukemia and Lymphoma Branch, for broadcast in France.

*Other information and education activities*

The Research Information Branch produced and arranged for distribution of *Progress Against Cancer 1967*, the second public report of the National Advisory Cancer Council. The 65-page illustrated booklet is in two parts, *Research and Prevention and Control* and *Research on Viruses and Cancer*. More than 350,000 copies were distributed to health officers, national organizations, medical and dental students, and members of the American Medical Association.

The Branch arranged a contract with National Educational Television for the production of a two-part program on cancer chemotherapy research. The color films, each running 30 minutes, were scheduled for broadcast beginning in early 1968 on the 133-station nationwide NET network, to an estimated 18,000,000 viewers. Entitled *Drugs Against Cancer* (Part I—*The Search:* Part II—*The Battle in the Cell*), the films will also be available for loan by NCI and NET to schools and interested groups.

The Branch completed distribution of a group of science teaching aids produced in collaboration with the National Science Teachers Association. Approximately 25,000 sets were mailed to high school science teachers and supervisors throughout the United States. Included were a paperback book, *Science and Cancer*, by Michael B. Shimkin, M.D., formerly of NCI and now with Temple University School of Medicine; *The Cancer Story*, a simplified version of Dr. Shimkin's book; a teaching guide prepared by a faculty committee of Kansas State Teachers College: two film strips, and a portfolio of pictures.

Turning again to radio in 1967 to emphasize the importance of cancer research, the Research Information Branch distributed a series of 5-minute programs, *Countdown Against Cancer*, to 250 commercial stations across the nation. The 26 segments of the series, reproduced on 12-inch records, were excerpted from *Reserach Report*, an earlier series of half-hour programs produced for educational and commercial stations.

The Research Information Branch assisted a *New York Times* writer in preparing a story on projections of cancer rates and risks for the remainder of this century. The *Times* story served as an impetus to writers from other media who

also prepared articles on the subject. Gene Bylinsky followed his smoking article in *Fortune* with a second piece on the more general aspects of cancer, with assistance from the information staff, who also collaborated with a *Reader's Digest* reporter preparing a story on comparative breast cancer incidence.

For the CBS television program, *The 21st Century*, the Research Information Branch provided material on the viral causation of cancer in animals and methods of treating human cancer, for use in several broadcasts. Two Institute-supported films—on blood-platelet transfusion and the blood-cell separator—were made available to CBS.

As in former years, Research Information Branch staff members took charge of the news room at the annual meeting of the American Association for Cancer Research, at the request of the Association. Many interpretive reports for the general public on developments in cancer come out of these annual meetings, and last year was no exception. Another noteworthy meeting for which the Branch supplied news room management was that of the Society for Cryobiology. Stories of this gathering were carried by the *Washington Star*, *Washington Post*, *New York Times* and *Wall Street Journal*. At the Institute-sponsored Combined Clinical Staff Conference, *Hodgkin's Disease: Can It Be Cured?* information staff members made arrangements for news coverage by the *New York Times* and a large segment of the medical press.

Assisted by information staff, the *Cleveland Plain Dealer* published a three-installment series (two segments on page one) on the search for cancer drugs. In this same area, a Hearst newspaper reporter prepared an article on the search for cancer drugs in undersea plant life, based on an Institute news release. Publication of the Institute's public information pamphlet, *Drugs vs. Cancer*, gave rise to a number of news stories about cancer drugs and requests for further information from newspapers, wire services, radio-TV networks and magazines.

*Future Activities*

Heightened public interest in the smoking and cancer problem, in other aspects of cancer prevention, and in early detection and treatment will produce a continued demand from the news media and others for interpretive information on research progress. The Research Information Branch has in preparation the third public report for the National Advisory Cancer Council—*Progress Against Cancer 1968*—which will deal mainly with the rapidly moving field of drug research. Research programs developed by the Lung Cancer Task Force will be reported as authorized, and the results of studies will be made available to the public as significant stages of investigation are reached. The information will be prepared by the Research Information Branch in forms suitable for dissemination as a public education effort designed to bring to public attention the state of scientific knowledge on the effects of smoking and the prospects for reducing the lung cancer toll with public cooperation.

Continued efforts will be made by the Branch to keep the public informed on progress in all areas of cancer research, both fundamental and clinical, with special emphasis on virus-cancer and drug research. All public media will be utilized, and areas of research needing special interpretation will be treated in reports and publications designed to answer public inquiries.

NATIONAL HEART INSTITUTE

The information activities of the Heart Information Center (HIC) are closely tied to the needs, activities, and goals of the various research and training programs of the Institute. An effective information program can aid materially in the achievement of Institute goals by—

creating heightened public awareness of the immensity of the cardiovascular disease problem.

promoting public understanding of the National Heart Institute and enlisting public support for research and training programs directed toward solution of this disease problem.

disseminating to the general public and to the health professions new knowledge arising from research programs carried out or supported by the Institute.

publicizing and promoting new programs to generate interest and encourage participation by members of the scientific community.

HIC activities in pursuit of these goals can be grouped conveniently under the following headings: 1) publications, 2) press and media services, 3) internal reporting, 4) exhibits, 5) correspondence and 6) information retrieval. Currently, activities under each heading are being reviewed in an effort to improve efficiency

and, where possible, to expand the output of useful information. This report will summarize activities in each of these areas during 1967 and briefly discuss plans for the near future.

*Publications.* Because it is our belief that a strong publications program is perhaps the most effective means of reaching large audiences, this area received heavy emphasis during 1967. A new section was established for the specific purpose of producing, promoting, and distributing publications and related informational materials issued by HIC.

During 1967, 286,768 copies of HIC publications were distributed, a 20% increase over the previous high established in 1966. Individual requests and exhibit distribution have accounted for most of this business; but, as a result of promotional mailings to educational and health group associations, there has been a substantial increase in bulk mailings, with their attendant advantages of speed and reduced costs. Promotional mailings, containing sample copies of HIC publications and offering new publications as they are issued, have resulted in the creation of new mailing keys; and, to cite only one recent example, led to a request for more than 2,000 copies of a single publication for distribution to employees of just two companies.

New publications issued during 1967:

Artificial Parts for the Heart and Blood Vessels, a 28-page publication describing the evolution of cardiovascular prostheses from the earliest blood-vessel and heart-valve replacements to artificial heart prototypes, has moved very well with exhibits and has been especially popular with high-school science students.

The Coronary Drug Project, a 12-page illustrated brochure describing the nationwide NHI-supported study of lipid-lowering drugs, was produced as part of a campaign to secure physician cooperation and to assist in the recruitment of patients. It was mailed to 50,000 physicians practicing in project clinic areas and will be used with an exhibit on the project now under construction.

Epidemiology of Stroke, was prepared for use with an exhibit of the same title that describes the findings of the NHI Framingham Study with respect to factors increasing risk of stroke. It has also proved useful as a general publication. The American Heart Association requested 3,000 copies for use with one of their information kits and Ayerst Laboratories requested 750 for distribution to their medical staff and field representatives.

Two other publications were prepared in 1967. Both are currently in press and will be extensively promoted and distributed during 1968:

Cardiovascular Surgery, probably the most complete lay publication on the subject, discusses and illustrates surgical treatment of a wide variety of cardiovascular disorders, including congenital defects, rheumatic heart disease, coronary heart disease, stroke, and renal hypertension. Also covered are pacemakers, heart-assist devices, and artificial hearts.

Hypertension will cover mechanisms of blood pressure control, hypotheses of causation, diagnosis, and current methods of medical management of this disease.

Currently in preparation is a brochure providing a general description of the National Heart Institute, its history, and its present research and training programs.

The HIC publications program will be continuously reviewed in the future with the goal of phasing out these that have outlived their usefulness, revising and updating others, and creating new publications to broaden the coverage of NHI research and training activities.

*Press and Media.* During 1967, HIC issued a total of 67 press releases dealing with such topics as research accomplishments of NHI scientists and grantees, research grant and contract awards, staff appointments and honors, and new programs. Media interest in NHI programs was generally high during 1967, particularly with respect to the newly established Artificial Heart-Myocardial Infarction Program and the National Blood Resource Program.

Appointment of a new Press Officer and other organizational changes more than doubled the press output over the preceding year, but it also pointed up several basic weaknesses: 1) Preoccupation with research conducted in Bethesda to the near exclusion of the much larger extramural research and training programs. 2) A passive information posture, in which press materials were generated primarily in response to inquiries or pressures from outside HIC. 3) Excessive reliance on routine press and science-writer channels while giving but token effort to the audio-visual media.

Initial steps were taken during 1967 to correct these inadequacies. Several joint releases coordinated with grantee institutions were issued and closer ties were initiated between HIC and public information officers at grantee institutions. HIC became more aggressive in seeking out and publicizing NHI accomplishments and program developments. Greater use was made of the NIH features branch and other available, but previously untapped means of information dissemination.

Because TV and other audio-visual media have begun to challenge newspapers, magazines and semi-professional journals as the source of most people's information and ideas, plans have been made for use of a "treatment concept" in dealing with non-printed media. By this method, information and pictures would be collected, together with background reprints or historical references, and presented as a prospectus package to TV, radio, or film news editors in order to interest them in developing their own personnel and equipment. In addition to its value to non-printed media, the prospectus package could serve as the basis for development of exhibits, publications, and more traditional press services.

*Internal Reporting.* During 1967, HIC prepared 110 reports intended primarily for use within NIH, PHS, and DHEW. These ranged from routine information reports through items on research findings published by NHI scientists and grantees to special reports and supporting materials for use in conjunction with appropriations hearings.

Though many of these reports are routine, some provided excellent grist for the press release or publications mills. Currently, the Internal Reporting Unit is being reorganized and its staff increased in order to augment their research reporting activities and to increase the coordination of their efforts with those of the press and publication units. In this way, we hope to make fuller and more effective use of "routine" reports that contain information of more-than-routine interest or news value.

*Exhibits.* During 1967, HIC displayed exhibits at 9 medical and scientific meetings. Exhibits presently provide our best direct access to professionals in the health fields. They are also excellent vehicles for displaying and distributing publications and related information materials. More than half the publications distributed by HIC during 1967 were moved as a direct result of the exhibits program.

Four exhibits are currently in circulation. Epidemiology of Stroke, an exhibit displaying findings of the NHI Framingham Study, was shown for the first time in 1967. It is one of two audience-participation exhibits on Framingham that have proved extremely popular. Members of the audience may have their ECG taken and analyzed by a cardiologist, their blood pressure and vital capacity determined, and other simple tests performed, the results of which may be indicative of relative risk of coronary heart disease or cerebrovascular disease. For the past two years, the audience-participation exhibit on coronary heart disease has been used at the American Medical Association Scientific Meeting as part of a health-screening program for physicians.

Presently under construction is an exhibit on the Coronary Drug Project that will be widely used this year and next to promote professional interest in the Project and to assist in the recruitment of patients. This exhibit, closely keyed to the needs and goals of an important NHI program, sets a precedent that we hope to continue in the design and employment of all future exhibits.

*Correspondence.* Of the more than 26,000 public inquiries received by HIC during 1967, the great majority were requests for specific publications or other readily available information that could be easily and quickly handled. However, some of this requested information was not easily come by or else required considerable delicacy or tact in framing a suitable reply. We attempt to answer such letters promptly and to provide the specific information requested, even though this often requires considerable staff time. We assign the difficult ones to highly qualified personnel. As a result, our best science writers spend a lot of time answering letters; but we believe that this time and effort is justified.

*Information Resources.* Information concerning heart disease is the commodity in which the Heart Information Center deals. Hence an activity basic to the operation of the Center is the systematic development of information resources relating to the cardiovascular field. Essential stores of data and documents must be at hand from which to draw facts for the substantive content of informational products and services. Whatever the medium used for disseminating heart information—pamphlet, report, press release, film, speech, exhibit, script, letter—authentic and adequate subject matter is the required ingredient.

The Heart Information Center collects, organizes, stores, retrieves, and makes available basic elements of information in three main categories: (1) on the various aspects of the National Heart Institute and its programs, (2) on the results and contributions of the Institute's programs to progress in the cardiovascular field, and (3) on the existing and developing knowledge of the heart and circulatory system and the diseases that affect them.

During the past year, acquisition of materials in all categories was continued and expanded. These resources provided information to the Center's staff and to other branches of the Institute, not only for program organizational, legislative, biographical, and other types of data, but for historical applications such as the *National Institutes of Health Almanac*.

Documentation of research conducted and supported by the National Heart Institute provided basic elements essential for research reporting and other functions of the Center. An estimated 4,200 NHI-credited scientific papers and abstracts were documented through regular screening of approximately 400 journals. Reprints of most were quickly obtained and added to the Center's research reference materials, which now number more than 40,000 items. This information was provided the staff of the Center for informational uses and to other parts of the Institute for other purposes, particularly the Analysis and Reports Section of Extramural Programs and the Epidemiology and Biometry Program.

Cardiovascular reference materials, comprised of index volumes, texts, reports, journals, and source files of selected items on subjects of special interest, were broadened. Frequently consulted, these materials provided ready access to subject matter needed for a variety of informational purposes.

Demands made on the information resources activity have increased. During the coming year, enlargement and improvement of resources will continue. More comprehensive coverage and services, including incorporation of technological developments, will be evolved as space, equipment, and staffing permits, and as informational program requirements are further defined.

*Conclusion.* In terms of publications distributed, press releases issued, public inquires handled, and other measures of informational activity, 1967 was a good year for HIC. But we still have far to go toward full compliance with the directives set forth for the Heart Information Center by the Congress as part of the National Heart Act.

It was also a year of reorganization aimed at increasing our output of useful information and at providing opportunities for continued development of the information staff. Reorganization has been gradual and is not yet complete. Its primary focus has been the improvement of present information programs rather than the creation of new ones and on continued staff development rather than staff expansion. We are working toward a nucleus of well-executed information programs and highly qualified, properly placed people that will make possible both the continued growth of on-going programs and orderly expansion into heretofore neglected areas. A year from now, even two years from now, we may not yet be accomplishing all the tasks that Congress set for us in 1948, but we fully intend to be doing more of them than we're doing now—and doing them better.

### NATIONAL INSTITUTE OF ALLERGY AND INFECTIOUS DISEASES

The Information Office of this Institute has set for itself the goal of changing the public's complacent attitude toward allergic and infectious diseases. Today, many people minimize the potential threats of infectious diseases, claiming that they are not much of a problem. Going into this line of reasoning are such thoughts as: We have licked polio. There are plenty of drugs to treat tuberculosis. Diphtheria and smallpox are diseases of the past and ordinary measles soon may be. Science is working on the chronic diseases and we usually recover from the acute ones, so why be concerned.

This complacent attitude on the part of the American public—both layman and scientist—is frequently encountered by the Institute's Information staff. But the facts do not always lead to such optimism. Acute diseases do kill. Antibiotic drugs do not always work against bacterial diseases. Allergic reactions and viral organisms are prime suspects in the research attack on such chronic diseases as bronchitis and emphysema. And evidence is mounting that viruses may actually trigger such diseases as cancer and multiple sclerosis.

The Information Office staff is attempting to supplant the attitude of indifference with one of awareness of current research accomplishments and the need for

increased research efforts. This objective entails a broad multi-media approach: establishing credibility with mass media representatives by prompt, accurate responses to inquiries; providing clearly written explanations of research programs and progress; making personal contacts at the local level; and alerting the medical-scientific community to advances in basic and clinical research.

*Sessions for the Press*

In an effort to keep representatives of the mass media up to date on the expanding knowledge emanating from NIH, this Institute participated in two highly successful projects in 1967. One involved cosponsorship of a Science Writers' Seminar in Transplantation at Duke University in February. The seminar covered reports on recent developments in organ transplantation (particularly kidney transplants), tissue typing techniques, plans and needs for organ preservation and storage methods, as well as discussions on the psychiatric, moral, and ethical aspects of transplantation. The results were nearly 5,100 column inches of copy in print in publications with a combined circulation of more than 43,000,000.

The other highly successful information project was the DHEW press briefing by Dr. Robert J. Huebner, Institute virologist and world authority on virus-cancer relationships. Augmenting Dr. Huebner's skill in describing his theories and research project was an Information Office press kit which included background information on current knowledge of tumor-causing viruses in animals, a statement on NIH cancer research activities and recent press releases relating to the work under discussion. The briefing rated television mention on the NBC Huntley-Brinkley report plus segments on local television and radio. A survey revealed that coverage by local and national press produced 165 newspaper clippings from 42 states and the District of Columbia.

*Television Tie-in With Basic Research*

The task of gaining and maintaining the interest of the American citizen in basic scientific research—which to the uninitiated may appear to have little relationship to his everyday health problems—is a challenging one. The Information Office attempts to accomplish this by establishing a close working relationship not only with science writers but also with television newsmen. When reports were released that some 10,000 cases of malaria had developed in American military forces in Southeast Asia, it was a particularly appropriate time for a television interview with an Institute malariologist who described the basic problems and outlined the path the government was taking in seeking effective prevention of the disease.

Also, when heart transplant operations in South Africa and the United States became front-page news, this Institute was able to provide written background material and television and radio interviewees who could describe fundamental research on auto-immunity and tissue rejection and could explain the tissue-typing program on which this Institute is placing special emphasis.

*New Fact Sheet Series*

This office has had considerable success in providing information in the form of fact sheets, some updated just prior to periods of high disease prevalence. These inexpensively-produced fact sheets have proved invaluable in responding to inquiries from the general public and news reporters on such topics as the common cold, rabies, infections mononucleosis, and infectious hepatitis. The value of this material was apparent when a recent rabies scare in metropolitan Washington, D.C., occurred within days after completion of the related fact sheet.

*Community-Level Approach*

In its community-level approach, the Information Office played an active part in the production of a motion picture, "The Miraculous Pool". Depicting the activities of the NIH and this Institute's virus disease research including vaccine development, the film was produced by a private foundation at no cost to the government. The Institute contracted for 100 prints and film distribution; and by April 1968, more than 200 showings had been booked on television stations from Alaska to Texas and from New York to California. The film also will be available for showings to civic and professional groups throughout the Nation.

Unrelated to this Institute's usual functions—but important in the relationship of NIH to its community neighbors—was the Institute's responsibility for the Combined Federal Campaign efforts at the NIH in 1967. The Information Office planned all aspects of publicity (campaign motif, letters, feature stories, billboards, posters, tent cards and weekly reports) in a $175,000 one-month campaign.

The results: 86 of every 100 NIH employees contributed and the NIH reached 84% of its goal, a 4% goal increase over the previous year.

*The scientific community*

The Institute is acutely aware of the need to alert the scientific community to research developments within its purview. Last fall, this office outlined an information campaign to encourage physicians from nearby colleges to participate in a research study on infectious mononucleosis.

Recently, this office provided editorial direction in the preparation of three major reference catalogs on tissue typing sera, arboviruses and research reference reagents. These catalogs, to be issued in 1968, will list the Institute's biological materials which are available to scientists throughout the world and should contribute immeasurably to research data standardization.

An Information Office exhibit, commemorating 80 years of microbiological research, was shown at several scientific meetings last year, and was also displayed in the American Chemical Society headquarters. A new exhibit on transplantation immunology is being designed for viewing at scientific meetings and will be accompanied by a new publication on kidney transplantation research.

*Future*

The Information Office plans to implement its objectives during the coming year with: sponsorship of a second science writer's seminar; additional fact sheets on subjects of current research emphasis; increased attention to motion picture, television and radio activities; and development of closer working relationships with public information contracts at grantee and contractor institutions.

NATIONAL INSTITUTE OF ARTHRITIS AND METABOLIC DISEASES

The Institute is aware that the communication of new knowledge to the public is a vital ingredient making for the success of the Institute's overall programs. It therefore expects its Information Office to convey to the public the latest Institute research findings, as well as an appreciation of the meticulous and frustrating character of the basic research the Institute conducts and supports.

The Information Office is expected to answer specific questions concerning any facet of the Institute program at any time and to fulfill the Institute's responsibility to report to the public through the press and other media.

Both the scope and depth of the Institute's categorical research programs have increased rapidly in recent years, and reporting on all of these varied and complex activities makes heavy demands on the information staff. Accompanying this growth has been an increase in the number of internal reports required of this Institute by the Congress and all levels of the Department.

The National Institute of Arthritis and Metabolic Diseases (NIAMD) information worker has assumed the role of all-around "ombudsman". Briefly, for the public and press, he responds to inquiries and prepares and disseminates information; for the Director, other staff members and Institute scientists, he prepares material such as speeches, popular articles and exhibits, clears publications, attends conferences, and meets visitors, among other responsibilities; and for Congress, the DHEW, PHS, and the NIH, he is the contract for reports and information.

*Activities*

Several press releases this past year were conceived and prepared by the Information Office to inform various publics about the Institute's new Artificial Kidney Program. Among these were the announcement of a new quarterly current awareness publication, *Artificial Kidney Bibliography*, and of the awarding of new contracts to a variety of academic institutions and industrial organizations in connection with the Artificial Kidney Program; and Institute sponsorship of a two-day salicylate conference at the New York Medical College.

Several news releases were played up significantly in the various news media: the discovery of an enzyme defect in Lesch-Nyhan disease by NIAMD scientists; the finding of a previously unrecognized sulfit oxidase deficiency disease by Institute scientists; results of two studies by NIAMD scientists among the Pima Indians of Arizona which revealed that the effects of childbearing do not account for a higher prevalence of diabetes among women, as previously believed, and that the prevalence of gallbladder disease is higher among the Pimas than it is among Caucasians; and the awarding of a new contract to the National Pituitary Agency, which was used by the press as

a news peg on which to hang a review of progress in human growth hormone research.

NIAMD *Research for Health* columns, research-oriented press releases aimed at many small newspapers throughout the United States, covered such diverse subjects as burn shock, psoriasis, insulin action, hemophilia, and ulcerative colitis.

Excellent public relations were maintained with such organizations as the Arthritis Foundation, The National Cystic Fibrosis Research Foundation (NCFRF), the American Gastroenterological Association, and the Federation of American Societies for Experimental Biology (FASEB). Information personnel assisted in obtaining motion pictures at the Clinical Center for a NIAMD-NCFRF cystic fibrosis teaching film; staffed a press room for a gastroenterological conference co-sponsored and hosted by the Institute, and prepared nontechnical abstracts on papers to be read by NIAMD scientists at the FASEB's 51st annual meeting, which were subsequently distributed to news media representatives covering the meeting.

In the publications field, this past year saw such publications and fact sheets as *Psoriasis, Facts About Hypoglycemia,* and *Systemic Lupus Erythematosus.* Publications which were revised included *Facts About Nutrition* and *Facts About Cystic Fibrosis,* among others.

Answering public inquiries, both by telephone and letter, is a major function of the Information Office, and is perhaps the best method of being of service to individuals, while simultaneously disseminating information about the NIAMD and its programs.

The Information Officer's major effort in the field of professional education is the scientific exhibits program. This past year the Institute, one of the most active in the exhibit area, completed another strong exhibit schedule, showing 20 per cent of all NIH exhibits presented in 1967. Seven different scientific exhibits, which were viewed by about 100,000 physicians, scientists, and paramedical personnel, were shown by NIAMD at 13 medical and scientific meetings throughout the country. Institute exhibits on human growth hormone, gout, artificial kidneys, current awareness publications, and on an epidemiological study of arthritis among the Pima Indians constituted the bulk of the ones shown.

A new NIAMD exhibit entitled "Current-Awareness Publications" made its debut at the November 1967 meeting of the Southern Medical Association. This exhibit is aimed at informing scientific investigators about four significant current-awareness publications, regularly published by the Scientific Communications Office and available to scientists upon request.

*Outlook*

With the addition of two new writers, it is expected that considerably more news releases and more opportunities to provide newsman-scientist interviews will be forthcoming during the coming year than during the past one. The new additions will also enable the Information Office to respond more fully and rapidly to public inquiries, as well as to initiate new projects such as nontechnical films, public speaking engagements, and exhibits for the lay public. A priority goal for the Information Office will be a wide-ranging information program to be carried out through all possible communication media in order to reach the citizen taxpayer. For the scientific public, an exhibit will be built on the newly-recognized Lesch-Nyhan syndrome, and the existing cystic fibrosis exhibit will be revised to include new findings. The extent of public information activities, however, will depend significantly on the internal reporting workload.

### NATIONAL INSTITUTE OF CHILD HEALTH AND HUMAN DEVELOPMENT

The Institute, established only a little over five years ago to stimulate, support, and develop research into the nature of human development, ultimately aims to promote a nation of well-born individuals who will be able to achieve and maintain the optimum in physical, intellectual, and social health throughout continuingly productive lives.

The challenge posed by the scope of this mission is reflected in the Institute's public information activities. These are concerned, on the one hand, with such intimate and sensitive areas of human life as conception, contraception, and birth and, on the other hand, with such broad issues of national policy as infant mortality, population dynamics, nutrition and intellectual development, and learning.

The life of every person in the Nation, at some time, is touched by the results

of research supported by the Institute. Because, however, the Institute is working with goals, concepts, and research problems that are relatively new and unexplored even within the scientific and medical communities, the first goal of the Institute's information activities has been to make its approach and its programs known to these communities.

Its public information activities have been firmly tied into its communications with scientific and medical groups.

Thus, for the past three years, the Institute has managed the press activities for the annual meetings of the American Pediatric Society and the Society for Pediatric Research. It has also contributed staff support to the American Academy of Pediatrics for press activities connected with its annual and clinical meetings, and represented the Institute in the press rooms and exhibit halls of the following scientific and medical organizations: The American Medical Association, the American Association for the Advancement of Science, the Federation of American Societies for Experimental Biology, the American College of Obstetrics and Gynecology, the American Sociological Association, the American Psychological Association, and the International Congress of Genetics.

The Institute's goal of decreasing the Nation's infant mortality stimulated the development of an exhibit depicting various research approaches to the clinical problems associated with infant mortality, and the publication of conference reports on the sudden infant death syndrome, and neonatal respiratory distress.

The Institute's primary interest in reproductive biology has resulted in the development of a film guide on early developmental biology to be used in teaching and research settings. Availability of this guide led to the cooperation of the Institute with the ABC–TV hour-long show on "How Life Begins." The Institute's portfolio of research grants on problems of learning in early childhood led Institute-supported grantees to make major contributions to CBS' two-hour-long television show on learning, "From the Cradle to the Classroom."

Because the Institute is continuing to grow at a fairly rapid rate and the public is becoming more aware of and involved in the developmental problems with which the Institute is concerned, the Information activities of the Institute will increase greatly in the next two or three years to provide information flowing from its research programs: how married couples can plan their families safely, how women can bear healthy children, how children can grow into productive adults free from developmental defects, how adult life—from early maturity through late maturity—can be satisfying to the individual, and sustaining to society.

### NATIONAL INSTITUTE OF DENTAL RESEARCH

The public's obsolete view of the dentist as an artisan-technician not only plagues dentistry but also rubs off on dental research. A major responsibility of the information office of the Dental Institute is to change this image. A changed attitude would not only invite more productive study of the oral disorders but would also create a greater public sensitivity to their importance and the need for preventive measures. By substituting a hope born of knowledge for current attitudes of indifference, apathy, and outright fatalism about tooth loss, we can greatly raise the level of oral health of the Nation.

Dental research is exceedingly diversified, current Institute-supported studies embracing over 30 basic science disciplines. Reporting of research reflecting such a broad base of science helps to erode the common misconception of the narrowness of this field. Every opportunity is therefore vigorously sought to tell the story to the general public, the practicing dentist, dental educators, and the scientific community.

In vying for media attention, dental diseases patently are at a competitive disadvantage against such dramatic problems as heart disease and cancer; moreover, their relation to general health is not clearly perceived. Nonetheless, efforts have been successful in achieving greater coverage in the radio and television media as well as mass periodicals. One step in this direction has been to provide film clips on newsworthy research. For example, in cooperation with the NIH Office of Information, motion picture footage was taken at the beginning of a new National Institute of Dental Research (NIDR) clinical field study utilizing a fluoride-gel mouthpiece as a caries inhibitor. Among other uses, these film clips were distributed by ABC to 95 television affiliates in this country.

For the first time this year, Dental Institute information efforts tied in with National Children's Dental Health Week, sponsored by the American Dental Association. The current theme was "grow up smiling." NIDR provided the mass

media with a feature story and photographs illustrating the role played by children in "research for the smile of health."

In another new service introduced this year, a feature article was prepared and mailed to approximately 3,000 company house organs throughout the country. Clippings now being received indicate good usage of this material.

National magazine queries, resulting in several articles on dental research, continue to be stimulated by the quarterly mailing of "NIDR Research Capsules," prepared for selected science writers. *Time*, *Newsweek*, *Readers' Digest*, and *Parade* were among those reporting on dental research. In the dental press, too, numerous articles appeared as a result of the monthly mailing of "Research News from NIDR."

New opportunities to reach various segments of the public with information on research progress against oral disorders are also sought continuously. This year, for example, copies of the Institute's pamphlets on tooth decay and oral ulcerations were sent to several thousand teacher members of the American Association for Health, Physical Education, and Recreation. The pamphlets were also published in their entirety in *TIC*, a periodical found in the reception room of dental offices.

Related to the narrow image of dental research is the serious shortage of dental research personnel. A major effort has been undertaken by the information office to acquaint young science students, as well as science teachers and guidance counsellors, with the variety of career opportunities in this field. The principal segment of this program is the production, under grant, of a motion picture illustrating the broad diversity of the dental sciences and focusing on the oral cavity as an integral system of the body.

Particular emphasis was also placed this year on the showing of a specially designed exhibit on the spectrum of dental research. The exhibit has been shown by information office staff at national and regional meetings of science students, teachers, and guidance counsellors. A new brochure illustrating the wide scope of studies supported by the Institute was made available at the exhibit. In addition to the large volume of material distributed from the exhibit, several thousand copies of another new brochure on the expanding world of dental science were sent to members of high school science clubs throughout the United States.

In a companion effort to reach research-oriented dental students, the information office arranged for showings of exhibits on Institute-supported training programs at 24 dental schools. A related service was introduced following a survey to identify dental school science clubs and to elicit membership interest in Institue materials. As part of this new continuing service, literature on training and fellowship opportunities was sent to members of 40 dental school science clubs.

Information plans for calendar year 1968 will continue to emphasize recruitment. The motion picture now under production will be extensively promoted, and a series of articles on dental research are planned for scientific and lay journals. Through widespread dissemination of research findings, using NIH information channels and direct media contacts, more intensive efforts will be made to increase public understanding of the oral disorders and the hope held out through research.

### NATIONAL INSTITUTE OF GENERAL MEDICAL SCIENCES

Information activities are planned and implemented relative to the Institute's mission and achievement of its research and training goals. The Institute traditionally acts to acquire and disseminate new knowledge broadly applicable to the solution of health problems in general, and to meet research manpower needs in the sciences basic to medicine.

Within its framework of general research support and at the request of Congress, the Institute has initiated special research programs in pharmacology and toxicology, anesthesiology, and diagnostic radiology. Research progress in human genetics, biomedical engineering, and in clinical fields concerned with the general therapy of trauma has led to the identification of other program areas and specific goals for improving the health of the American people. Program objectives are described as follows:

Safer and more effective use of drugs (pharmacology/toxicology)

New and improved anesthetics and methods for their administration (anesthesiology)

New and better radiographic and related diagnostic methods (diagnostic radiology)

Automation of clinical laboratories for speedier, more accurate diagnosis of disease (biomedical engineering)

New life-saving therapies and techniques to care for critically injured patients (trauma)

Greater knowledge essential to preventing and treating genetically-related diseases (human genetics)

These new and emerging areas of Institute research emphasis have stimulated new directions for information activities and are beginning to lead to greater public interest in the Institute and its programs. Because of its predominant support of medical science in general, the Institute has not been identified with a particular group or category of diseases nor, in the past, with specific applied goals. Therefore it has not been a major focal point for public or mass media interest.

The Institute's research and training activities are wholly supportive, so that it has no laboratories or staff of investigators at hand which, for other Institutes and Divisions, represent important attractions for news media. Its information activities and accomplishments thus depend greatly upon the cooperation of information units because it adds appreciably to the Institute's production of news information. On the other hand, most mass media people are reluctant to pad their stories with extensive credits and despite efforts of university and Institute staff, it often happens that even though support for work was provided by the Institute, this fact is not reported or is simply attributed broadly to the National Institutes of Health.

Such was the case, for example, with most nationally-distributed news stories emanating from the news conference held in December at Stanford University on the test-tube creation of biologically active DNA by Institute grantee Dr. Arthur Kornberg. Although arrangements were made with the university information officer for express acknowledgement of Institute support during the conference, this was reported widely only by the *New York Times* and by the Scripps-Howard Washington bureau dispatch (for which the Institute was queried directly). In this same respect, Institute-prepared material for comment on the Kornberg discovery was used effectively by NIH spokesmen but no attribution of the National Institute of General Medical Sciences support is known to have resulted. The problem of "second credit" (Institute mention after the university and/or after the NIH) is not, of course, exclusively that of NIGMS and may in fact be insoluble due to the unfettered system of news reporting in America and most other countries of the free world.

By contrast, perhaps because of the lower level of news significance, the Institute over the past year has been substantially aided (and credited) in announcing systematically the award of research fellowships to several hundred candidates. In this system, brief form announcements are prepared by the Institute and sent directly to university public information offices for release to community news interests. Experience has shown these stories almost always are used by local printed media and in many cases are expanded as personality features by university writers and appear prominently displayed in newspapers.

Similar results have been achieved during the year with announcements of a number of major research grant awards. Routinely, the Institute information staff works closely with university personnel to prepare and coordinate distribution of such releases, the Institute releasing nationally from its position in Bethesda, the university to its circumscribed area of interest.

Extensive activities are undertaken as permitted by staff resources and news circumstances. This was the case recently when Harvard University was awarded a large grant to establish a major center for research in anesthesiology. The Institute supplied background information to the University on the national scope and goals of its anesthesiology research program. Harvard, in turn, incorporated this information in its releases and staged a news conference on the award at which Dr. Robert H. Ebert, Dean of the Medical School, and Dr. Frederick L. Stone, director of the Institute, both appeared. Subsequent coverage via television and the press was extensive in the New England area.

Earlier, the information staff was instrumental in publicizing widely the Institute's support of a new program to train practicing physicians in the specialty of anesthesiology. Due rather directly to this effort, the number of applicants far exceeded the number to be trained and opportunities for selecting those candidates most highly motivated and qualified was enhanced significantly.

In another program area, an Institute-sponsored conference on Future Goals for Engineering in Biology and Medicine, held in Washington, D.C., was used to focus the national news spotlight on opportunities for improving health

through support of biomedical engineering research and development work. Press kits and press room services were provided for some 20 science writers attending the conference and a number of general releases were issued periodically during the two-day meeting.

The information staff also published and distributed several brochures and special reports on research in pharmacology and toxicology, trauma, and anesthesiology. Releases of all types, excluding fellowship announcements, totaled 38 for the year.

Information activities in the year ahead will seek to exploit as much as possible the growing opportunities for describing special Institute programs and their accomplishments through mass media channels. At the same time, a balanced effort must be directed toward the equally important but more difficult task of enlarging public understanding concerning the need for research progress in the general health sciences as a prerequisite to orderly advances in nearly all areas of medicine.

## NATIONAL INSTITUTE OF NEUROLOGICAL DISEASES AND BLINDNESS

*The information mission*

Millions of Americans are victims of such long-term neurological and sensory disorders as cerebral palsy, muscular dystrophy, multiple sclerosis, epilepsy, stroke, parkinsonism, head injury, deafness, and blindness. They and their families and friends are eager to learn the most recent advances in treatment and to know what hope can be expected through medical research.

The major mission of the Office of Public Information of the National Institute of Neurological Diseases and Blindness (NINDB) is to inform this large segment of society of the latest neurological and sensory research advances. This information is needed by persons of all ages, races, and economic classes since many from all groups are affected. A large percentage of those in need of this information are organized into local and State chapters of the more than 20 national voluntary health agencies. In addition to press, radio, and TV, the Office of Public Information has been able to work effectively with these voluntary agencies to disseminate information rapidly.

*A decade of progress*

In the decade of 1958–68, the Office of Public Information has emphasized the preparation of informational materials and the building of working relationships with voluntary agencies, medical schools, and the scientific press. Publications in four major series have been created and made available to the public. These are the *Hope Through Research* pamphlets (16 disease category pamphlets for laymen); the *Profile Pamphlets* (11 pamphlets on research advances for scientists and well-informed laymen); the *Monograph Series* (7 program reviews for scientists); and *Fact Sheets* (4 question and answer sheets for the laymen). Another publication not in a series, *Eye Research*, published in 1967, was selected as the best of one-time publications in a Government-wide contest sponsored by the Federal Editors Association.

Five films—two for the public and three for scientific audiences—have each had over 500 showings and have been viewed by thousands. One has won four major awards including the top award at the International Scientific Film Festival in Australia and has been seen by more than a million students.

At least three program exhibits are kept current and shown at national meetings of professional societies and lay organizations. This past year, two new NINDB exhibits were developed: one presented the Institute's program in the Western Hemisphere to the Second Pan American Neurological Congress; the other depicted the Institute's Stroke Program to the Regional Medical Program directors.

New emphasis was given to preparing medical public information materials in Spanish for the growing Spanish-speaking segment of our population. Three of the *Hope Through Research* pamphlets were translated into Spanish, a Spanish sound track was provided for two of NINDB's scientific films, and a recent Institute exhibit was prepared in Spanish.

*The program for 1968*

A greatly enlarged distribution campaign for the Institute's many publications is now under way. In this campaign, many national organizations are cooperating, such as the National Science Teachers Association, nursing organizations, social worker groups, personnel counselors, rehabilitation workers, and many

medical and paramedical groups. Announcements of two pamphlets in a Sunday magazine supplement recently brought 15,000 requests each, a small indicator of a tremendous unfilled need.

In the immediate future, the Office of Public Information will emphasize the early recognition of neurological and sensory disorders in children, in order that treatment can be instituted, language can develop normally, and the children can fit into regular education classes. A color motion picture will help parents and teachers recognize minimal brain dysfunction before children go to school. A new borchure will stress early testing for hearing, speech, and language disorders in children. A pamphlet and a monograph on learning disorders are already available: another brochure will discuss speech disorders in all ages. And a science writers' seminar will review the field of human communications and present the findings of the Institute's Council Subcommittee studying this area.

A scientific exhibit on multiple sclerosis research is being produced cooperatively with the National Multiple Sclerosis Society. Also, an exhibit presenting the Institute's Information Network is in the planning stage. Direction is being given to the monthly production and distribution of a journal of epilepsy abstracts. And a bi-monthly newsletter is sent to voluntary agencies and Advisory Council members.

To increase an understanding of the Institute's total research program, a new Institute brouchure is in preparation. Also, a brochure on neurology is being written to aid in the recruitment of neurological scientists.

To reach a larger public, twenty 1-minute radio spot announcements about the Institute will be recorded by personalities from the screen and public life and distributed to 5000 radio stations. Two TV institutional spot announcements are being developed. And a film on NINDB's research programs is in the planning stage.

A heavy emphasis is being placed on developing a closer working relationship with the grantee institutions. Since more than 80 percent of the Institute's appropriations are supporting research and training programs at these centers, most of the research findings can be expected from this area. Through meetings and correspondence with university public information personnel, and a newly developed quarterly report to research and training administrators, it is hoped that more news can be generated and recognition given to the public support involved.

### DIVISION OF BIOLOGICS STANDARDS

The Division of Biologics Standards (DBS) is responsible for maintaining standards of quality and safety of all biological products that come within the jurisdiction of the Public Health Service. These include all vaccines, antitoxins, therapeutic serums, allergenic products, and human blood for transfusion, as well as products prepared from human blood.

The unique relationship between the pharmaceutical industry and the DBS is primarily due to the special nature of these biological products. Used almost solely by the medical profession, these products can involve serious risks to the public unless special care is used in their preparation and control. Perhaps nowhere in Government is the objective of the manufacturer and the regulating agency so closely allied. The licensed pharmaceutical manufacturer generally seeks the assistance of the DBS in precautionary action, and when necessary, corrective action, to ensure the safety and efficacy of their products.

It follows that there are sensitive areas of information within the DBS that, unless carefully handled, are susceptible to misinterpretation. These are known as areas of "privileged information"—information given the Division by the pharmaceutical establishment concerning a product they are developing or planning to develop for commercial use. The legal regulations relating to this confidentiality require careful consideration by the Information Office in dealing with the press.

Despite these limitations on public information, the Division's Information Office has carried out an active public information program, not only through assistance to the media in response to its requests, but in covering general information regarding the Division's mission.

Cover stories on the DBS were carried by three national magazines in 1967: The *American Professional Pharmacist's* July issue published an 8-page story on the DBS, by-lined by the Director, and titled "Biologics Old or New: Research is Vital." The August issue of *Hospital Formulary Management* published a 3-page cover story titled "DBS: Small Agency with a Big Job." The *Medical World News*,

December 8 issue, featured the DBS in a 5-page story with 4-color photo of Director on the cover.

Requests for information reflected public interest in a variety of health problems relating to biological products, including measles, influenza, rabies, tetanus, polio, snake bite, blood derivatives, and poison ivy.

A 16-page brochure on DBS, prepared by the Information Office, has just been published. Photos illustrate animal tests, laboratory techniques, and research-related control and test procedures, all of which are an essential part of DBS's responsibility for maintaining standards of quality and safety of biologics. Wide distribution is being made.

A press briefing was arranged for the American Academy of Pediatrics meeting at the Washington Hilton on rubella by the two DBS scientists who jointly received the Academy's 1967 E. Mead Johnson Award. Press briefings were also held during the two-day international conference on cell cultures for virus vaccine production, sponsored by the DBS.

A close working relationship is maintained with the press, including science writers across the country, wire services, and news syndicates. Those interested in infectious diseases and related vaccines are kept informed in these areas, and the many calls from them attest to their continuing interest.

Increasing awareness on the part of television and radio in relaying science to the public is evidenced in the queries received. A special effort is being made to keep radio and TV networks informed of subjects for news coverage.

The DBS Information Office will continue to fulfill its responsibility to keep the public informed of the Division's research programs relating to new biologics as they are developed.

### DIVISION OF ENVIRONMENTAL HEALTH SCIENCES

The primary goal of the Division of Environmental Health Sciences is to advance fundamental knowledge and to develop a scientific base that will serve to identify and obtain answers to problems that man's interaction with his environment has generated and will inevitably create.

The activities of the Division's Information Office are designed to expand the concern and the cognizance of private citizens, students, academicians, and scientists regarding the capability of environmental agents to affect the well-being of man.

The Division's mission relates to the development of basic knowledge, whose application is vested in other organizations with whom the Division cooperates closely. The Information Office, therefore, expects generally to broadcast this developing data for other workers in environmental health sciences, basic and applied. New knowledge, that can be applied by and/or is of interest to the lay public will be beamed to it through the public news media.

Whatever media is used—leaflets, newspapers, periodicals, radio, television, speeches—it is important that each advance be placed, as far as possible, within the context of the total effort.

Information materials directed to scientists, future scientists, and the general public must stress the interrelatedness of a variety of environmental insults occurring over long periods of time to disease states in human hosts who possess varying levels of susceptibility.

Currently, the Division's Information Office fulfills its share of the responsibility for the many over-all NIH information activities described previously. Requests of every type from local and regional news media are processed. Contacts are maintained with local and National organizations whose activities impinge upon the Division's mission and responsibilities.

The location of the Division's headquarters at the Research Triangle Park in North Carolina helps to shape one of our major concerns: tobacco and health. The Director has been interviewed extensively concerning the production of a safer cigarette—by radio, television, and periodicals. It is expected that interest in this subject will increase and that the Information Office will share increasingly in the response to this interest.

Projected plans for this recently established Information Office include publication of descriptive brochures on the Division's activities for the scientific community and the general public, and of Division-sponsored conference proceedings that will help to promote the multicategorical study of environmental health problems. Specific publications planned include appeals to the academic community and to university students to encourage the training of more environmental health scientists.

DIVISION OF RESEARCH FACILITIES AND RESOURCES

Among the grantees of the Division of Research Facilities and Resources are more than 400 institutions spread across the United States. The principal challenge confronting the Division's information staff is to implement a continuing action plan that will cover both every objective and every segment of the public important to the Division's vital institutional research facilities and resources support function.

*Guidance and assistance*

The information office strives to help win understanding and support for the Division's essential programs by increasing its involvement with institutional public relations staffs on mutually-important projects. During the year, the Division information office has supplied institutional personnel with story ideas, suggestions for special events, and background information on Division-supported facilities and resources, and has supplemented these with complete articles and photographs tailored to the individual institution or occasion.

The Division information staff has joined with grantee institution personnel to improve communications techniques and open distribution channels. As a result of the expansion of Division communications through grantee institutions, as well as a growing interest on their part in mutual cooperation, there is now clear indication that individual institutions, the Division, and NIH are coming increasingly before the public eye.

*Cooperative efforts*

In dealing with personnel from many different institutions with different attitudes and emphases, it becomes necessary to identify the Division's interests very strongly with those of the local institution. Working with instituional public relations staffs in many parts of the Nation, efforts have been made to reach large segments of the population through mutually-cooperative ventures that reap benefits for both the Federal government and the grantee. Institutions joining in common effort have included the University of Washington, University of Oregon, University of California Medical Center, Stanford Medical Center, Washington University School of Medicine, Tulane University, Bowman Gray School of Medicine, Memorial Sloan Kettering Cancer Center, Tufts New England Medical Center, Children's Hospital of the District of Columbia, and the University of Cincinnati Medical Center. The following examples represent highlights of the work of the Division in projecting to the American people with and through its grantee institutions.

*Dedication ceremony*

Mrs. Lyndon B. Johnson, accompanied by Secretary of Health, Education, and Welfare, John W. Gardner, who was making his final appearance before his retirement March 1, dedicated the Clinical Research Center at Children's Hospital in the District of Columbia. The Center is the newest of 91 general clinical research centers supported by the Division. A large turnout from the media, including AP, UPI, *The Washington Post*, *The Evening Star*, *The Denver Post*, UPI newsfilm, ABC, WMAL, and the medical press covered Mrs. Johnson's tour of the Center after the dedication. The Division information office worked with the Children's Hospital and White House staffs in pre-dedication preparations. In addition, it put together a press kit, supervised filming, editing, and distribution of TV motion picture clips, and ran the press room for the event.

*Press briefing*

At a press briefing held early in January in Washington, D.C., Dr. Thomas J. Kennedy, Jr., Director of the Division, Dr. Orville Smith of the Regional Primate Research Center at the University of Washington, and Dr. Bruce Alexander of the Oregon Regional Primate Research Center met with representatives of ABC–TV, NBC–TV, CBS–TV, UPI Newsfilm, WTTG, the wire services, and the Washington press corps. The information staff handled all aspects of the preparation and management of the briefing, which was widely reported, with all stories mentioning NIH support for regional primate research centers.

*Television shows*

Dr. William Montagna, Director of the Oregon Regional Primate Research Center, was interviewed by NBC correspondent Peter Hackes on the "Today" Show in January. All arrangements for Dr. Montagna's appearance on "Today" were made by the information office.

"Animal Secrets," NBC's award winning television program on science, featured films from primate centers furnished by the DRFR information office. The programs mentioned support by the Division and NIH.

*Magazine articles*

Two magazines, *The Instructor*, and *Science* and *Children*, and NBC's printed 1968 program schedule for "Animal Secrets" all contained pictures and background information furnished by the DRFR information office on the use of animals in medical research at grantee facilities. *The Instructor* and *Science and Children* articles credited the Division and NIH in story and pictures for support of medical research on animals. The April *Jack and Jill* ran a four-page color spread with NIH credited for support of primate centers. *Woman's Day*, 7½ million circulation, is planning a feature on primate centers for the July issue. The DRFR information office provided full information to author Hollis Alpert and the *Woman's Day* staff.

The May issue of *Psychology Today* carries a piece by two Washington Regional Primate Research Center scientists on their work Publication of the article was arranged by the DRFR information staff. Division support for the center is credited.

*Science World*, Scholastic Magazine's publication which goes to over 400,000 junior high science students carried two separate cover pictures furnished by the information office. These featured primates at two grantee primate research centers. Both credited the Division and NIH.

*Photos and stories*

Photos and stories on completed buildings constructed under the Health Research Facilities Construction Program were placed in *JAMA* and other medical publications by the information staff.

A Science Feature release on Division primate center research was mailed to 1700. daily and weekly newspapers by the National Society for Medical Research. The information staff furnished the copy and pictures.

*Other activities*

*Health Research Laboratory Design*, a compendium of laboratory design notes, written to assist engineers, architects, and other institutional staff members with construction problems, will be published by the Division before the end of the fiscal year. In addition, a revision of the *Guide to Laboratory Animal Facilities and Care* will be published as an aid to institutional personnel.

The Information Officer of the Division is serving on the planning committee for the "Inter-American Symposium on Health Aspects of the International Movement of Animals," to be held in San Antonio late this summer. He will be Press Officer for the meeting, sponsored by the Pan American Health Organization and the Conference of Public Health Veterinarians.

The Division information staff will assist at the dedication of the Clinical Research Center at the University of Pennsylvania's Graduate Hospital in late May, and preparations are being made in cooperation with hospital's staff.

To sum up: The Division has been trying to project its story throughout the Nation by intensifying its cooperative efforts with grantee institutions. The results have been most satisfactory. Institutional representatives have been very cooperative. Media workers have been enthusiastic, and there is every indication this will continue.

## DIVISION OF REGIONAL MEDICAL PROGRAMS

Public Law 89–239 calling for the development of Regional Medical Programs to make the latest advances in the diagnosis and treatment of heart disease, cancer, stroke and related diseases readily available to all the people everywhere in the country, required initial understanding by those who were to administer and implement the law. Its next requirement was the understanding, acceptance and cooperation of those individuals and institutions throughout the country—medical schools and medical centers, community hospitals, research institutions, public, private and voluntary health agencies, practicing physicians, members of the various allied health professions and representatives of the lay public—whose cooperative efforts were needed to organize and implement the first phases of each of the Regional Medical Programs. Because the ultimate purpose of the Programs is to upgrade the level of health care and make it immediately available to all people, the purpose and activities of the Programs must ultimately also be understood and accepted by everyone in all of the Regions.

As suggested, the expressed policy for the first phase of the communications and

public information activities of the Division of Regional Medical Programs has been almost exclusively to direct informational activities to those individuals and groups responsible for the initial development of Regional Medical Programs and others involved at the policy and decision-making levels. As a result, primary efforts to utilize the professional news and feature media at the national level have been directed toward selected publications that reach those groups. Consequently, there has been little or no emphasis on the use of lay media to gain attention for Regional Medical Programs lest a public demand be created for a product not yet produced or available. Therefore, all informational activities related to the lay public have been limited to merely keeping the medical, health and hospital editors and writers of lay publications informed, and responding only to direct requests from this group. These have, however, had some very tangible results at this level including a Sunday supplement feature that reached nearly 6 million people (*Family Weekly*, September 10, 1967). Other stories have appeared in such national publications as the *New York Times* (feature, April 15, 1967—syndicated by the *New York Times* wire service) and *U.S. News and World Report* (feature, February 26, 1968).

While the Office of Communications and Public Information of the Division of Regional Medical Programs is assuming responsibility for all such activities on the national level, the local activities are, for the most part, the responsibility of the Regions' own public information people. Plans for a growing effort in this area are currently being mounted to develop the best possible relationship between the two to gain maximum results for the Division of Regional Medical Programs of the National Institutes of Health, of which it is a part, and the Programs themselves. In addition, it will gain understanding, acceptance and support for the new concepts which are bridging the gaps between science and service.

*NIH information statistics, calendar year 1967*

MATERIALS

| | |
|---|---|
| Press releases: | |
| General | 59 |
| Announcements | 123 |
| Science writer | 53 |
| Press summary | 91 |
| Total | 326 |
| Inquiries: | |
| Press | 3,062 |
| Public | [1] 101,574 |
| Congressional | 1,411 |
| Total | 106,047 |
| Publications: | |
| New | 52 |
| Revised | 50 |
| Distributed | 787,202 |
| Speeches prepared | 57 |
| Reports prepared | 451 |
| Exhibits presented | 79 |

[1] Includes only those inquiries requiring formal structured response.

ANONYMOUS ORGANIZATION

Dr. SHANNON. I can only say to you precisely what I said to Secretary Gardner, who asked the same question, and that is: As long as NIH, as an operating agency, was an anonymous organization as far as the public media were concerned, we could never tell our story to the people.

Let me be very specific on that. All of our grants, up until April 1 of this year, have been announced as Public Health Service grants. All of our appointments to committees have been announced by the Surgeon General. All of the news releases that have impact relative to technical advances have been announced not by NIH but by higher authority.

It was my contention in discussing this with Secretary Gardner, and I will say it to you, sir, that in such a circumstance it is quite impossible to build up a personality for an institution that is so important to the American people.

With the organizational changes that became effective on April 1 of this year, we will have direct access to the public media. We will be in a position to do a much better job and this will become a normal responsibility of our operation.

Literally, we could not tell our story before.

### Building a Public Image

Senator Javits. Dr. Shannon, you also tell us that you will not take special means by writing yourself or encouraging the writing of magazine articles and appearances on television by you and your appropriate associates to give the public some concept of the totality of your work. It is not enough just to issue a release from now on that you have given this grant or that one. I think the people will want some clearer concept of what you are all about and I think you owe it to the people.

Incidentally, I don't see any possibility of sustaining this level of appropriation.

Senator Hill, Senator Cotton and I really died for this this year.

Dr. Shannon. I can say very positively that we have not been impaired in our ability to make such appearances, television appearances and write articles. But a steady flow of news that relates to people and to advances is needed to attract the interest of the people who control the news media, who issue the invitations, who provide access to the people via their media.

I would not have you think that the method of press announcement was accompanied by any attempt on the part of the Department or the Public Health Service to prevent public appearances and the like. But the normal flow of information that is basic to the generation of press interest is the thing that has been lacking in our operation.

I can assure you that with the reorganization and the direct access to the press that it will provide, we have the opportunity and, indeed, we will take advantage of the opportunity to do precisely what you say.

Senator Javits. I am also asking you to wrap up the package up to now and put it out, not just with respect to the future.

Will you do that?

Dr. Shannon. Yes, sir.

### Public and Private Research Funds

Senator Javits. You spend, say, a billion dollars, give or take a few dollars, and we are told that governmental research generally runs to about $12 billion in this country. That includes the Defense Department.

Dr. Shannon. Federal research and development is around $16 to $17 billion.

Senator Javits. What does private research run, industrial and otherwise?

### Biomedical Sciences

Dr. Shannon. I can give you the figures for biomedical sciences. I do not have them for all sciences. Total expenditure on medical re-

search, by both the private and public sectors, during fiscal year 1968 is estimated as $2.49 billion.

MEDICAL FIELD

Senator JAVITS. In the medical field.

How would you group the $16 or $17 billion that is spent in the governmental field so far as it affects medicine? In other words, how much do you spend plus, say, the armed services and other agencies?

Dr. SHANNON. I can give you the precise figure. Let me give you the breakdown. Industry spends $640 million and the private sector, other than industry, spends $180 million. Federal establishments spent $1,670 million. These figures do not include training or construction.

Of the $1,670 million, the NIH expenditure accounts for roughly half, in round figures. It is about 55 percent of Federal expenditure on medical research. I could give you a more detailed breakdown of the NIH expenditures. One of the deficiencies of our present organization of science is that we do not have a cognizant agency for the biomedical sciences that can give this committee an analysis of the entire national effort and, more particularly, an analysis of the Federal contributions to that effort so that you can look at the larger picture as you take particular looks at our own operation.

OTHER GOVERNMENTAL AGENCIES BIOMEDICAL RESEARCH

It has been said that NIH is, basically, the chosen instrument of the Federal Establishment for the support of biomedical science—and indeed it is in comparison with any other agency. I would point out, however, that there are large segments of biomedical research supported by the Veterans' Administration, by NASA, by AEC, by DOD, and by the Department of Agriculture.

It is impossible for us, except in the retrospect and from the files of the Science Information Exchange, which we were originally responsible for establishing for the health sciences, to give you a breakdown of the program content of the activities of these various agencies.

It is my belief that until some such responsibility is made resident in some agency that a committee such as this will operate——

Senator JAVITS. In the dark.

Dr. SHANNON. That is true.

NIH SUMMARY REPORT

Senator JAVITS. What are you reading from?

Dr. SHANNON. This is a summary document of basic data on NIH, which we have been preparing annually since about 1961. It gives a statistical summary, in retrospect, of the various components of our program.

COORDINATION OF GOVERNMENT AND PRIVATE RESEARCH PROGRAMS

Senator JAVITS. In order to give you, the Director of NIH, a means for ascertaining and endeavoring to coordinate the various programs, governmental and private, do you need a change in the law, or do you need a change in the directive?

Dr. SHANNON. We would require an Executive order.

Senator JAVITS. An Executive order?

Dr. SHANNON. Yes.

Senator JAVITS. I will tell you that I am going to urge the chairman, our friend, to join with us as the whole subcommittee in asking the President to issue such an order. It is inconceivable to me that we should blunder around in this dark room with just your appropriation and not give you the authority to be responsible to us for how all this money is being spent.

Certainly before we are going to give you any of the other things you need, and I know all of us know you need them, we have to have some test of what is being done overall.

I certainly will try to enlist the members of the subcommittee in inducing the administration to take that elementary first step.

Dr. SHANNON. We would be very glad to respond to the committee on that.

Senator Javits. Thank you so much, Mr. Chairman.

Is there anything else you would like to add?

Dr. SHANNON. No, sir; other than to say that it is always a pleasure to return.

Senator HILL. Some of the questions raised here were raised earlier.

Dr. SHANNON. I am always delighted when Senator Cotton joins you. He always has come up with some very penetrating questions.

## Grants for Construction of Health Research Facilities

STATEMENT OF DR. THOMAS J. KENNEDY, JR., DIRECTOR
ACCOMPANIED BY:
KENT A. SMITH, ACTING EXECUTIVE OFFICER, DIVISION OF RESEARCH FACILITIES AND RESOURCES
DAVID TILSON, CHIEF, HEALTH RESEARCH FACILITIES BRANCH, DIVISION OF RESEARCH FACILITIES AND RESOURCES
BERTIL G. BERGQUIST, BUDGET OFFICER, DIVISION OF RESEARCH FACILITIES AND RESOURCES
JAMES A. HICKEY, ACTING FINANCIAL MANAGEMENT OFFICER, NATIONAL INSTITUTES OF HEALTH
WILLIAM H. STEWART, SURGEON GENERAL
CHARLES MILLER, CHIEF FINANCE OFFICER

### Appropriation Estimate

"GRANTS FOR CONSTRUCTION OF HEALTH RESEARCH FACILITIES

"For grants pursuant to part A of title VII of the Act, [$35,000,000] *$8,400,000*, to remain available until expended."

AMOUNTS AVAILABLE FOR OBLIGATION

| | 1968 | 1969 |
|---|---|---|
| Appropriation | $35,000,000 | $8,400,000 |
| Unobligated balance brought forward | 15,607,934 | 12,207,934 |
| Cutback required by H.J. Res. 888 (unobligated balances carried forward): | | |
| Reduction below obligation level in the 1968 President's budget | −11,600,000 | |
| Reduction because of unanticipated carryover balances | −607,934 | |
| Total cutback | −12,207,934 | |
| Total, available for obligation | 38,400,000 | 20,607,934 |
| Disposition of cutback: Carried forward for obligation in 1969 | 12,207,934 | |

OBLIGATIONS BY ACTIVITY

| | 1968 estimate | 1969 estimate | Increase or decrease |
|---|---|---|---|
| Grants for construction and equipment: | | | |
| (a) Health research facilities | $37,792,775 | $20,607,934 | −$17,184,841 |
| (b) Centers for research on mental retardation | 607,225 | | −607,225 |
| Total obligations | 38,400,000 | 20,607,934 | −17,792,066 |

OBLIGATIONS BY OBJECT

| | 1968 estimate | 1969 estimate | Increase or decrease |
|---|---|---|---|
| Grants, subsidies, and contributions (total obligations) | $38,400,000 | $20,607,934 | −$17,792,066 |

*Summary of changes*

| | |
|---|---|
| 1968 enacted appropriation | $35,000,000 |
| Unobligated balance brought forward | 15,607,934 |
| Cutback required by HJR 888: | |
| Reduction below obligation level in the 1968 President's budget | −11,600,000 |
| Reduction because of unanticipated carryover balances | −607,934 |
| 1968 estimated obligations | 38,400,000 |
| 1969 requested appropriation | 8,400,000 |
| Unobligated balance brought forward | 12,207,934 |
| 1969 estimated obligations | 20,607,934 |
| Total change | −17,792,066 |
| Decreases: Program: | |
| Health research facilities | −17,184,841 |
| Centers for research on mental retardation | −607,225 |
| Total decreases | −17,792,066 |

EXPLANATION OF CHANGES

The net decrease of $17,792,066 is the result of a decrease of $26,600,000 in appropriated funds (the difference between $35,000,000 appropriated for 1968 and $8,400,000 requested for 1969) adjusted by unobligated balances at the beginning and end of 1968 and 1969 as follows: $15,607,934 brought forward from 1967 making the gross amount available for obligation $50,607,934 in 1968, of which $12,207,934 will be carried forward to 1969; the $12,207,934 unobligated balance brought forward from 1968 plus $8,400,000 the amount requested for 1969 will provide a total of $20,607,934.

| | 1968 estimate, amount | 1969 estimate, amount | Increase or decrease, amount |
|---|---|---|---|
| Health research facilities: | | | |
| Appropriated | $35,000,000 | $8,400,000 | −$26,600,000 |
| Unobligated balance brought forward | 15,000,709 | 12,207,934 | −2,792,775 |
| Subtotal | 50,000,709 | 20,607,934 | −29,392,775 |
| Unobligated balance end of year | −12,207,934 | ---------- | 12,207,934 |
| Subtotal, HRF | 37,792,775 | 20,607,934 | −17,184,841 |
| Centers for research on mental retardation: Unobligated balance brought forward | 607,225 | ---------- | −607,225 |
| Total | 38,400,000 | 20,607,934 | −17,792,066 |

The primary objectives of the Health Research Facilities program are to meet needs for new and replacement facilities for the Nation's research in the health sciences. In addition, the program assists in the construction of biomedical research facilities in new and expanding medical schools and the construction and renovation of research animal facilities. Modern facilities are essential to the Nation's colleges, universities, and research institutions in effectively prosecuting research efforts leading to better health for the American people. This program provides assistance to non-profit institutions by means of grants for up to 50 percent of the necessary costs of the facility, and requires that such facilities be used by the recipient for research in the health sciences for a minimum of ten years.

Medical schools committed to expanding their enrollments for the purpose of providing the Nation an increased number of physicians have been aided by the Health Research Facilities program in providing research space required by expanding faculty. New medical schools have been assisted in their endeavors to develop a basic complement of research facilities for core faculty.

The Health Research Facilities program has also been an important element in initiating programs related to high priority national biomedical research objectives in fields such as aging, dental health, human reproduction, and pharmacology-toxicology.

To support research in preclinical biomedical scientific disciplines such as cystology, biochemistry, molecular biology, and genetics, and in clinical sciences, such as oncology, cardiology, surgery, opthalmology, pediatrics, and psychiatry, research-service type facilities such as animal facilities, instrumentation laboratories, clinical research units, etc. are required.

Although the Health Research Facilities program has been able to meet some of the foregoing needs, the imbalance between the rate of research manpower development and the rate of facilities construction, replacement, and renovation is steadily widening. This trend will continue and result in serious overcrowding of research space. Against this increasing imbalance between the demand for the supply of research facilities, the $20,608,000 requested will provide approximately 589,000 net square feet of research space (based on $70.00 per net square foot) and provide space for an aggregate faculty expansion of approximately 589.

Historically, total appropriations of $465,000,000 have been made by the Congress through 1968 for Health Research Facilities construction. Since the inception of the program, 1,930 applications have been received requesting a total of $809,440,328.

Upon recommendation of the National Advisory Council on Health Research Facilities, the Surgeon General has thus far awarded 1,448 grants, totalling $445,252,574. This amount for construction is more than doubled by the nonfederal matching funds contributed by the grantees.

| | |
|---|---|
| Medical schools | $244, 867, 897 |
| Dental schools | 9, 328, 760 |
| Schools of public health | 9, 749, 889 |
| *Other health-related schools | 92, 387, 101 |
| **Institutions other than health-related schools | 88, 918, 927 |
| Total | 445, 252, 574 |

*Includes schools of veterinary medicine, pharmacy, osteopathy, nursing, chemistry, and biological sciences.

**State, county, and municipal health agencies as well as hospitals and independent research institutions.

Grants made under this program include support for the construction of large multipurpose facilities as well as providing for relatively small additions to existing facilities. Specific examples of projects awarded during the past year are the following:

Private nonprofit medical schools:

University of Chicago, Chicago, Ill ..... $903, 000
New addition to the medical school for cancer research

Hahnemann Medical College and Hospital, Philadelphia, Pa .... 6, 903, 000
Construction of research space in a new medical college building for the basic and clinical sciences.

Mount Sinai School of Medicine, New York, N.Y ..... 7, 945, 000
New medical school with HRF space for research in basic medical sciences. Also some remodeling in the Atran and Berg buildings.

Duke University, Durham, N.C ..... 1, 218, 000
Central laboratory animal facilities.

Public medical schools:

University of Arizona, Tucson, Ariz ..... 500, 000
Construction of research space in a proposed clinical sciences building which is an expansion of the medical school.

Ohio State University, Columbus, Ohio ..... 723, 000
Construction of phase I of a laboratory animal center consisting of four one-story buildings.

University of Texas Southwestern Medical School Dallas, Tex ..... 1, 894, 000
Construction of basic science research laboratories in a new basic sciences building to house the departments of anatomy, physiology, pharmacology and biochemistry.

Private nonprofit:

| | |
|---|---|
| Children's Hospital Medical Center, Boston, Mass---------- Laboratory facilities in a new basic pediatrics sciences building. | 2, 091, 000 |
| University Hospitals of Cleveland, Cleveland, Ohio---------- Construction of research facilities for the department of pediatrics in the new Rainbow Babies and Children's Hospital. | 952, 000 |

The $8,400,000 requested for 1969 plus the unobligated balance of $12,208,000 carried forward from fiscal year 1968 would be used to help meet some of the following estimated requirements:

| | |
|---|---|
| Balance of recommended grants as of June 30, 1968---------- | $102, 000, 000 |
| Applications approved by fiscal year 1969 councils---------- | 90, 000, 000 |
| Total estimated requirements---------- | 192, 000, 000 |

BUDGET REQUEST AND PROGRAM AIMS

Senator HILL. You may proceed Dr. Kennedy.

Dr. KENNEDY. I am here to speak on behalf of the President's request that $8.4 million be appropriated for the health research facilities program for 1969.

This program was created in the summer of 1956 by the passage of the Hill-Bridges Health Research Facilities Act whose authority has been renewed four times. The objectives of the original authorization, which were reaffirmed each time the program was renewed, were to expand throughout the Nation physical facilities for the conduct of research in the sciences related to health by constructing new facilities, by renovating or remodeling substandard facilities, and by replacing obsolete facilities which could not be renovated economically. These objectives continue to be valid.

AVAILABILITY OF HEALTH RESEARCH FACILITIES RESOURCES COINCIDES WITH EXPANDING BIOMEDICAL RESEARCH AND TRAINING PROGRAMS

The availability of resources to expand health research facilities throughout the United States coincided in time with the enlargement of our national commitment to support biomedical research and training. Enormous growth in research in the science related to health and tremendous advances in knowledge have occurred during this period, which could not have taken place without this program. The exciting work in cardiovascular surgery, pioneered by distinguished investigators such as Drs. DeBakey, Kantrowitz, and Shumway have been done in facilities partly funded by grants from the health research facilities program.

Drs. Kornberg and Goulian did their recently reported epoch-making work on the synthesis of DNA—popularly described as the creation of living matter in the test tube—in facilities built with the assistance of health research facilities program funds. These are but two examples of many which could be enumerated. The full array of clinical and basic science investigation on all of the serious diseases with which medical research is concerned is conducted in space provided in part by this program. Many outstanding medical scientists have received their graduate research training in such facilities.

FEDERAL FUNDS AS A PORTION OF TOTAL CONSTRUCTION COSTS

Since the inception of the program $445 million has been awarded as the Federal portion of 1,144 construction projects, encompassing over 18 milion net square feet of well-equipped research space. Grants-in-aid have been tendered to 405 institutions in every State of the Union as well as Puerto Rico and the District of Columbia. The total construction cost of these projects is well over $1 billion.

RELATIONSHIP BETWEEN ADEQUATE HEALTH RESEARCH SPACE AND DEVELOPMENT OF RESEARCH ORIENTED SCHOLARS

The need to add space to accommodate high quality scientific activity continues strong. All of the leading research institutions are crowded, many very seriously.

Growth in population, with the attendant increase in social needs of all sorts, has generated pressures to expand existing academic institutions and to create new ones. One major bottleneck limiting the rate of enlargement of these institutions has been the small manpower pool from which faculty members must be drawn. In the specific context of this presentation, additional health research facilities are the key to the development of the research-oriented scholars to staff new and expanding schools engaged in biomedical research, and also to provide the environment to attract such scientists, once trained, to permanent academic careers. Thus the flow of service oriented health care specialists is closely coupled to the availability of adequate health research space.

Senator HILL. In other words, you are not going to get them unless you have the space for them in which to work?

Dr. KENNEDY. That is correct.

NATIONAL HEART INSTITUTE CARDIOVASCULAR RESEARCH AND TRAINING CENTERS

Specific new national commitments present inescapable requirements for research space. For example, the creation by the National Heart Institute of the Cardiovascular Research and Training Centers which the Congress has approved will increase the need for construction of space to house the activity. Public Law 89–544, which regulates the transportation, sale, and handling of certain laboratory animals, has given rise to an increasing demand for renovation, replacement, and in many cases, expansion of laboratory animal facilities.

Senator HILL. And you agree with what Dr. Shannon said about these?

Dr. KENNEDY. Indeed I do.

Senator HILL. They have to be modern, up-to-date facilities to take care of the animals?

Dr. KENNEDY. That is correct.

INCREASED APPLICATIONS FOR FACILITIES

There has been a noticeable increase in applications to the health research facilities program for such facilities in response to the passage of this legislation.

Senator HILL. This total of $20,600,000 does not in any way match what we authorized and contemplated and provided for some few

years ago when we authorized some $280 million; is that right?

Dr. KENNEDY. That is correct.

UNUSED AUTHORIZATION

Senator HILL. How much short are you of that?

Dr. KENNEDY. $187 million will not have been appropriated.

Senator HILL. Do you mean even with this additional appropriation and this reserve that you have left over?

Dr. KENNEDY. That is correct.

Senator HILL. $187 million out of the $280 million?

Dr. KENNEDY. $187 million of unused authorization.

Senator HILL. You lost some $41,600,000 in the review of the budget this year?

Dr. KENNEDY. That is correct.

Senator HILL. Do you want to bring in Barnum and Bailey with a spectacle put on at NIH for the signing of this $280 million authorization?

Dr. KENNEDY. That was just after I assumed the responsibility for this program.

Senator HILL. The President and several of us who were invited came out in helicopters. Most of the personnel at NIH were there and saw him sign that momentous act and dispense the pens he used to sign the bill.

Now, instead of getting $280 million, you are getting only $180 million?

Dr. KENNEDY. Actually, $93 million will be the total amount requested in appropriations.

Senator HILL. Out of $280 million?

Dr. KENNEDY. That is correct.

Senator HILL. Although you said here you have a very compelling need for more of these health research centers; is that correct?

Dr. KENNEDY. Indeed we do.

Senator HILL. You certainly are not going to meet that need with this little appropriation even though you have some $12 million left over. The only reason you have that left over is you have plenty of applications and good applications but the Bureau of the Budget simply cut you down; is that correct?

Dr. KENNEDY. That is correct. We presently have——

Senator HILL. How much request do you have?

Dr. KENNEDY. We have 58 approved applications whose total value is approximately $54 million at the present time. We expect more from the June Council and also from the three Council meetings next year.

BUDGET REDUCTIONS

Senator HILL. So you have nothing like the money to meet these applications; is that correct?

Dr. KENNEDY. That is correct.

Senator HILL. You will be far short, won't you?

Dr. KENNEDY. Yes.

Senator HILL. You will be very far short.

Is there anything else you can suggest?

Dr. KENNEDY. I think this program has been a casualty and an especially ripe target for stringency during this period, and certainly our hope is that in the future we will catch up on this delay.

Senator HILL. It will take time to catch up.

Dr. KENNEDY. Yes, sir, it will take time, and leadtime is very important. Money appropriated this year will not be realized as working space for scientists for approximately 3 years.

Senator HILL. I think you used the proper term when you described it as a casualty. It is indeed a casualty; is it not?

Dr. KENNEDY. That is the way we feel.

Senator HILL. That is a terrific, terrific reduction.

### ADMINISTRATION TO FOLLOW ORIGINAL PROGRAM

Dr. SHANNON. I would like to make two comments. It is a casualty for two reasons.

First, however, I would like to say that there is no doubt in my mind that the intent of the administration was to go forward with the program as it was originally proposed. I have no doubt about that at all because we had very extensive discussion both within the Department and with the Bureau of the Budget and this was totally supported.

### RISING CONSTRUCTION COSTS

The first problem came when construction programs, in general, were cut back—not so much because of Vietnam but because of what it did to inflation. Federal spending for construction was hit as a specific target for that reason.

### ADJUSTMENTS IN NATIONAL PRIORITIES

Then, on the second round, there was a further cut because national priorities did not permit the expenditure of what I think we generally accept as money that could wisely be spent in the medical field.

One can only summarize the situation by saying that it is unfortunate that these programs have suffered.

The cuts have been made in good faith because of a feeling of compulsion to curtail these expenditures for two reasons. But from the program operator's point of view—when Dr. Kennedy looks at this—I am reminded of a favorite saying of Dr. C. J. van Slyke that the appropriation request "is pitifully small and woefully inadequate."

Senator HILL. And may I add definitely a casualty. I have never seen such a slash from the authorization from what was contemplated. Didn't you put on the show at NIH? You did that by request, I am sure.

Dr. SHANNON. One of the emotional casualties of this program is Dr. Kennedy.

Senator HILL. I can understand that.

Is there anything you would like to add, Dr. Stewart?

Dr. STEWART. No, Mr. Chairman.

Senator HILL. Doctor, I believe you have another item you would like to discuss with us now.

## General Research Support Program

### Appropriation Estimate

"GENERAL RESEARCH SUPPORT GRANTS"

"For general research support grants, as authorized in section 301(d) of the Act, there shall be available from appropriations available to the National Institutes of Health *and the National Institute of Mental Health* for operating expenses, the sum of [$61,700,000] *$60,700,000*: *Provided*, That none of these funds shall be used to pay a recipient of such a grant any amount for indirect expenses in connection with such project."

### Appropriation Language Change

The change clarifies the continued inclusion of the National Institute of Mental Health as a contributor to the General Research Support grants program under the Institute's revised status as a separate bureau.

### Amounts Available for Obligation

| | 1968 | 1969 |
|---|---|---|
| Amount available | $61,700,000 | $60,700,000 |
| Cutback from the 1968 President's budget required by H.J. Res. 888 | −2,000,000 | |
| Total available for obligation | 59,700,000 | 60,700,000 |
| Disposition of cutback: To be returned to the Treasury | 2,000,000 | |
| Total cutback | 2,000,000 | |

### Obligations by Activity

| | 1968 estimate | 1969 estimate | Increase or decrease |
|---|---|---|---|
| Grants: | | | |
| (a) General research support | $48,200,000 | $48,200,000 | |
| (b) Biomedical sciences support | 7,500,000 | 7,500,000 | |
| (c) Health sciences advancement awards | 4,000,000 | 5,000,000 | +$1,000,000 |
| Total obligations | 59,700,000 | 60,700,000 | +1,000,000 |

### Obligations by Object

| | 1968 estimate | 1969 estimate | Increase or decrease |
|---|---|---|---|
| Grants, subsidies, and contributions (total obligations) | $59,700,000 | $60,700,000 | +$1,000,000 |

*Summary of changes*

| | |
|---|---|
| 1968 amount available | $61,700,000 |
| Cutback required by H.J. Res. 888 | −2,000,000 |
| 1968 estimated obligations | 59,700,000 |
| 1969 estimated obligations | 60,700,000 |
| Total change | +1,000,000 |
| Increase: Program—Health sciences advancement awards | 1,000,000 |

EXPLANATION OF CHANGE

The program increase of $1,000,000 will provide support for two additional new health sciences advancement awards.

*Introduction*

Strong and effective institutions are indispensable to the betterment of health care and to the improvement of fundamental conditions of human life. Academic and research institutions produce the scientific manpower, ideas, and techniques that are essential to the growth of concepts that relate to health, disease and to the application of medical knowledge.

The General Research Support grant program contributes to the development of research capabilities of institutions by (1) providing flexible general support to health professional schools, hospitals, and non-academic non-profit institutions; (2) extending similar general support to other academic institutions which are heavily engaged in health-related research and research training; and (3) providing support designed to accelerate the advancement of existing capabilities in health research and related graduate research training activities within institutions which have demonstrated an appropriate base for the achievement of scientific excellence.

*Program plans*

*Traditional general research support program.*—This program will continue to provide encouragement to health professional and other health-related institutions to meet emerging opportunities in research, to explore new and unorthodox scientific ideas, and to use research funds in ways that will contribute to long range development of institutional capability in health research and in the environment for research. It makes possible the recruitment of faculty and other professional personnel, the retention of senior investigators, and the support of research associates and research trainees in a variety of disciplines. In addition, general research support funds are used to initiate, support and expand research facilities, exclusive of construction costs, needed by many investigators within an institution. Other uses of general research support funds include the creation of new research and research training opportunities, the support of exploratory research projects by young investigators and the acquisition of costly apparatus necessary for the proper conduct of research activities. Under this program approximately 311 separate awards are now made to schools of medicine, dentistry, osteopathy, pharmacy, public health and veterinary medicine, and to hospitals, research institutes, research foundations, and state and municipal health departments.

*Biomedical sciences support grant program.*—This program extends the concept of general research support to academic institutions other than the health professional schools. The National Institutes of Health has long recognized the importance to the Nation of the contributions to the health sciences made by investigators and teachers in academic components not covered by the traditional General Research Support program, as demonstrated by the fact that a significant proportion of research project grants, graduate training grants, center grants, etc., go to these components. It is essential that flexible general research support funds be provided in order that the project-oriented funds may be utilized most effectively in these institutions, and that they may have benefits similar to those that now accrue to the health professional and health-related schools. Approximately 96 institutions are funded under this program in 1968.

*Health sciences advancement award program.*—In 1966 funds were provided to advance the health sciences, primarily in graduate academic institutions. The Health Sciences Advancement Award Program supports institutions which are not yet pre-eminent in the health sciences, but which offer a strong base of biomedical research and research training. This support which is catalytic in nature will enable the institutions to attain a new level of achievement and to continue their advancement beyond the period of the grant. Approximately nine health sciences advancement awards will be made in 1968. In contrast to the formula basis of the two preceding programs, these awards are made on the basis of selection on merit in national competition, and are of limited duration.

*Distribution of funds by program area in 1969*

The requested amount of $60,700,000 would be distributed as follows: $48,200,000 for the General Research Support to approximately 326 institutions; $7,500,000 for Biomedical Sciences Support Grants to approximately 99 institutions; and

$5,000,000 for Health Sciences Advancement Awards to approximately 11 institutions.

The following table illustrates the planned 1968 and 1969 distribution of general research support grants:

| | 1968 estimate | | 1969 estimate | |
|---|---|---|---|---|
| | Number | Amount | Number | Amount |
| General research support: | | | | |
| Educational institutions: | | | | |
| Dentistry | 49 | $2,892,000 | 49 | $2,800,000 |
| Medical | 95 | 26,125,000 | 99 | 26,450,000 |
| Osteopathy | 5 | 193,000 | 5 | 180,000 |
| Public health | 12 | 2,072,000 | 13 | 2,000,000 |
| Pharmacy | 10 | 578,000 | 11 | 550,000 |
| Veterinary medicine | 15 | 1,928,000 | 16 | 1,900,000 |
| Noneducational institutions: | | | | |
| Hospitals | 72 | 7,905,000 | 77 | 7,840,000 |
| Research foundations, institutes, and others | 51 | 6,025,000 | 54 | 6,030,000 |
| Health departments | 2 | 482,000 | 2 | 450,000 |
| Subtotal | 311 | 48,200,000 | 326 | 48,200,000 |
| Biomedical sciences support grants | 96 | 7,500,000 | 99 | 7,500,000 |
| Health sciences advancement awards | 9 | 4,000,000 | 11 | 5,000,000 |
| Total | 416 | 59,700,000 | 436 | 60,700,000 |

The general research support grants program is administered by the staff and funds of the Division of Research Facilities and Resources. Grant funds are provided by applying a uniform percentage to the amounts provided for research grants in the appropriations of the several institutes and one division of the National Institutes of Health, and the National Institute of Mental Health.

The following table shows the estimated amounts to be provided by each contributing appropriation:

| | 1968 estimate | 1969 estimate |
|---|---|---|
| National Institutes of Health: | | |
| National Cancer Institute | $6,899,000 | $6,838,000 |
| National Heart Institute | 9,809,000 | 9,425,000 |
| National Institute of Dental Research | 1,256,000 | 1,194,000 |
| National Institute of Arthritis and Metabolic Diseases | 9,551,000 | 9,409,000 |
| National Institute of Neurological Diseases and Blindness | 8,094,000 | 7,430,000 |
| National Institute of Allergy and Infectious Diseases | 5,169,000 | 5,289,000 |
| National Institute of General Medical Sciences | 7,989,000 | 8,127,000 |
| National Institute of Child Health and Human Development | 4,264,000 | 4,082,000 |
| Division of Environmental Health Sciences | 547,000 | 551,000 |
| General Research and Services: Office of International Research | 639,000 | 600,000 |
| Subtotal, NIH | 54,217,000 | 52,945,000 |
| National Institute of Mental Health | 5,483,000 | 7,755,000 |
| Total | 59,700,000 | 60,700,000 |

## FINANCED BY TRANSFER OF FUNDS

Dr. KENNEDY. I welcome this opportunity to appear before you in support of the general research support program and its budget for 1969. This program is financed through funds transferred from the appropriations of the several Institutes into an account administered by the Division of Research Facilities and Resources.

For this reason, the general research support allocation does not appear as a formal proposal for funds to be appropriated in the President's budget; rather, it is set forth as a line item in the budget submissions of the various categorical Institutes.

LEGISLATIVE HISTORY AND PROGRAM OBJECTIVES

The general research support program, created under the authority of Public Law 86–798, was explicitly designed to strengthen the biomedical research programs of institutions significantly engaged in this activity. The avowed objectives of this program were to enable them: to cultivate scientific excellence by building institutional strength; to enlarge their role in determining the direction of their research and research training programs, and to balance these programs in accordance with their own long-range research aspirations; to explore emerging opportunities in research through the pursuit of new and/or unorthodox ideas; to foster early recognition and support of scientific talent; and to attract an increasing amount of non-Federal research funds for their institution.

At the present time, the program is composed of three distinct elements known respectively as the general research support, the biomedical sciences support, and the health sciences advancement award programs.

GENERAL RESEARCH AND BIOMEDICAL SUPPORT GRANT PROGRAMS

The general research support grant program has since 1962 provided flexible support, in an amount proportional to an institution's identifiable direct biomedical research expenditures, to health professional schools, to biomedical research institutes, to research-oriented hospitals, and to State and local health departments. The biomedical sciences support grant program is similar in most respects but eligibility for it is limited to nonhealth professional components of graduate schools.

INSTITUTION DISCRETIONARY CONTROL

These two programs deliberately permit and encourage institutions to exercise broad discretionary control in the use of the grant funds, provided that the expenditures are for research and research training in the health sciences.

In addition, the programs furnish institutions with an unparalleled opportunity to administer grant funds creatively within the context of their own long-range research objectives.

The flexibility with which these funds can be used means that they are particularly suited to the task of coupling institutional goals with the missions of the various Federal agencies; at the same time, this pliancy allows them to redress imbalances created by the zeal with which Federal agencies have pursued their statutory missions.

1967 Grants

During 1967, 387 institutions were tendered support through these programs. Of these, 271 were academic and 116 were nonacademic organizations such as research-oriented hospitals and research institutes.

Of the 271 academic institutions receiving aid of this nature, there were 178 schools for training health professionals—in medicine, dentistry, public health, veterinary medicine, pharmacy, and osteopathy—and 93 nonhealth professional components of graduate schools.

INSTITUTION PROGRESS REPORTS

Each year, progress reports from the grantee institutions cite numerous research accomplishments derived from the use of these funds and thereby verify the immense benefits accruing to the Nation's health.

For example:

The Albert Einstein Medical Center in Philadelphia is convinced that skillful deployment of small general research support awards has been the major factor in the expansion of its research program from virtually zero in 1960 to a current annual level of $2.5 million.

At the University of Colorado, a screening test devised for evaluating the intellectual and behavioral development of children from birth to 5 years has proven so valuable that the American Academy of Pediatrics has recommended its routine use to pediatricians, and it has been adopted on a nationwide basis for evaluating Project Headstart children.

There can be no question that these two grant programs have served as a powerful instrument to help institutions throughout the Nation strengthen and expand their health-related research capabilities.

EVALUATION OF PROGRAM GUIDELINES

Recently, the NIH has been engaged in a careful reappraisal of the guidelines which govern this program, in the light of the dynamic changes which have taken place since it was established in 1962. Among the major events relevant to this program which have transpired, one may note: the extensive growth in magnitude and evolution in character of the biomedical research enterprise in the United States; the enactment of authority to aid the educational functions in health professional schools; and recently announced organizational changes which placed authorities for support of both research and educational functions under the aegis of the new National Institutes of Health. After thorough discussions have been completed with advisors from the scientific and academic community and particularly with members of the National Advisory Health Council, the NIH intends to put into effect in the coming year whatever changes in eligibility and entitlement rules appear to be appropriate in the light of almost a decade of growth and operational experience.

HEALTH SCIENCES ADVANCEMENT AWARD PROGRAM

Biomedical research is an activity almost totally dependent upon the academically based scientific research community. As a result of the growing governmental investment in biomedical research, the Congress has shown an increasing interest in developing a broader base of scientifically excellent academic institutions.

It has become more and more evident that a few outstanding medical centers cannot constitute a research community large enough to serve the entire Nation.

Senator HILL. You have to have more than that.

Dr. KENNEDY. That is correct.

In 1966, the NIH announced a competitive program to encourage comprehensive institutional advancement toward excellence in biomedical research and research training. Called the health sciences advancement award program, it provides grants to carefully selected colleges and universities that can become institutions truly distinguished in research and research training by developing their facilities, staff, and research potential.

Five new awards were initiated in 1967 in addition to the two begun in 1966. With these new awards, the NIH is confident that more outstanding health science research centers will emerge to help in the conquest of disease.

BUDGET LIMITATION REQUEST

The President's budget requests $60.7 million for 1969, $1 million above the operating level for 1968, for this complex of programs, as follows:

—$48.2 million for the traditional General Research Support program.

—$7.5 million for the Biomedical Sciences Support grant program.

—$5 million for support of the Health Sciences Advancement Award program.

This request is not in addition to but is already included within the research grants budgets of the several Institutes and Divisions of the NIH and the National Institute of Mental Health, from which the funds are transferred and aggregated for General Research Support programs.

I shall now be happy to answer any questions.

Senator HILL. Then any reductions would have taken place in these institutes?

Dr. KENNEDY. It would be reflected in each of them.

EFFECT ON PROGRAMS OF TRANSFER TO NIH OF EDUCATIONAL AUTHORITY

Senator HILL. Is there anything you would like to add, Dr. Shannon?

Dr. SHANNON. No, Senator, except that it may be pertinent to point out that with the transfer of educational authority to NIH, it should be possible to pair these programs with certain programs under the Health Educational Assistance Act to approach the total requirements of universities and university medical centers in a more effective fashion.

Senator HILL. Dr. Stewart?

Dr. STEWART. I have nothing to add.

## Social Security Administration

STATEMENT OF ROBERT M. BALL, COMMISSIONER
ACCOMPANIED BY:
JACK S. FUTTERMAN, ASSISTANT COMMISSIONER, OFFICE OF ADMINISTRATION
MRS. MILDRED L. TYSSOWSKI, ACTING DIRECTOR, DIVISION OF FINANCIAL MANAGEMENT
JAMES B. CARDWELL, DEPUTY ASSISTANT SECRETARY, BUDGET
PHILIP O'BRIEN, ACTING BUDGET OFFICER

### INTRODUCTION OF ASSOCIATES

Senator Hill. We are happy to have you with us, Mr. Ball, and we will be happy to have you proceed in your own way.

Mr. Ball. I appreciate your arranging your schedule so that I could testify this week. It has been very helpful.

I have with me Mrs. Tyssowski on my left who is Acting Director of the Division of Financial Management, and on my right is Jack Futterman, Assistant Commission for Administration, and on my far right is Mr. Philip O'Brien, Acting Budget Officer for the Social Security Administration.

Senator Hill. He is the man who gets your money for you?

Mr. Ball. I am expecting help from all three.

Senator Hill. We are glad to have all three here with you.

### PREPARED STATEMENT

Mr. Ball. Mr. Chairman, I have a rather lengthy statement that I would like to suggest with your permission we place in the record and then I have a shorter summary statement I can go through rather quickly.

Senator Hill. We will place your full statement in the record at this point.

(The statement follows:)

### DEPARTMENT OF HEALTH, EDUCATION, AND WELFARE

#### Statement by Commissioner of Social Security

Mr. Chairman and members of the committee, we have before you today the 1969 budget requests for salaries and expenses of the Social Security Administration and for payments from general revenues to the trust funds for certain types of benefits.

As you know, administrative expenses for the social security program, like the benefit payments, come from the social security trust funds and with certain limited exceptions, are not a charge on the general treasury. Moreover, the amounts required are related to work loads which emanate from the statutory base of the program. The size of these loads depends upon objective factors such as population growth, the level of employment, the incidence of illness among



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the aged and mortality rates. There is little we can do to control the amount of work that needs to be performed.

SCOPE OF PROGRAM

Our budget for fiscal year 1969 is significantly affected by the 1965 Amendments of the Social Security Act, which established a medicare program and made significant changes in the cash benefit program, as well as by the recently enacted 1967 Amendments to the Act. These recent amendments, the latest in a series of important changes enacted in the 1950's and early 1960's, have greatly strengthened and broadened the social security program until today we have a national social insurance system which importantly affects practically every man, woman and child in the United States.

Twenty-four million people—one out of every eight Americans—receive cash benefits under the program each month. These are the very people—the retired aged, widows and orphans, and the totally disabled—who without social security would be the most economically vulnerable groups in America.

Today, nine out of ten jobs are covered under social security, including the Armed Forces, the self-employed, the farmer, the farm worker, and just about everyone except certain government employees covered by separate systems. About 90 percent of the people 65 and over are protected under the program and 95 out of 100 mothers and children in the country would be entitled to monthly benefits in the event of the death of the main breadwinner in the family. The face value of survivors insurance alone under social security is now $940 billion. Nearly 90 million people will contribute to the system during 1968.

One way of seeing the great growth of the program following the amendments of 1965 and 1967 is to compare benefit payments before and after the amendments. In June of 1965 the social security system was paying benefits at the annual rate of $17 billion; this month the program, including medicare, is paying benefits at the annual rate of $31 billion. About three-fourths of this increase is the result of the amendments and the other fourth is a result of normal program growth.

Under the medicare program so far in its first year and a half of operation, the program paid out a total of $5.5 billion—$4.2 billion for hospital expenses and $1.3 billion for other medical expenses, primarily doctors' services.

In the brief period since July 30, 1965, the date medicare was signed into law, the monumental task of establishing medicare as a going program has been completed. The successful implementation of medicare flows from a new high in cooperative effort undertaken by the Federal Government and public and private organizations and individuals. Effective working relationships were established among Federal and State organizations, medical institutions, insurance companies, doctors and 19.5 million elderly Americans. Today nearly 6,900 hospitals, 4,500 extended care facilities, 2,400 independent laboratories, 1,900 home health agencies, 130 insurance organizations and thousands of government and health personnel at all levels are directly involved in making medicare a success.

The task of administering medicare remains immense. From the beginning we have worked hard to streamline our policies, forms and methods to carry out this task with maximum efficiency in and out of government. We have instituted administrative improvements wherever possible and the 1967 amendments make possible further important simplifications in medicare administration as well as improving medicare's benefits.

As you know, the medicare program is divided into two parts. Practically all of the 19.5 million people over 65 have had hospital insurance automatically—those who are insured under social security or railroad retirement receiving this protection through the trust fund operations and those who are uninsured under these programs receiving the protection as a result of general revenue contributions. The voluntary part of the plan covering primarily physicians' services was elected by about 92 percent of the aged during the first enrollment period. During the open enrollment period that ended April 1, 1968, the figure has risen to about 95 percent or 18.5 million people over 65.

Medicare has gone a very long way toward eliminating the major financial threat of illness among older Americans. But the impact of medicare carries far beyond the specific insurance coverages provided by the program. Patients of all ages, young and old, are benefiting from the higher quality standards which medicare supports. One of the great accomplishments of medicare is that it has

helped advance the best and most efficient of health practices. Medicare coverage, not merely of hospitalization but of the alternative modes of care, has meant that the choice of the most appropriate level of care—post-hospital extended care, outpatient service, or home health care—has been made more nearly realizable. The extended care benefit represents a new level of care conceived in the medicare legislation, distinct from acute hospital care on the one hand and on the other hand, distinct from long-term care. It has helped to build a bridge from the hospital, self-care and the home.

In addition, medicare is serving as a catalyst in several respects. One result is a nationwide application of professional review of the need for hospitalization utilization. A much-needed increase in a focus on medical costs is another result. In addition, under the 1967 legislation, we have been given authority to experiment with methods of reimbursing health care institutions and physicians to try and discover ways to provide incentives for lowering costs while maintaining quality of care. We believe that through such experiments it may be possible to make a significant contribution to the larger effort that must be carried out by providers and consumers of health care alike toward a more economical utilization of health, manpower and facilities.

## PROGRAM FINANCING

These vast program changes have been accomplished while at the same time the sound financing of the program, both for the short run and the long run, has been maintained. The long-range actuarial estimates show that for the program taken together and for each of the individual programs separately, there will be sufficient financing to cover the full cost of the benefits and administrative expenses as they fall due on into the future. Beginning with fiscal year 1968 and in each year in the future, our best estimate is that income will be substantially larger than outgo.

Fiscal year 1969 will be the first year to bear the full cost of the amended program since the 1967 amendments became effective in the second half of fiscal year 1968. Income to the social security trust funds in fiscal year 1969 is estimated at $37.7 billion or $4.7 billion more than the estimated outgo for the year. The estimated income for 1969 is $5.1 billion more than the $32.6 billion income figure as estimated for 1968. Approximately $3 billion of this increase is related to the 1967 amendments which provided an increase in the earnings base from $6,600 to $7,800 effective January 1, 1968, and an increase in the contributions from employers and employees from 4.4 percent to 4.8 percent beginning January 1, 1969. (This increase in the rate incidentally is slightly less than the rate that had been provided by statute for 1969 under the old law. Under the old law, the contribution rate was to rise to 4.9 percent beginning January 1, 1969.) Contributions from self-employed persons also increased from 6.4 to 6.9 percent in 1969. The increases in the size of the employed population and earnings levels account for another $1.5 billion of the increased income in 1969 over 1968.

Also contributing to the 1969 increase in income is the $1 increase, from $3 to $4, in monthly premiums paid by enrollees in the voluntary medical insurance program and matched by the Federal Government. This change in premium is effective April 1, 1968, and adds $300 million to the fiscal year 1969 increase. Interest income and all other changes account for the remaining $300 million of the $5.1 billion increase.

Expenditures from all four trust funds in 1969 are estimated at $33 billion, an increase over 1968 of $4 billion. The 1967 amendments are responsible for the greater portion of this increase: of the estimated increase of $4 billion, approximately $2.6 billion is due to these amendments. Population increases and the increase in the utilization and cost of health services account for most of the remainder. Included in the trust fund expenditures for fiscal year 1969 is $855.5 million for administrative expenses incurred by this Department and the Treasury Department in administering the social security program. Administrative expenses budgeted for 1969 are equivalent to about two percent of the contributions to the program for the old-age and survivors, disability and hospital insurance programs. Because of the high volume of small bills in the supplementary medical insurance program, administrative costs for that program are significantly higher. In 1969 administrative costs are estimated to be equivalent to 9.25 percent of contributions. In all parts of the program, administrative expenses compare favorably with comparable expenses under private insurance.

PROGRAM CHANGES—THE 1967 AMENDMENTS

The 1967 amendments have a significant effect on trust fund outgo and on our salaries and expenses requirements for fiscal year 1969. I would, therefore, like to review the most important of the changes:

1. *Benefit Increases*

The across-the-board increase provided by the amendments was effective for the month of February 1968 and was included in the check delivered on March 2. The across-the-board increase amounted to 13 percent with an increase in the minimum monthly benefit from $44 to $55. As a result of this legislation, the average monthly benefit paid to retired workers already on the rolls was increased from $86 to $98. For a retired worker and his wife, the average monthly benefit increased from $145 to $164. As a result of being able to include higher earnings and benefit computations because of the increase in the maximum earnings base from $6,600 to $7,800 a year, increases for those earnings above $6,600 will be considerably more in the future than the 13 percent increase which applies to people currently on the rolls and to people earning less than $6,600 and, of course, paying contributions on a lower amount. Thus, the maximum benefit for example goes from $168 under the old law to $218 as a result of the 1967 amendments.

While the new maximum retirement benefits will be paid only to workers who are now young and who will pay contributions on the higher amounts of earnings that count for social security contributions and benefits purposes over a considerable period of time before they retire, benefits are also increased significantly for workers who are much older now and who consequently will pay on these higher amounts for a much shorter period. For example, a man aged 50 who has been earning $7,800 or more a year will get a benefit increase of about 22 percent over the old law when he retires at 65. The young man today in his twenties will get an increase of about 30 percent.

Benefits payable to certain individuals aged 72 and over who are eligible as a result of a provision of the Tax Adjustment Act of 1966, frequently referred to as the Prouty Amendment, increased from $35 a month to $40 a month. The benefits payable to the eligible spouses of these individuals increase from $17.50 to $20.00 a month.

2. *The Retirement Test*

Another measure which affects benefit payments to some three quarters of a million people already on the rolls is the liberalization of the retirement test. Individuals are now able to earn $1,680 a year instead of $1,500 as under the old law without the loss of any social security benefits in the year. Between $1,680 and $2,880, $1 may be withheld for each $2 of earnings; above $2,880, $1 may be withheld for each dollar of earnings. Regardless of the amount of his annual earnings, an individual will get benefits for any month in which he earns $140 or less in wages and does not render substantial services in self-employment.

3. *Dependents of Women Workers*:

The amended law provides that a child is deemed dependent on his mother and can be entitled to benefits based on her earnings if, at the time she died, retired or became disabled, she was either fully or currently insured. Thus, a child can now get benefits based on his mother's earnings record under the same conditions as those under which a child can become entitled to benefits based on his father's earnings. During 1968 and 1969 it is estimated that 174,000 beneficiaries will be added to the rolls as a result of this provision.

4. *Benefits for Disabled Widows and Widowers*:

Also, about 65,000 persons were immediately made eligible for reduced benefits which are payable under the 1967 amendments to widows, widowers and surviving divorced wives who are disabled. Prior to this change a widow could receive full benefits at age 62 or, if she desired, reduced benefits at age 60. Widows could also receive benefits at any age if they have a child of the deceased in their care. This amendment provides for benefits as early as age 50 to these people provided they become disabled no later than seven years after the death of the spouse or within seven years of the terminations of mother's benefits.

During 1968 and 1969 it is estimated that 209,000 persons will file claims for disability benefits as a result of this change in the law. However, many of these claimants are not expected to meet the statutory requirements for disability.

5. *The Young Disabled Worker:*

Another of the most significant changes is the reduction in the insured status requirements for workers becoming disabled prior to age 31. Under the old law five years of social security credits out of the ten years before an individual became disabled were required regardless of age. Now the law requires that if an individual becomes disabled between ages 24 and 31, he will need credits for half the time between age 21 and the time he becomes unable to work. Should disability begin prior to age 24, one and a half years of credits are needed. Payments under this provision can begin for the month of March 1968. This change permits the young worker who becomes disabled to be entitled to benefits even if he does not have a long employment history. During 1968 and 1969 it is estimated that 104,000 persons—disabled workers and their dependents—will be added to the benefit rolls as a result of this provision of law.

6. *Changes in the Health Insurance Program:*

The 1967 amendments broadened the services covered by the hospital and medical insurance programs and made several administrative simplications. Provision was made in the amendments for each medicare beneficiary to have a lifetime reserve of 60 days of added coverage of hospital care after the 90 days covered in a "spell of illness" have been exhausted. Co-insurance of $20 per day will be applicable to these added days of coverage. Also, outpatient physical therapy services are now covered on a much broader basis; and X-ray and laboratory services are covered without any deductible or co-insurance for those who elect supplementary medical insurance.

Payment of charges by physicians is facilitated by the 1967 amendments. The two methods of payment—to the physician on assignment or to the patient—provided for under the Social Security Amendments of 1965 have been retained but with one important change: The new law eliminates the requirement that the beneficiary must pay the physicians' charges before he can be reimbursed under the program. Thus, the law permits payment either to the patient on the basis of an itemized bill (which can be either paid or unpaid) or to the physician under the assignment method.

Other changes in the hospital and medical insurance programs include simplification of reimbursement to hospitals by consolidating all coverage of outpatient hospital services under the medical insurance program; elimination of the requirement for a physician's certification prior to receipt of hospital outpatient services and admissions to general hospitals; and changing the open enrollment period and the effective period of the premium rate for the medical insurance program from a biennial to an annual basis.

ADMINISTRATION OF THE 1965 AND 1967 AMENDMENTS

In 1965 the Social Security Administration was completely reorganized to handle its vastly enlarged responsibility under the amendments of 1965. The reorganization divided the central office into five staff offices and seven operating bureaus, including a new Bureau of Health Insurance, which was given the overall responsibility for medicare.

At the same time major improvements were made in methods of processing and in service to the public. A more complex and efficient utilization of skills of electronic data processing and communications was achieved by centering responsibility for these functions in a single headquarters bureau. Improved administration of the program in the field was assured by bringing regional and field staff under regional assistant commissioners.

To make service more available to the public, 146 new local offices have been opened in the last two years, bringing the number to 762. Since July 1966, most local social security offices have remained open up to three hours one night a week or on Saturdays. More than half a million people have had the convenience of being able to come to the office at a time when a family member or neighbor could bring them, or without losing time from work.

The 1965 amendments had a tremendous impact on the volume of work handled by the Social Security Administration. In a single year, fiscal year 1966, our work loads increased by 44.8 percent. Work loads for subsequent years have continued to increase over the new, high 1966 level so that the volume of work projected in the 1969 budget represents approximately a doubling of work over the last pre-1965 amendment year.

Not only have our own work loads greatly increased, but so too has the work load of those organizations assisting us in administering the medicare program—

Blue Cross, Blue Shield and private insurance companies. These private agencies are primarily responsible for reviewing and paying the bills, determining reasonable charges and reasonable costs, and auditing providers of service.

On a national basis the carriers had backlogs of physicians' bills equal to eight weeks of work after the first two months of operation. Within six months this was reduced to five and now, in this second year of the program, the work on hand is equivalent to 3.6 weeks even though the volume has greatly increased. For a time the average time nationally was down to about two weeks.

From the beginning of the program, payment of hospital bills has been handled more quickly than bills for physician services. Nationwide, the backlog of hospital bills in intermediary offices is equivalent to 1.3 weeks.

The sharp increases in work loads in 1966 and 1967 placed a severe strain on the Administration's staff and its data processing installations. During fiscal year 1967 substantial backlogs in the cash benefit program developed. The time for processing new claims for retirement and survivor benefits rose from a pre-medicare average of four weeks to over seven weeks. By the beginning of 1968, we were able to reduce the processing time to five weeks. Of course, with the sharp influx of new claims beginning in January 1968 as a result of the 1967 amendments, we are losing some of our gains. However, for retirement and survivors claims we expect this to be only a temporary loss; we expect by early fiscal year 1969 to return to the pre-medicare level of four weeks.

The handling of disability claims has always been a longer process. We have been averaging about nine weeks for cases not requiring extensive development and 16 weeks for cases requiring such development. Because the 1967 amendments will have the effect of increasing the number of disability determinations to be made during calendar year 1968 by 39.2 percent, some stretching out of the processing time will result for a time even with the added resources provided in the 1968 and 1969 budget estimates. However, we are adopting measures such as specialization on disability work in our larger district offices and concurrent development of disability claims by district offices and State agencies to keep the increase in disability claims processing time to a minimum.

MANAGEMENT IMPROVEMENTS

We are continuously searching for improvements in our processes that can be accomplished by administrative or legislative changes that do not impair the rights of beneficiaries. We made an important step through the legislative process in the 1965 amendments where provision was made for automatic recomputation of benefits and in the 1967 amendments further simplification was made in the calculation of benefits where it is to the beneficiary's advantage to use earnings reported prior to 1950.

The automatic recomputation of benefits provided by the 1965 amendments eliminated the requirement of prior law that a beneficiary must file an application to have his benefit recomputed. The application requirement had several disadvantages. Some beneficiaries, through a lack of information on their part, missed out on increases that they would have had had they applied. Also, the process was more costly than need be because of the paper work associated with handling the application and because we could not take full advantage of our ADP capability. In fiscal year 1967 we completed 1.4 million recomputations under the new automatic procedures at a cost of $4.7 million. If we had handled these recomputations under the old procedures, the cost would have been $37 million. The new procedure in the 1967 amendments related to the use of a formula in determining pre-1950 earnings in the benefit calculations rather than an actual search of reported earnings will produce less dramatic savings—about $414 thousand annually. However, it signifies a continued effort to achieve administrative savings through simplification of our work processes by recommending changes in the law.

Although we have made significant economies because of revisions in the Act, most of our savings in administrative costs are achieved by improving our procedures and greater use of automation. We are giving special emphasis now in our planning to the more expeditious handling of actions such as changes of address and other changes in the status of beneficiaries on the rolls. The number of these actions being handled by computer processes is increasing each month. Also, beginning this fiscal year, notice of changes of address, death notices, and other changes that are received in the district offices have been routed directly by wire to our central computer complex rather than being routed first

to the payment centers and then into the computer installation. This has the effect of speeding up the handling of these actions by at least three days.

Another management improvement now underway is the installation of folder control systems in our payment centers. The Administration has recognized for several years the desirability of developing an electronic system to replace its manual procedures for locating case folders and controlling work in its payment centers. However, it has been only recently that equipment has been developed to do the job. Electronic control systems are in effect in the disability operation in Baltimore and in the Birmingham, Philadelphia and New York Payment Centers. The Chicago, Kansas City and San Francisco systems should become operational before the close of this fiscal year.

Under this system a computer is used to keep track of case folders as they move among the various work stations in the payment center. The system will keep all correspondence, claims and beneficiary actions under close control at all times. This will permit much faster association of incoming correspondence related to a beneficiary whose case folder is out of file than has been possible under the existing manual procedures for associating correspondence with folders out of file. Moreover, special attention can more easily be given to processing delayed cases and the management of the huge volume of work in process becomes much easier.

### Appropriation Estimate

"Social Security Administration

"limitation on salaries and expenses

"For necessary expenses, not more than [$631,500,000] *$778,145,000* may be expended as authorized by section 201(g)(1) of the Social Security Act, as amended, from any one or all of the trust funds referred to therein: *Provided*, That such amounts as are required shall be available to pay the cost of necessary travel incident to medical examinations or hearings for verifying disabilities or for review of disability determinations, of individuals who file applications for disability determinations under title II of the Social Security Act, as amended: *Provided further*, That $25,000,000 of the foregoing amount shall be apportioned for use pursuant to section 3679 of the Revised Statutes, as amended (31 U.S.C. 665), only to the extent necessary to process workloads not anticipated in the budget estimates and to meet mandatory increases in costs of agencies or organizations with which agreements have been made to participate in the administration of title XVIII *and section 221 of title II* of the Social Security Act, as amended, and after maximum absorption of such costs within the remainder of the existing limitation has been achieved."

### Appropriation language change

*Change*

". . . and to meet mandatory increases in costs of agencies or organizations with which agreements have been made to participate in the administration of title XVIII *and section 221 of title II* of the Social Security Act, as amended. . . ."

*Explanation*

As a result of the enactment of the medicare program, the contingency reserve was made available to meet unanticipated increases in costs of agencies or organizations which entered into agreements to assist in administering the health insurance program. It was recognized that intermediaries and carriers might incur cost increases that would be unforeseen in the budget estimates, and that the Administration would be required to pay such costs.

The Administration now proposes that the recognized principle allowing use of the contingency reserve for mandatory increases of organizations and agencies assisting in the health insurance program be extended to State agencies assisting in the disability program. Section 221 of title II of the Social Security Act requires that the Secretary of DHEW enter into agreements with agencies of the States to make determinations of disability on the claims filed under the disability program.

One significant cost item for the State agencies—salaries for their employees—is largely beyond the control of the Social Security Administration. The rates are set by statute and are difficult to predict with accuracy in the budget estimates. Another uncontrollable cost item is the unit cost for disability cases

requiring one or more consultative medical examinations. The cost of these examinations is established by fee schedules of State governments which cover medical examinations under various State programs as well as the disability program of the Social Security Administration.

There is a strong possibility that in future years these items will be even more difficult to estimate. The principle of comparability of civil service salaries to private employment is receiving more recognition, and may take the form of greater increases in State agency salaries. The general rise in cost of physician services has already caused an increase in fee schedules for consultative examinations and may have an even greater effect in the future.

AMOUNTS AVAILABLE FOR OBLIGATION

| | 1968 | 1969 |
|---|---|---|
| Appropriation | $631,500,000 | $778,145,000 |
| Proposed for separate transmittal: | | |
| Program supplemental | 72,555,000 | ---------- |
| Pay supplemental | 12,373,000 | ---------- |
| Total | 716,428,000 | 778,145,000 |

OBLIGATIONS BY ACTIVITY

| | 1968 estimate | | 1969 estimate | | Increase or decrease | |
|---|---|---|---|---|---|---|
| | Positions | Amount | Positions | Amount | Positions | Amount |
| Old-age and survivors insurance program | 34,504 | $332,839,101 | 36,043 | $353,819,811 | +1,539 | +$20,980,710 |
| Disability insurance program | 10,803 | 144,470,045 | 10,981 | 157,290,028 | +178 | +12,819,983 |
| Health insurance program: | | | | | | |
| (a) Hospital insurance plan | 3,971 | 89,316,756 | 3,812 | 82,759,088 | −159 | −6,557,668 |
| (b) Supplementary medical insurance plan | 4,218 | 149,802,098 | 4,388 | 159,276,073 | +170 | +9,473,975 |
| Contingency reserve | | | | 25,000,000 | ---------- | +25,000,000 |
| Total obligations | 53,496 | 716,428,000 | 55,224 | 778,145,000 | +1,728 | +61,717,000 |
| Unobligated balance, reserve | | | | | | |
| Total obligations and balances | | 716,428,000 | ---------- | 778,145,000 | ---------- | +61,717,000 |

OBLIGATIONS BY OBJECT

| | | 1968 estimate | 1969 estimate | Increase or decrease |
|---|---|---|---|---|
| | Total number of permanent positions | 53,496 | 55,224 | +1,728 |
| | Full-time equivalent of all other positions | 796 | 271 | −525 |
| | Average number of all employees | [1] 50,493 | [1] 53,339 | +2,846 |
| 11 | Personnel compensation: | | | |
| | Permanent positions | $357,021,500 | $391,914,285 | +$34,892,785 |
| | Positions other than permanent | 3,164,136 | 1,167,865 | −1,996,271 |
| | Special personal service payments | 76,945 | 104,490 | +27,545 |
| | Other personnel compensation | 39,942,698 | 17,594,160 | −22,348,538 |
| | Total personnel compensation | 400,205,279 | 410,780,800 | +10,575,521 |
| 12 | Personnel benefits | 29,231,425 | 31,348,747 | +2,117,322 |
| 21 | Travel and transportation of persons | 6,324,357 | 7,321,655 | +997,298 |
| 22 | Transportation of things | 1,774,178 | 1,790,185 | +16,007 |
| 23 | Rent, communications, and utilities | 46,778,705 | 51,644,015 | +4,865,310 |
| 24 | Printing and reproduction | 7,780,118 | 5,308,292 | −2,471,826 |
| 25 | Other services | 14,804,870 | 16,670,461 | +1,865,591 |
| | Payments to States | 51,476,700 | 61,680,250 | +10,203,550 |
| | Payments to intermediaries | 148,920,000 | 149,778,000 | +858,000 |
| 26 | Supplies and materials | 5,563,444 | 5,663,529 | +100,085 |
| 31 | Equipment | 3,121,229 | 10,855,484 | +7,734,255 |
| 32 | Land and structures | 383,174 | 200,000 | −183,174 |
| 42 | Insurance claims and indemnities | 64,521 | 103,582 | +39,061 |
| | Contingency reserve | | 25,000,000 | +25,000,000 |
| | Total obligations by object | 716,428,000 | 778,145,000 | +61,717,000 |

[1] Excludes overtime equivalent as follows: 1968, 4,395 man-years; 1969, 1,884 man-years.

## SUMMARY OF CHANGES

| | |
|---|---|
| 1968 enacted appropriation (including contingency) | $631,500,000 |
| Proposed supplementals: | |
| Increased pay costs (Public Law 90–206) | 12,373,000 |
| Other | 72,555,000 |
| 1968 total estimated obligations | 716,428,000 |
| 1969 estimated obligations (including contingency) | 778,145,000 |
| Total change | +61,717,000 |

| | Base | | Changes to base | |
|---|---|---|---|---|
| | Man-years | Amount | Man-years | Amount |
| Increases: | | | | |
| A. Reinstatement of contingency reserve of $25,000,000 | | | | $25,000,000 |
| B. Built-in: | | | | |
| 1. Annualization of pay raise, Public Law 90–206 | | —$5,064,337 | | 5,064,337 |
| 2. Average salary costs | | 34,639,740 | | 5,145,533 |
| a. Pay above the base of grade | | 32,570,858 | | 4,041,170 |
| b. Reclassifications in 1968 | | 1,368,871 | | 79,000 |
| c. Reclassifications in 1969 | | | | 72,892 |
| d. Promotions to journeyman grades in 1968 | | 4,419,189 | | 2,135,066 |
| e. Promotions to journeyman grades in 1969 | | | | 4,895,130 |
| f. Recruitment below journeyman grades in 1968 | | —3,719,178 | | —3,635,430 |
| g. Recruitment below journeyman grades in 1969 | | | | —4,032,446 |
| h. Pay in excess of 52 weeks | | | | 1,590,151 |
| 3. Increases in wage and price levels of public and private agencies performing work on a contract basis | | | | 8,404,411 |
| a. State agencies (disability program) | | | | 829,141 |
| b. State agencies (health program) | | | | 324,370 |
| c. Intermediaries (health program) | | | | 7,250,900 |
| 4. Increase in postal rates | | 933,810 | | 690,568 |
| Subtotal, built-in | | | | 19,304,849 |
| C. Program: | | | | |
| 1. Increase of 4.2 percent in work output | 54,888 | 644,542,020 | 1,801 | 32,546,385 |
| a. Increase of 3.3 percent in work output of SSA: Payroll and other objects | 54,888 | 444,145,320 | 1,801 | 19,375,172 |
| b. Increase of 17.8 percent in work output of State agencies making disability determinations | | 43,476,700 | | 7,750,113 |
| c. Increase of 3.6 percent in work output of health insurance intermediaries | | 148,920,000 | | 5,421,100 |
| d. Health insurance State agency operations | | 8,000,000 | | |
| 2. Increase in unit cost for consultative examinations for disability determinations | | | | 688,788 |
| 3. Better allocation to the health insurance program of costs incurred by State agencies | | | | 617,630 |
| 4. Continuing space and communications requirements | | 22,235,469 | | 3,181,782 |
| a. Annualization of changes made in 1968: Other objects | | 22,235,469 | | 1,364,823 |
| b. Changes scheduled for 1969: Other objects | | | | 1,816,959 |
| 5. Purchase of ADP equipment | | 234,450 | | 7,385,637 |
| 6. Nonrecurring work performed on a contract basis | | 2,321,650 | | 1,215,850 |
| 7. Replacement of equipment | | 6,046 | | 1,074,518 |
| 8. Changes in prices and inventories | | | | 746,382 |
| Subtotal, program | | | 1,801 | 47,456,972 |
| Gross increases | | | 1,801 | 91,761,821 |

| | Base | | Changes to base | |
|---|---|---|---|---|
| | Man-years | Amount | Man-years | Amount |
| Decreases: | | | | |
| A. Productivity changes | | | —$1,466 | —$16,253,051 |
| 1. Procedural changes and other cost reductions: Payroll and other objects | | | —1,019 | —4,716,988 |
| 2. Increased production from better-trained and supervised staff: Payroll costs | | | —370 | —2,752,006 |
| 3. Decreased proportion of time devoted to training | | | —210 | —1,391,678 |
| 4. Changes in proportion of time scheduled for developing new operating procedures and ADP applications | | | 133 | 1,875,621 |
| 5. Productivity increase for health insurance intermediaries | | | | —9,268,000 |
| B. Decrease in nonrecurring costs of agencies under contract with SSA | | | | —2,552,492 |
| C. Recruiting, equipping, and training new staff | | $2,876,677 | | —790,862 |
| D. Effect of reduction in the use of overtime on additional cost of overtime | | 7,866,804 | | —4,992,522 |
| E. Reduction in rent resulting from purchase of ADP equipment | | | | —2,011,671 |
| F. Intermittent or nonrecurring costs | | 5,835,671 | | —3,444,223 |
| Gross decreases | | | —1,466 | —30,044,821 |
| Total change | | | +335 | +61,717,000 |

EXPLANATION OF CHANGES

*Increases*

A. Reinstatement of contingency reserve of $25,000,000 ..... $25,000,000

The $25,000,000 contingency fund authorized for 1968 will be used to finance program work loads in excess of those contained in the President's Budget for fiscal year 1968. This requirement stems principally from the underestimation of needs for administering the health insurance program in the 1968 budget and the related repercussions of the medicare program on the cash benefit program which were not provided for in the 1968 budget. The budget request contains a contingency fund of $25,000,000 for 1969.

*B. Built-in*

1. Annualization of pay raise, P.L. 90–206 ..... 5,064,337

This is the effect in 1969 of varying effective dates of changes in 1968 of pay scales and Government payment for employee life insurance.

2. Average salary costs ..... 5,145,533

a. Pay above the base of the grade ..... 4,041,170

This is the cost of carrying within-grade promotions granted in 1968 for a full year in 1969 and the cost of such promotions in 1969.

b. Reclassifications in 1968 (annualization) ..... 79,000

This is the cost of carrying for a full year in 1969 the reclassifications of positions that took place in 1968.

c. Reclassifications in 1969 ..... 72,892

This is the cost of various minor reclassifications scheduled in 1969.

d. Promotions to journeyman grades in 1968 (annualization) .. 2,135,066

This is the cost of carrying for a full year in 1969 the promotions of trainees to journeyman grades. Many of these promotions are to intermediate grade levels because the development of a fully-trained technician may take two years.

e. Promotions to journeyman grades in 1969 ..... 4,895,130

This is the cost of promotions expected in 1969 as a result of recruitment below the journeyman grade planned in 1968 and 1969.

EXPLANATION OF CHANGES—continued

*B. Built-in*—Continued

2. Average salary costs—Continued
   f. Recruitment below journeyman grades in 1968 (annualization) ---------- —$3,635,430
   g. Recruitment below journeyman grades in 1969---------- —4,032,446
   Offsetting promotions to journeyman grades is the practice of hiring new personnel at levels one or two grades below the journeyman level. This is especially true of the higher-graded technical positions in the claims and post-adjudicative processes where classroom and on-the-job training in a complex law may take up to two years.
   h. Pay in excess of 52 weeks---------- 1,590,151

3. Increases in wage and price levels of public and private agencies performing work on a contract basis---------- 8,404,411
   a. State agencies (disability program)---------- 829,141
   This represents principally both the annualization of changes in salary scales and classifications of positions in State agencies made in 1968 and additional changes estimated to occur in 1969. Average salary of State personnel engaged in the disability program is expected to increase from $7,261 in 1968 to $7,550 in 1969.
   b. State agencies (health program)---------- 324,370
   This increase is similar to the one above for the disability program. Average salaries for this program are higher than the disability program because of a higher proportion of technical and professional staff. The 1969 estimate provides for an average salary of $8,895 compared with $8,472 in 1968.
   c. Intermediaries (health program)---------- 7,250,900
   The 1969 estimate provides for a five percent increase in salaries, services obtained through subcontracts, supplies and other costs of private agencies handling the bill payment and other functions under the health insurance program. This increase in wage and price levels is more than offset by a productivity improvement of $9,268,000 which is shown among the decreased items.

4. Increase in postal rates---------- 690,568
   This is the additional cost in fiscal year 1969 of the postal rate increases contained in P.L. 90–206. These increased rates became effective January 7, 1968.

*C. Program*

1. Increase of 4.2 percent in work output---------- 32,546,385
   The volume of work to be handled by the staff of the Social Security Administration and by public and private agencies under contract to perform certain administrative functions of the health insurance and disability insurance programs is estimated to increase by 4.2 percent over the 1968 level. This increase is largely due to the growth of population and in the proportion of the population benefiting from the social security program.
   a. Increase of 3.3 percent in work output of SSA manpower.
   1,801 man-years and $19.375,172
   The increase of 3.3 percent in work output is the net effect of: (1) An increase of 2.3 percent in measurable work-load units at a computed cost of 1,288 man-years and $14,472,492; (2) an improvement in service to the public and in the outgoing quality of work performed at an estimated cost of 801 man-years and $5,914,229; and (3) a decrease in the volume of non-recurring work amounting to 288 man-years and $1,011,549.

EXPLANATION OF CHANGES—continued

*C. Program*—Continued

1. Increase of 4.2 percent in work output—Continued

The increase in work-load units results primarily from servicing an estimated 25,005,000 beneficiaries in the cash benefit program in fiscal year 1969 as compared with 23,875,000 in fiscal year 1968. Also, the number of persons expected to receive services paid for under the medicare program is expected to rise from 4,500,000 in 1968 under the hospital insurance program to 4,600,000 in 1969; under the medical insurance program the number of individuals receiving covered services is estimated to increase from 7,500,000 in 1968 to 7,600,000 in 1969.

To improve service to beneficiaries of the social security programs, the Administration instituted in fiscal year 1968 a computerized system for more effective control and rapid location of the 23 million beneficiary folders in its OASI payment centers. (A similar system had already been put into effect for disability cases at SSA headquarters.) Implementation of this system began in fiscal year 1968 and will require 254 man-years. The annualization of this system in fiscal year 1969 will require an additional 449 man-years. It is expected that the total manpower requirements will be quickly amortized through the virtual elimination of lengthy searches for folders, reduction in follow-up requests for information, and many other management improvements. In this budget a saving of 299 man-years is shown in the decrease items under procedural changes as a result of the implementation of the case control system.

The 1969 budget also provides 288 man-years to restore partially those quality reviews of claims and post-entitlement work in the payment centers which have been suspended during the heavy work-load period following the 1965 amendments. The reinstatement of these reviews is necessary to ensure uniform interpretation and application by the staff of adjudicative procedures in making entitlement and payment decisions. The reviews pinpoint individual employee weaknesses and permit more effective training. An additional 64 man-years is needed to annualize procedures for improved development of disability cases in the district offices and other minor quality improvements.

In fiscal year 1968 the Administration used 604 man-years for non-recurring work, the principal job being converting the monthly benefits to the higher amounts provided by the 1967 Amendments to the Social Security Act. The amount of manpower required for non-recurring work declines to 316 man-years in 1969. This is for the continuation of work started in 1968 to process a backlog of underpayments to beneficiaries that have accumulated over several years because the law prior to the 1967 amendments required that payments made after the death of the beneficiary must be paid to a legal representative of the estate. The 1967 amendments eliminated this requirement and established an order of priority for disposing of these underpayments.

EXPLANATION OF CHANGES—continued

C. *Program*—Continued

1. Increase of 4.2 percent in work output—Continued
   b. Increase of 17.8 percent in work output of State agencies making disability determinations ..... $7,750,113

   The sharp increase in disability work in the State agencies in 1969 is due largely to the increased volume of disability claims and reconsideration requests stemming from the 1967 Amendments to the Social Security Act. During fiscal year 1968 and early fiscal year 1969, it will be necessary to make temporary modifications to State agency contracts to permit a channeling of some of the disability determination work normally performed by the States into SSA headquarters. It is expected that these temporary modifications to contracts will be terminated as soon as the States have staffed up and are able to handle the larger volume of work on a current basis.

   c. Increase of 3.6 percent in work output of HI intermediaries ..... 5,421,000

   The work output increase of 3.6 percent for the health insurance intermediaries is the net effect of a higher volume of processed bills and claims and a reduction in the costs of auditing providers of service. Intermediaries will process 7.6 percent more hospital insurance bills and 4.3 percent more medical insurance claims in fiscal year 1969 than in fiscal year 1968 for an increase cost of $7,121,000. Audit costs are expected to decline by $1,700,000 from the 1968 level. This reflects mainly less complexity than in the first full year of the audit program.

   d. Health insurance State agency operations ..... No change

   The work of State agencies in certification and recertification of eligibility of hospitals, extended care facilities and other providers of service for participation in the hospital insurance program is expected to be at about the same level in 1969 as 1968.

2. Increase in unit cost for consultative examinations for disability determinations ..... 688,788

   The average cost of obtaining consultative medical examinations for each disability case requiring one or more examinations is estimated to increase from $61.20 in 1968 to $63.00 in 1969. The budgeted increase reflects actions being taken by State agencies to increase medical fee schedules. Also, the amount of data requested per case is expected to continue to rise, which will contribute to a higher unit cost.

3. Better allocation to the health insurance program of costs incurred by State agencies ..... 617,630

   Increased costs amounting to $617,630 in 1969 will result from a more adequate identitfication and measurement of actual State costs attributable to the health insurance program. A high proportion of State personnel working across divisional and program lines has made difficult an accurate accounting of costs. In some States accounting practices have not permitted charges across divisional or program lines. It is expected that these difficulties will be overcome by 1969; thus, the estimate for that year reflects full charges for State costs attributable to the health insurance program.

4. Continuing space and communications requirements ..... 3,181,782

   Of this increase $1,364,823 results from the annualization of the cost of added office space and communications facilities to be acquired in 1968 to accommodate an additional 5,904 permanent positions. In fiscal year 1969 additional space and communications facilities will be obtained for 1,728 more positions at a cost of $1,306,279 in that year. An additional $510,680 will be required because of increased rental rates and movement from inadequate rent-free space.

EXPLANATION OF CHANGES—continued

C. *Program*—Continued

5. Purchase of ADP equipment ..... $7,385,637

Planned purchases of ADP equipment are summarized below:

| Year | Type of equipment | Purchase price |
|---|---|---|
| 1968 | Magnetic tape terminals | $196,000 |
| | Tape control for IBM 7080 | 38,450 |
| | Total | 234,450 |
| 1969 | Central processing complex of 6 IBM 360/65's | 7,257,574 |
| | Microfilm printer | 180,000 |
| | Disk packs | 182,513 |
| | Total | 7,620,087 |

Of the equipment purchases scheduled for fiscal year 1969, all of the pieces except one IBM 360/65 computer and the microfilm printer will be equipment already being leased. Purchase of this equipment will be more economical to the government. In fiscal year 1969 alone it will produce rental savings of about two million dollars, which are shown among the decrease items. The microfilm printer and one computer, which will be new additions, are required for the estimated increase in work loads and for new uses of computer equipment. It is planned to purchase this equipment at the time of acquisition.

6. Non-recurring work performed on a contract basis ..... 1,215,850

This is the cost of non-recurring contractual work planned to evaluate the effectiveness of the social security program in providing income maintenance to those who have suffered an economic loss, to evaluate the effect of the medicare program on hospital financing and on patterns of health care use, and to obtain current data on the utilization of services and benefits paid under the medicare program. Also included in the estimate are studies to evaluate existing formulae for reimbursing providers of service under the medicare program.

7. Replacement of equipment ..... 1,074,518

This is the cost of replacing worn-out equipment. Such equipment has reached the point where repair is more costly than replacement.

8. Changes in prices and inventories ..... 746,382

Most of this increase ($585,384) is for increased rental rates for wire communications services. The remainder represents miscellaneous changes in rental rates for equipment and various adjustments in inventories of supplies.

*Decreases*

A. Productivity changes (—1,466 man-years) ..... —$16,253,051

1. Procedural changes and other cost reductions (—1,019 man-years) ..... —$4,716,988

These cost reductions are to be achieved principally through improvements to operating procedures and new or refined applications of automatic data processing methods to the work of the Social Security Administration.

2. Increased production from better trained and supervised staff. (—370 man-years) ..... —2,752,006

The application of greater resources to training and supervision in 1968 is expected to result in improved production from employees in 1969.

EXPLANATION OF CHANGES—continued

*Decreases*—Continued

3. Decreased proportion of time spent in training (—210 man-years) ---------- —$1,391.678
Since staff will increase at a decreasing rate in 1969 and most of the backlog of training related to the recruitment of new staff and to training of existing staff on the 1967 amendments will be completed in 1968, the time and money needed for training decrease in 1969.

4. Change in proportion of time scheduled for developing new operating procedures and ADP applications (133 man-years)---------- 1,875,621
Most of this additional time is needed to provide the manpower necessary to refine further and develop new automatic data processing applications to achieve future cost reductions and to continue improving the operating policies and procedures of the medicare program.

5. Productivity increase for health insurance intermediaries---- —9,268,000
This productivity improvement results from a decrease in training requirements for new staff as the staffing of the intermediaries levels out, elimination of one-time training requirements on revisions to the health insurance program made in the 1967 amendments, and improvements in operating procedures for handling bills and claims for services under the health insurance program.

B. Decrease in non-recurring cost of agencies under contract with SSA ---------- —2,552,492
All but $6,492 of this decrease is in the requirements for the health insurance intermediaries. It largely reflects elimition of one-time costs associated with implementation of the 1967 amendments in fiscal year 1968.

C. Recruiting, equipping, and training new staff---------- —790,862
The decrease in the number of new and vacant positions to be filled in 1969 as compared with 1968 results in lower estimates for travel, recruiting and moving expenses, equipment and supplies.

D. Effect of reduction in the use of overtime on additional cost of overtime---------- —4,992,522
As the staff of the Administration reaches higher levels needed for the on-going level of work and as abnormal backlogs and the non-recurring effect of the amendment work loads decrease, the amount of overtime used will decline. Thus, funds needed to pay the higher average cost of overtime above the average cost of regular time will decrease.

E. Reduction in rent resulting from purchase of ADP equipment---- —2,011,671
This is the rental reduction assuming the purchase of equipment discussed under program increases on October 1, 1968. Further rent reductions in future years will result in full amortization of the equipment in three years.

F. Intermittent or non-recurring costs---------- —3,444,223
To inform the public of their rights and responsibilities under the recently enacted amendments, unusually large expenditures will be required for printing and postage in 1968. Since these costs will not be repeated in 1969, total non-recurring costs will decline. The total non-recurring expenses of $2,391,448 in 1969 can be accounted for in four principal areas: (1) $1,183,883 for various equipment purchases, the largest of which is $690,000 for purchase of microfilm readers in lieu of renting; (2) $331,873 for opening 35 additional district offices and branch offices; (3) $150,000 as the Administration's share of a Department personnel data system; and (4) $176,000 for capital improvements to the headquarters building.

JUSTIFICATION—LIMITATION ON SALARIES AND EXPENSES

| | 1968 estimate | | 1969 estimate | | Increase or decrease | |
|---|---|---|---|---|---|---|
| | Positions | Amount | Positions | Amount | Positions | Amount |
| Personnel compensation and benefits [1] | 53,496 | $429,436,704 | 55,224 | $442,129,547 | +1,728 | +$12,692,843 |
| Payments to States | | 51,476,700 | | 61,680,250 | | +10,203,550 |
| Payments to intermediaries | | 148,920,000 | | 149,778,000 | | +858,000 |
| Other expenses | | 86,594,596 | | 99,557,203 | | +12,962,607 |
| Contingency | | | | 25,000,000 | | +25,000,000 |
| Total | 53,496 | 716,428,000 | 55,224 | 778,145,000 | +1,728 | +61,717,000 |

[1] Average manpower estimates are as follows:

| | 1968 | 1969 | Increase or decrease |
|---|---|---|---|
| Regular staff | 50,493 | 53,339 | +2,846 |
| Overtime equivalent | 4,395 | 1,884 | −2,511 |
| Total | 54,888 | 55,223 | +335 |

GENERAL STATEMENT

The Social Security Administration is responsible for administering national programs of old-age, survivors, disability, and health insurance. The old-age, survivors, and disability programs have their statutory basis in Title II of the Social Security Act, as amended. The health insurance program is administered under the provisions of Title XVIII of the Social Security Act. The basic objective of the overall social security program is to provide individuals and families a measure of protection against the risks of economic loss resulting from old-age, disability, or death, and more recently, the high costs of health care in old age.

Income is provided to retired and severely disabled workers and their dependents, and to dependent survivors of deceased workers, in the form of monthly payments, generally known as "social security benefits". These benefits are related to the worker's earnings on which social security contributions have been made. The health insurance program consists of a hospital insurance plan and a voluntary medical insurance plan. The hospital insurance plan helps eligible older people to finance the cost of hospital and related care. The medical insurance plan helps individuals who elect this coverage finance the cost of physicians' services and certain other medical and health services.

SOURCE OF FUNDS

The old-age, survivors, and disability insurance programs, and the hospital insurance plan are supported by contributions collected from employees, employers, and the self-employed in jobs, businesses, and professions covered by social security. The scheduled rate of contributions from each employer and employee is 4.4 percent in calendar years 1967 and 1968 and 4.8 percent in calendar year 1969. The rate for the self-employed is 6.4 percent in calendar years 1967 and 1968 and 6.9 percent in calendar year 1969. These rates were applied to a maximum of $6,600 in earnings until December 31, 1967. Effective January 1, 1968, the maximum earnings base is $7,800.

For those aged who are not insured under social security or railroad retirement, but who are entitled to hospital insurance benefits, the cost of hospital insurance payments and associated administrative costs is borne by the general revenues. The voluntary medical insurance plan is supported by equal contributions by the participants and by general revenue. The rate to be paid is $3 per month until April 1968 when it will be increased to $4 until June 30, 1969. This rate is subject to redetermination annually.

Social security contributions are collected by the Internal Revenue Service, with the exception of contributions from State and local government employees and their employers which are collected by the Social Security Administration, and deposited in the trust funds—the "Federal Old-Age and Survivors Insurance Trust Fund" created in 1939, the "Federal Disability Insurance Trust Fund" created in 1956, and the "Federal Hospital Insurance Trust Fund"

created in 1965. The contributions by the participants in the voluntary medical insurance plan are collected by the Social Security Administration and deposited, together with matching contributions from the general funds of the Treasury, in the "Federal Supplementary Medical Insurance Trust Fund" which was also created in 1965. Benefit payments and administrative costs are paid from the trust funds. Funds not currently required for expenses are required by statute to be invested in "obligations of the United States or in obligations guaranteed as to both principal and interest by the United States" and the interest earned is used to support the programs.

GROWTH OF PROGRAM

Since the Social Security Act became law on August 14, 1935, the Congress has passed numerous amendments to the Act which made significant changes in the scope and character of the program, the most recent change being the Social Security Amendments of 1967. Over the years the program has been so strengthened and broadened that today nine out of ten workers are covered by the cash benefit program. About 92 percent of the people now reaching age 65 are eligible for cash benefits. Almost all persons aged 65 or over are insured against most hospital costs, and about 93 percent of the aged have enrolled in the medical insurance program and are insured against a substantial part of physician and other medical costs.

The growth of the program is best illustrated by a comparison of the number of beneficiaries in payment status and the amount of benefits paid. During fiscal year 1950, an average of 2,742,808 persons were receiving monthly benefits; in fiscal year 1969, an average of 25,005,000 individuals will be receiving monthly benefits. In addition, an estimated 4,600,000 aged will receive hospital insurance services and an estimated 7,600,000 will receive supplementary medical insurance services. Benefit payments in fiscal year 1950 amounted to $727,266,479; in fiscal year 1969, an estimated $31,753,000,000 in cash and medicare benefits will be paid.

ESTIMATED WORK OUTPUT

The size of the Administration's job in any given year is largely dictated by factors outside its control. Major factors are the level of employment, labor mobility, birth, marriage, disability, retirement, death rates, and rates of utilization of health care services by the aged. The estimated effect of these factors on the size of the Administration's job is determined by the actuaries and economists who prepare the basic work-load estimates. These estimates then serve as the basis for the Administration's budget estimates, which are developed primarily by a work-load production-rate method.

*SSA Proper.*—The work output of the Administration increased in 1967 by 15.5 percent over a 1966 level which had included substantial "make-ready" work for the medicare program as well as added work in the OASDI program stemming from the 1965 amendments. Fiscal year 1967 was the first year of operation under the new health insurance program. Many unforeseen areas of work developed as a result of the new program, causing backlogs at the end of fiscal year 1967 to be significantly higher than planned, particularly in the retirement and survivors insurance program.

In fiscal year 1968 the Administration must process the backlogs built up in 1967, handle the normal increase in work loads related to a growing population, and process the additional heavy work loads generated by the 1967 amendments. Overall, work output in 1968 will increase another 13.5 percent over the very high 1967 level.

Work output in 1969 is expected to be another 3.3 percent higher than in 1968. This reflects processing of a substantial part of the 1967 amendment work load in the first part of fiscal year 1969, the continuing upward trend in the number of persons eligible for benefits, and partial reinstatement of reviews suspended during fiscal years 1967 and 1968 to improve the outgoing quality of SSA work.

*State agencies (disability program).*—The work output of State agencies under contract with the Administration to make determinations of disability increases by 20.7 percent in 1968 over 1967 because of the effect of the 1967 amendments which provide for benefit payments to disabled widows and widowers and for the liberalization of the insured status requirements for workers disabled before age 31. In 1969, a further increase of 17.8 percent in work output is projected because of the carryover of amendment work from fiscal year 1968, plus the effect of the normal increase in disabled beneficiaries coming on the rolls.

*Carriers and intermediaries (health insurance program).*—The bill payment and certain other administrative functions under the health insurance program are performed by Blue Cross and Blue Shield organizations and by private insurance companies. Fiscal year 1967 was the first year of operation of the new health program, and the work load in that year was not representative of the ongoing level because of the initial lag between provision of services and submission of bills and because the extended care facilities part of the hospital insurance plan was in effect for only half of the year. Also, the $50 deductible provision in the supplementary medical insurance plan was in effect twice in fiscal year 1967 but will be in effect only once in 1968 and 1969.

These factors plus the increase in the number of aged persons eligible under the program will increase work output required of the carriers and intermediaries by 74 percent in 1968. In 1969, work output increases by 3.6 percent, which represents a more normal year-to-year growth in the program.

MANPOWER

During fiscal year 1967 the Administration used 49,650 man-years to handle the heavy work loads of the expanded social security program and to cope with the many problems which developed in connection with implementing the health insurance provisions. Of this total, 3,728 man-years were obtained through the use of overtime. In fiscal year 1968, total manpower will be 54,888 man-years to handle substantially more work and 4,395 man-years of this will be through the use of overtime.

In fiscal year 1969 total manpower budgeted amounts to 55,223 man-years, an increase of less than one percent over 1968. Overtime declines about 57 percent from the 1968 level to 1,884 man-years.

PRODUCTIVITY

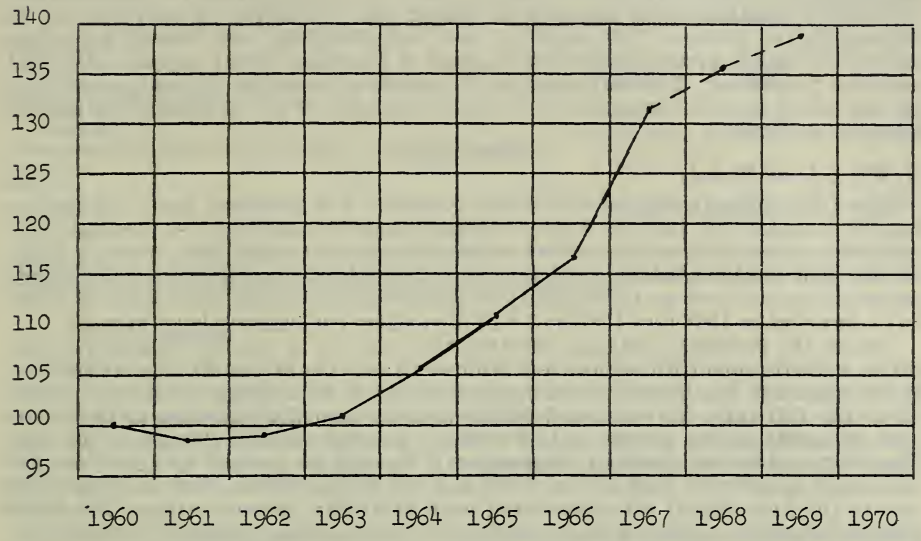
*Fiscal year 1967 actual experience.*—During fiscal year 1967 the Administration saved 6,350 man-years and $47,714,000 because of higher productivity than experienced in 1966. This represented a 12.8 percent increase in productivity over 1966, of which 10.1 percent was related to revised procedures for handling recomputations of benefits.

*Fiscal years 1968 and 1969.*—A more normal increase in productivity of over two percent each year is budgeted for 1968 and 1969. This further improvement is due principally to procedural changes. Changes in the amount of training of new employees and retraining of present employees, the proportion of indirect to direct time, and the increased proficiency of the staff also enter into the year-to-year increases in productivity.

*Fiscal years 1968 and 1969 estimates compared with fiscal year 1967 experience.*—At 1967 overall productivity 1968 and 1969 work output would require 56,329 man-years and 58,177 man-years respectively, as compared to 54,888 and 55,223 budgeted. Increased productivity thus accounts for man-year savings of 1,441 in 1968 and 2,954 in 1969. Based on average payroll costs per man-year for each year, the money savings amount to $11,273,000 in 1968 and $23,650,000 in 1969.

The following chart shows the trend in productivity in the Administration since fiscal year 1960. The work output index used in computing the productivity index is composed of units of program work loads processed, adjusted for changes in work-load mix and substance, and non-recurring work involving the use of Administration manpower. The manpower index comprises total manpower paid directly from this appropriation, including overtime. Work performed by State agencies and intermediaries, and the manpower for them, are excluded.

Comparison of Manpower with Work Load
Productivity Index
FY 1960 = 100




INDEXES OF WORK OUTPUT, MANPOWER, AND PRODUCTIVITY

| Year | Work output | Manpower | Productivity [1] |
|---|---|---|---|
| 1960 actual | 100.00 | 100.00 | 100.00 |
| 1961 actual | 114.11 | 116.39 | 98.04 |
| 1962 actual | 132.10 | 134.50 | 98.22 |
| 1963 actual | 137.55 | 135.35 | 101.63 |
| 1964 actual | 144.80 | 137.24 | 105.51 |
| 1965 actual | 151.60 | 136.84 | 110.79 |
| 1966 actual | 219.47 | 187.66 | 116.95 |
| 1967 actual | 253.55 | 192.22 | 131.91 |
| 1968 estimate | 287.66 | 212.50 | 135.37 |
| 1969 estimate | 297.10 | 213.80 | 138.96 |

[1] Productivity index equals work output index divided by manpower index.

ACTIVITY 1—OLD-AGE AND SURVIVORS INSURANCE PROGRAM

| | 1968 estimate | | 1969 estimate | | Increase or decrease | |
|---|---|---|---|---|---|---|
| | Positions | Amount | Positions | Amount | Positions | Amount |
| Personnel compensation and benefits [1] | 34,504 | $274,706,600 | 36,043 | $281,440,193 | +1,539 | +$6,733,593 |
| Payments to States | | 4,973,530 | | 9,200,950 | | +4,227,420 |
| Other expenses | | 53,158,971 | | 63,178,668 | | +10,019,697 |
| Total | 34,504 | 332,839,101 | 36,043 | 353,819,811 | +1,539 | +20,980,710 |

[1] Average manpower estimates are as follows:

| | 1968 positions | 1969 positions | Increase or decrease |
|---|---|---|---|
| Regular staff | 32,799 | 34,789 | +1,990 |
| Overtime equivalent | 3,049 | 1,161 | −1,888 |
| Total | 35,848 | 35,950 | +102 |

SCOPE OF PROGRAM

Funds requested for Activity 1 provide for: (1) Making the initial determination of eligibility of workers, wives, widows, children, and dependent parents for old-age and survivors benefits; (2) re-evaluating the initial determination when requested by the claimant; (3) making changes to the beneficiary rolls to assure proper and correct payment of benefits; and (4) investigating the beneficiary's continuing entitlement to benefits, including the evaluation of performance of representative payees. This activity, and the disability and health insurance activities, each support a distributive share of functions which support all social security programs: The maintenance of records of earnings of workers covered by the social security program, the overall direction of the program, and administrative services.

WORK LOADS

*A. Work-Load Trends*

The 1967 Amendments to the Social Security Act provided for a 13 percent benefit increase for persons now receiving monthly benefits, and increased the minimum monthly benefit from $44 to $55 effective February 1968. These amendments also made substantial changes in the old-age and survivors insurance program, which have an immediate and significant impact on the volume of work to be handled in 1968 and 1969 and will also affect the ongoing level of work.

One of the principal changes affecting this activity is making disability a condition of entitlement for widow and widower's benefits at age 50. If a widow(er) is not disabled, she is entitled to benefits at age 60 at a reduced rate and at age 62 at the full rate. An estimated 69,000 widows(ers) are expected to be in current payment status at the end of 1969 as a result of this change in the law. However, claims for disabled widows(ers)' benefits to be filed by that time are estimated at 209,000 (106,000 in 1968 and 103,000 in 1969). This is principally due to the high denial rate associated with disability determinations. The large number of claims expected to be denied will increase the volume of reconsideration and appeals actions in fiscal year 1969.

Another significant amendment change is the provision allowing dependents of female workers to qualify for benefits on the same basis as dependents of male workers. This provision is expected to result in an additional 174,000 beneficiaries (mostly children) being in current payment status at the end of 1969; claims applications from this group are estimated to be 155,000 (82,000 in fiscal year 1968 and 73,000 in fiscal year 1969).

The amendments also raised the benefit payable to non-insured persons age 72 and over from $35 to $40 per month and from $17.50 to $20 per month for their spouses. This provision will result in 35,000 claims applications in 1968 and 25,000 in 1969. The changes in the law, and the widespread publicity they have received, will stimulate public interest in the program. It is estimated that the Administration will receive 31,608,490 inquiries on the OASI program in 1968 and 30,822,500 in 1969. Because of the new amendment work and the abnormal amount of pending work carried into 1968 from 1967, the 1968 work output in Activity 1 will be over nine percent greater than fiscal year 1967. The amendments will continue to have a strong impact in 1969, when work output will be 3.9 percent greater than in 1968.

The amendments will augment the existing pattern of long-term growth of the benefit rolls. The long-range estimates of this program show that the number of persons on the rolls will continue to increase each year well into the next century. The growth in beneficiaries and amounts of benefits paid for past years and estimates for 1968–1969 are shown below:

| Fiscal year | Average number of beneficiaries | Benefits paid during year |
|---|---|---|
| 1941 | 222,488 | $64,341,885 |
| 1950 | 2,742,808 | 727,266,479 |
| 1960 | 13,243,564 | 10,269,708,577 |
| 1965 | 18,236,173 | 15,225,894,366 |
| 1967 | 20,595,000 | 18,885,714,204 |
| 1968 estimate | 21,725,000 | 20,742,000,000 |
| 1969 | 22,630,000 | 23,711,000,000 |

*B. Estimated Work Units*

Total work units to be processed in this activity in fiscal year 1969 increase 2.4 percent over fiscal year 1968. The principal work loads in this activity are:

| | 1968 estimate | 1969 estimate | Difference, 1969 over 1968 |
|---|---|---|---|
| Claims applications: | | | |
| Received | 3,622,000 | 3,666,000 | +44,000 |
| Processed | 3,644,290 | 3,685,000 | +40,710 |
| Changes to beneficiary rolls:[1] | | | |
| Received | 23,949,000 | 23,898,000 | −51,000 |
| Processed | 24,069,000 | 23,898,000 | −171,000 |
| Postadjudicative development and investigation actions: Received and processed | 2,387,066 | 2,461,612 | +74,546 |
| Inquiries: | | | |
| Received | 31,608,490 | 30,822,500 | −785,990 |
| Processed | 31,620,812 | 30,822,500 | −798,312 |

[1] This workload represents the sum of debit/credit actions taken on beneficiary accounts, exclusive of actions resulting from conversion of benefits to the higher rates provided by the 1967 amendments.

*C. Additional Work*

The Administration plans in fiscal year 1969 to: (1) Partially reinstate those quality reviews of claims and post-entitlement actions which had been suspended because of the press of 1965 amendment work loads; and (2) operate a case control system in the OASI payment centers. These actions are outlined in the Explanation of Changes section of this appropriation account. This activity's share of the increase in funding needed for these items is 693 man-years and $4,368,438.

Partially offsetting this increase is a decrease in the volume of non-recurring work amounting to 160 man-years and $318,654. Principal non-recurring jobs scheduled for completion in fiscal year 1968 are the conversion of benefits to the higher amounts provided by the 1967 amendments, a review of tax returns of self-employed persons for 1960–1963 to obtain any undetached schedules of earnings prior to destruction of these returns, and the filing of a punched control card in each OASI claims folder in connection with implementation of the case control system. One project initiated in 1968 that will be continued into 1969 is the processing of a backlog of underpayments due beneficiaries at the time of death. A priority list for payment of such underpayments was established by the 1967 amendments.

BUDGET ESTIMATE

The budget estimate for this activity in fiscal year 1969 is $353,819,811, an increase of $20,980,710 over fiscal year 1968. Of this increase, 20.1 percent is in the costs of State agencies under contract to make determinations of disability and 79.9 percent is in the costs of the components of the Social Security Administration.

*A. State Agencies*

State agencies, under contract with the Social Security Administration, will make disability determinations on claims of disabled widows and disabled children in 1968 and 1969. The costs for this service increase $4,227,420 in 1969 over 1968 and are due to: (1) A 76.7 increase in work output, $3,952,443, related to the backlog of widows made newly eligible for benefits under the 1967 amendments; (2) increases in average salary costs, $150,568; (3) increases in the unit cost for purchasing consultative examinations, $116,928; and (4) changes in other adjudicative costs, $7,481.

*B. Social Security Administration*

The Social Security Administration's share of the year-to-year increase of the OASI program is $16,753,290. The major increases are: (1) A 3.9 percent increase in work output, $14,370,272; (2) built-in salary changes such as within grades, promotion to journeyman levels, reclassifications, and pay in excess of 52 weeks, $3,303,165; (3) full-year effect of pay raise, $3,239,621; (4) OASI program's share of the purchase of six IBM 360/65 systems, $4,983,482; (5) annualization of space and communication changes made in 1968, and additional

space and communications facilities to be acquired in 1969, $2,632,909; (6) increase in postal rates on a full-year basis, increase in equipment rental rates for a full year and an increase in rates for the advanced record system, $876,466; and (7) other object increases including replacement of equipment, costs for opening new offices, and research contracts, $1,135,979.

Budgeted decreases in 1969 are: (1) Projected increase in productivity, $7,027,260; (2) savings due to the purchase of EDP equipment and a reduction in one-time purchases, $2,733,520; and (3) a reduction in the extra cost of overtime, $4,027,824.

ACTIVITY 2—DISABILITY INSURANCE PROGRAM

| | 1968 estimate | | 1969 estimate | | Increase or decrease | |
|---|---|---|---|---|---|---|
| | Positions | Amount | Positions | Amount | Positions | Amount |
| Personnel compensation and benefits [1] | 10,803 | $90,515,038 | 10,981 | $95,153,973 | +178 | +$4,638,935 |
| Payments to States | | 38,503,170 | | 43,537,300 | | +5,034,130 |
| Other expenses | | 15,451,837 | | 18,598,755 | | +3,146,918 |
| Total | 10,803 | 144,470,045 | 10,981 | 157,290,028 | +178 | +12,819,983 |

[1] Average manpower estimates are as follows:

| | 1968 | 1969 | Increase or decrease |
|---|---|---|---|
| Regular staff | 10,102 | 10,737 | +635 |
| Overtime equivalent | 655 | 355 | −300 |
| Total | 10,757 | 11,092 | +335 |

SCOPE OF PROGRAM

Funds requested for Activity 2 provide for: (1) Making the initial determination of eligibility for cash benefits of disabled workers and their dependents; (2) re-evaluating the initial decision upon the claimant's request; (3) making changes to the beneficiary rolls to assure proper and correct payment of benefits; and (4) investigating the beneficiary's continuing eligibility for benefits, including the evaluation of performance of representative payees.

WORK LOADS

*A. Work-Load Trends*

The Social Security Amendments of 1967 made extensive changes in the disability program. Virtually all work loads have been increased beyond the normal growth of the program. The most significant change is the liberalization of the insured status requirement for workers disabled before age 31. This provision lowers the amount of coverage these people require in order to quality for disability benefits.

Following heavy claims receipts in 1968, the number of applications by disabled workers and their dependents received in the district offices will decline in 1969, but the processed work will increase as backlogs are reduced. As the work flows through subsequent processing stations, most derivative receipts and processed work loads will continue to rise in 1969.

The long-range actuarial cost estimates of the disability program show that the number of persons on the benefit rolls will continue to rise each year until well into the next century. This growth is necessarily accompanied by an increased volume of changes to the beneficiary rolls.

The increase in the number of individuals being paid disability benefits since the cash benefits were first payable in fiscal year 1958 is accompanied by continuing growth in the volume of work to be processed in this activity. The higher benefit rate established by the 1967 amendments is fully reflected in the 1969 benefit payment amount shown on the following table:

| Fiscal year | Average number of beneficiaries | Benefits paid during year |
|---|---|---|
| 1958 | 149,850 | $168,419,534 |
| 1960 | 460,354 | 528,303,887 |
| 1965 | 1,563,366 | 1,392,190,265 |
| 1967 | 1,970,322 | 1,860,789,067 |
| 1968 (estimate) | 2,150,000 | 2,118,000,000 |
| 1969 (estimate) | 2,375,000 | 2,521,000,000 |

*B. Estimated Work Units*

A 5.6 percent increase over fiscal year 1968 in work-load units processed by the components of the Social Security Administration for this activity is expected in 1969 (1968 is estimated to be 15.6 percent over 1967). The volume of work units handled by State agencies under contract agreements will increase 7.2 percent in 1969. (The increase in 1968 over 1967 is 10.8 percent.) Principal work loads in this activity are:

| | 1968 estimate | 1969 estimate | Difference, 1969 over 1968 |
|---|---|---|---|
| Disability claims applications: | | | |
| Received | 952,000 | 931,000 | −21,000 |
| Processed | 942,705 | 945,300 | +2,595 |
| Determinations of disability (States): | | | |
| Received | 491,770 | 497,900 | +6,130 |
| Processed | 481,780 | 507,900 | +26,120 |
| Reconsideration of disability determinations: | | | |
| Received | 83,900 | 90,700 | +6,800 |
| Processed | 85,100 | 92,000 | +6,900 |
| Request for hearings: | | | |
| Received | 21,415 | 23,900 | +2,485 |
| Processed | 21,190 | 23,390 | +2,200 |
| Changes to the disability beneficiary rolls: Received and processed | 3,199,000 | 3,593,000 | +394,000 |
| Continuing disability determinations: | | | |
| Received | 124,800 | 139,000 | +14,200 |
| Processed | 126,300 | 138,900 | +12,600 |
| Inquiries: | | | |
| Received | 4,447,530 | 4,356,500 | −91,030 |
| Processed | 4,446,450 | 4,357,901 | −88,549 |

*C. Additional Work*

Procedural changes increasing disability application processing time will be instituted in January 1968. The increase in manpower required in 1969 amounts to 59 man-years and $434,112. The procedural changes call for resumption of a written opinion by the district office as to whether work performed by a claimant after the alleged onset of disability is substantial; extending the initial disability interview to obtain more complete information concerning the applicant's background; and completing development on dependents' applications before forwarding the file for a disability determination. Partially offsetting this added work is a decline of 45 man-years and $290,125 in the volume of nonrecurring work, due largely to the one-time job in 1968 of converting benefits to the higher rates provided by the 1967 amendments.

BUDGET ESTIMATE

The total costs for this activity in fiscal year 1969 are estimated at $157,290,028, an increase of $12,819,983 over 1968. Of this increase, 39.3 percent is in the costs of State agencies under contract to make determinations of disability, and 60.7 percent is in the costs of the components of the Social Security Administration.

*A. State Agencies*

Payments to State agencies increase by $5,034,130 in 1969 because of the following major factors: $3,797,670 to process a 9.9 percent increase in work output; $678,573 for changes in the average salaries of State agency employees; and $557,887 for other increases, principally changes in the unit cost of consultative medical examinations.

*B. Social Security Administration*

The year-to-year increase of $7,785,853 budgeted for the organizational components of the Administration is a net of many increases and decreases. The

major increases are: (1) a 5.7 percent increase in work output, $5,573,632; (2) mandatory salary changes, $695,634; (3) pay in excess of 52 weeks, $344,646; (4) full-year effect of pay raise, $1,067,438; (5) space and communications requirements, principally for increased staff, $465,782; (6) purchase of ADP equipment, partially offset by rental savings and other decreases, $807,213; and (7) other object increases including the postal increase on a full-year basis, replacement of equipment, research contracts, and price changes, $785,418. Budgeted decreases result from: (1) projected increase in productivity, $1,551,655; and (2) a reduction in the extra cost of overtime, $402,255.

ACTIVITY 3—HEALTH INSURANCE PROGRAM

| | 1968 estimate | | 1969 estimate | | Increase or decrease | |
|---|---|---|---|---|---|---|
| | Positions | Amount | Positions | Amount | Positions | Amount |
| Personnel compensation and benefits [1] | 8,189 | $64,215,066 | 8,200 | $65,535,387 | +11 | +$1,320,321 |
| Payments to States | | 8,000,000 | | 8,942,000 | | +942,000 |
| Payments to intermediaries | | 148,920,000 | | 149,778,000 | | +858,000 |
| Other expenses | | 17,983,788 | | 17,779,774 | | −204,014 |
| Total | 8,189 | 239,118,854 | 8,200 | 242,035,161 | +11 | +2,916,307 |
| Subactivities: | | | | | | |
| Hospital insurance | 3,971 | 89,316,756 | 3,812 | 82,759,088 | −159 | −6,557,668 |
| Supplementary medical insurance | 4,218 | 149,802,098 | 4,388 | 159,276,073 | +170 | +9,473,975 |

[1] Average manpower estimates are as follows:

| | Positions | Positions | Positions |
|---|---|---|---|
| Regular staff | 7,592 | 7,813 | +221 |
| Overtime equivalent | 691 | 368 | −323 |
| Total | 8,283 | 8,181 | −102 |

## SCOPE OF PROGRAM

Funds requested for Activity 3 provide for the administration of a hospital insurance plan and a supplementary medical insurance plan. As provided in the Social Security Amendments of 1965 (Public Law 89–97), coverage under both plans is extended to essentially all individuals age 65 and over. Benefits under both plans became effective on July 1, 1966, except for services in post-hospital extended care facilities which became effective on January 1, 1967. The hospital insurance plan affords basic protection against the costs of inpatient hospital services, post-hospital home health services, and post-hospital extended care services. The medical insurance plan covers 80 percent of the costs of physicians' services, outpatient services, home health services, and other related medical services, after a $50 yearly deductible amount.

The 1967 amendments made a number of improvements in the health insurance program, including provision for paying under the medical insurance program for X-ray and laboratory services provided in hospitals where a patient has exhausted his hospital insurance eligibility; covering under the medical insurance program physical therapy services on a much broader basis and also covering non-routine services of doctors of podiatry or surgical chiropody; and providing under the hospital insurance program each covered person with a lifetime reserve of 60 days of added hospital care. In addition, the 1967 amendments made several simplifications in procedures for reimbursing providers of services.

The administrative costs budgeted under this activity include those incurred by components of the Social Security Administration in directing the program, servicing the public, collecting premiums and maintaining records of utilization of services. Also budgeted in this activity are the costs of contracts with private organizations and State agencies to which certain administrative functions under the program have been delegated.

## WORK LOADS

### *A. Work-Load Trends*

Generally, increases in the number of beneficiaries will result from the growth in the population of persons aged 65 and over. The 1967 amendments will have

only a negligible effect on the number of entitled beneficiaries. Also, it is expected that the increase in the monthly premium rate for the voluntary medical insurance program from $3 to $4 effective April 1, 1968, will have only minimal impact on the average number of enrollees.

The estimated growth in 1968 and 1969 in the number of persons covered by the hospital and medical insurance programs. the number receiving services, and the amount of benefits paid is shown in the table below. Fiscal year 1968 represents the first full year of operation of all phases of the medicare program. Coverage of extended care facilities under the hospital insurance program did not commence until January 1, 1967. Under the medical insurance program, the $50 deductible was applicable in each of the six month periods of 1967 fiscal year. Also, because of an initial lag in submitting bills under this program, actual benefit payments made in fiscal year 1967 lag behind services actually rendered in that year.

| Fiscal year | Average number of persons covered by the program | Persons receiving services | Benefits paid |
|---|---|---|---|
| Hospital insurance: | | | |
| 1967 actual | 18,771,000 | 4,400,000 | $2,567,773,000 |
| 1968 estimate | 19,232,000 | 4,500,000 | 3,369,000,000 |
| 1969 estimate | 19,573,000 | 4,600,000 | 3,865,000,000 |
| Medical insurance: | | | |
| 1967 actual | 18,000,000 | 7,400,000 | 664,261,000 |
| 1968 estimate | 18,300,000 | 7,500,000 | 1,473,000,000 |
| 1969 estimate | 18,600,000 | 7,600,000 | 1,656,000,000 |

*B. Estimated Work Units*

The volume of work-load units to be processed in fiscal year 1969 by the staff of the Social Security Administration is expected to decrease by 2.2 percent as compared with fiscal year 1968; however, the volume of work to be handled by health insurance intermediaries is expected to increase in 1969 by 3.6 percent over 1968. The amount of work to be handled by State agencies who are responsible for the inspection and certification of hospitals, home health agencies, extended care facilities, and independent laboratories as providers of services is expected to be at the same level in 1968 and 1969.

The decline in work performed by the staff of the Social Security Administration results from fewer inquiries on the program from the public, fewer premiums to collect from individuals as more States buy in on a mass basis for their welfare recipients, and the decline in work loads related to serving hospital insurance beneficiaries who are not insured for cash benefits as this group of beneficiaries declines in number.

The growth in intermediary work stems from the larger number of persons covered by the program which causes an increased volume of bills and claims for payment for services.

The principal work loads in this activity are:

| | 1968 estimate | 1969 estimate | Difference, 1969 over 1968 |
|---|---|---|---|
| Health insurance inquiries in SSA offices: | | | |
| Received | 12,588,180 | 10,726,000 | −1,862,180 |
| Processed | 12,588,700 | 10,726,000 | −1,862,700 |
| Bills for services covered by hospital insurance (intermediaries): | | | |
| Received | 13,837,000 | 14,965,000 | +1,128,000 |
| Processed | 13,904,000 | 14,965,000 | +1,061,000 |
| Claims for services covered by medical insurance (intermediaries): | | | |
| Received | 26,997,000 | 28,657,000 | +1,660,000 |
| Processed | 27,464,000 | 28,657,000 | +1,193,000 |
| Bills and payment records posted to utilization records at SSA headquarters: Received and processed | 38,147,000 | 38,802,000 | +655,000 |
| Premiums collected:[1] | | | |
| Received | 6,444,232 | 6,044,000 | −400,232 |
| Processed | 6,345,000 | 6,044,000 | −301,000 |

[1] This workload excludes group payments and deductions from benefits.

BUDGET ESTIMATE

Total costs estimated for Activity 3 in fiscal year 1969 amount to $242,035,161, as compared with $239,118,854 in 1968, an increase of $2,916,307. Of this increase, 29.4 percent is in the costs of intermediaries, 32.3 percent in costs of State agencies, and 38.3 percent in costs of components of the Social Security Administration.

*A. Intermediaries*

Payments to the intermediaries increase by $858,000 because of the following factors: (1) $7,250,900 for increases in wages and price levels; (2) $5,421,100 for handling a 3.6 percent increase in work; (3) —$9,268,000 for improved productivity as training requirements decline and operating procedures are refined; and (4) —$2,546,000 in amount of non-recurring work because of the one-time costs in 1968 associated with the 1967 amendments.

*B. State Agencies*

Estimated costs of State agencies participating in the health insurance program are expected to increase from $8,000,000 in 1968 to $8,942,000 in fiscal year 1969. Of the total increase, 34 percent ($324,370) is due to a five percent increase in State personnel average salaries. The remainder of the increase ($617,630) is caused by a more accurate allocation of costs between the Federal health insurance program and various State programs where personnel are used in both the Federal health program and one or more State programs.

*C. Social Security Administration*

The net year-to-year increase budgeted for Administration components amounts to $1,116,307. The major increases include: (1) $951,971 for built-in salary changes; (2) $1,742,810 for an increase in manpower not directly related to processing specific health insurance work loads; (3) $757,278 for annualization of the pay raise; (4) $654,590 for ADP equipment purchases; (5) $190,222 for replacement of equipment; and (6) $143,427 for miscellaneous changes. The principal decreases are: (1) $2,042,928 less for one-time costs (principally due to amendment printing costs in fiscal year 1968); (2) $718,619 for a 2.6 percent decrease in work output; and (3) $562,444 resulting from a reduction in the use of overtime.

ACTIVITY 4—CONTINGENCY RESERVE

| | 1968 estimate | 1969 estimate | Increase or decrease |
|---|---|---|---|
| Undistributed | | $25,000,000 | +$25,000,000 |
| Total contingency reserve | | 25,000,000 | +25,000,000 |

This activity provides a contingency reserve in the event the Administration's work loads or mandatory costs of agencies or organizations with which agreements have been made to participate in the administration of the program are greater than anticipated in the budget estimates.

The 1968 budget included a contingency reserve of $25,000,000. In fiscal year 1968, all of this reserve will be used to offset in part the funds needed for higher than budgeted work loads in SSA proper and private agencies acting as intermediaries in the health insurance program. The contingency reserve contained in the 1969 request will maintain this reserve at the same $25,000,000 level authorized by the Congress for fiscal year 1968.

SALARIES AND EXPENSES (TRUST FUND)

Now I would like to summarize our requirements for fiscal year 1969 for each of the appropriation accounts. Our request for salaries and expenses for fiscal year 1969 amounts to $753,145,000 plus a $25,000,000 contingency reserve as compared with the revised estimate of $716,428,000 for fiscal year 1968.

Because the volume of work resulting from claims from individuals made newly eligible for benefits by the 1967 amendments is expected to be spread rather evenly over the last half of fiscal year 1968 and the first half of fiscal year 1969, the appropriation estimate for 1969 carries about the same costs for

the amendments ($34,428,000) as provided in the 1968 estimate. The increase of $36,717,000 in the 1969 request (excluding the reinstatement of the contingency reserve) over the 1968 estimate for salaries and expenses is not due therefore to the amendments. It is due to a 4.2 percent increase in the volume of work—largely due to the increased population serviced—to be handled by organizational components of the Social Security Administration, State agencies, and health insurance intermediaries and to built-in salary and price increases. Half of the computed cost of over $32 million for processing the larger work volume is expected to be absorbed by increased productivity. Hence, the budgeted increase of $36.7 million breaks down to $16.3 million for handling the increased volume of work: $19.3 million for built-in salary and price increases and $1.1 million for all other changes in requirements not directly related to work-load processing.

The 1969 budget estimate provides for an increase of 1,728 permanent positions over 1968, or a total of 55,224 positions. However, the increase in man-years is substantially less—335 man-years or less than one percent. This is due to a budgeted reduction of 2,511 man-years in overtime and a 525 man-year reduction in the use of temporary and part-time employees which largely offset the higher permanent staff increase. Although overtime and temporary employees are indispensable expedients for coping with sharp work-load increases, economy requires that long-range manpower needs be met by employment of permanent, full-time employees.

## Limitation on Construction (Trust Fund)

### AMOUNTS AVAILABLE FOR OBLIGATION

| | 1968 | 1969 |
|---|---|---|
| Appropriation | | |
| Unobligated balance brought forward | $52,893,651 | $48,330,651 |
| Unobligated balance carried forward | −48,330,651 | −23,424,651 |
| Total | 4,563,000 | 24,906,000 |

### OBLIGATIONS BY ACTIVITY

| | 1968 estimate | 1969 estimate | Increase or decrease |
|---|---|---|---|
| Headquarters construction | $4,063,000 | $9,462,000 | +$5,399,000 |
| District office construction | 500,000 | 15,444,000 | +14,944,000 |
| Total obligations | 4,563,000 | 24,906,000 | +20,343,000 |
| Unobligated balance reserve | | | |
| Total, obligations and balance | 4,563,000 | 24,906,000 | +20,343,000 |

### OBLIGATIONS BY OBJECT

| | | | |
|---|---|---|---|
| Other services | 703,000 | 1,127,000 | +424,000 |
| Land and structures | 3,860,000 | 23,779,000 | +19,919,000 |
| Total obligations by object | 4,563,000 | 24,906,000 | +20,343,000 |

*Summary of changes*

| | |
|---|---|
| Prior year balance available | $52,893,651 |
| Unobligated balance available in subsequent year | −48,330,651 |
| 1968 total estimated obligations | 4,563,000 |
| 1969 estimated obligations | 24,906,000 |
| Total change | +20,343,000 |

| | Base | Change from base |
|---|---|---|
| Increases: | | |
| A. Built-in: | | |
| 1. Planning and construction at headquarters site funded in prior years | $2,925,500 | $6,486,500 |
| 2. District office construction funded in prior years | 500,000 | 14,944,000 |
| Sub-total, built-in | | 21,430,500 |
| Total increases | | 21,430,500 |
| Decreases: | | |
| A. Land acquisition at headquarters site funded in prior years | 1,137,500 | −1,087,500 |
| Total decreases | | −1,087,500 |
| Total net change requested | | +20,343,000 |

## Explanation of Changes

### INCREASES

A. *Built-in*

1. Planning and construction at headquarters site funded in prior years ---------- +$6,486,500

Award of the construction contract for an office building, funded in fiscal year 1967, is scheduled for fiscal year 1969 at an estimated cost of $9,012,000. Partially offsetting the cost of this contract are base year costs of $2,014,000 for the construction contract for a warehouse building (funded in 1966) and $355,000 for the design contract for the building scheduled for construction in 1969.

2. District office construction funded in prior years ---------- +$14,944,000

The increase is due primarily to the larger number of district office projects funded in 1965, 1966, and 1967 for which construction contracts will be awarded in fiscal year 1969. The 1968 construction contracts will be limited to four offices.

### DECREASES

A. Acquisition of land at headquarters site ---------- −$1,087,500

Funds totalling $1,375,000 have been provided in 1966 and 1967 appropriations for purchase of land at the headquarters site. The major portion of the land is to be acquired during 1968 with most of the remaining acquisition to be completed in fiscal year 1969. Acquisition of a few parcels will be delayed beyond fiscal year 1969 pending establishment of right-of-way of a new Interstate highway adjacent to the headquarters site.

## Justification

### LIMITATION ON CONSTRUCTION

*General Statement*

No additional obligational authority is requested for fiscal year 1969 for construction expenditure from the trust funds established by the Social Security Act as amended.

Existing projects already funded under this appropriation fall under the following activities:

1. *Headquarters Construction.*—Funds were provided in the 1965, 1966, and 1967 appropriations for three new buildings and acquisition of additional land at the Social Security headquarters. Obligations scheduled for 1968 and 1969 under this activity are based on estimated progress of construction projects already funded. The manpower needs stemming from the added work resulting from the 1965 and 1967 Amendments to the Social Security Act make clear that these buildings now in planning or construction phases will not be adequate to house the estimated headquarters staff when completed. Before requesting authority and funds to proceed with additional construction at the headquarters site, the Administration needs to give further study to such problems as the most appropriate location of additional buildings, management of traffic, including adequacy of present public roads, and parking facilities (amount of surface parking vs. multi-level structures). In the interim, space shortages are being met

by leasing space in Baltimore City and in off-site buildings near the headquarters.

2. *District Office Construction.*—The Social Security Administration operates over 600 district offices throughout the country to provide direct service to the public in matters pertaining to the old-age, survivors, disability, and health insurance programs. Funds appropriated under this activity cover construction of district offices where improvement is needed in the present space and construction is both advantageous and feasible. Funds were provided in 1965, 1966, and 1967 for acquisition of sites, design, and construction of 109 offices. No new obligational authority for district office construction was requested of the Congress for 1968 and none is requested for fiscal year 1969. This slowing down of the construction program is intended only as a temporary measure and it is planned to resume the full district office construction program when restrictions are lifted. Obligations scheduled for 1968 and 1969 under this activity are based on estimated progress of construction projects already funded; 1968 obligations for this activity are limited to construction contracts for only four offices.

ACTIVITY 1—HEADQUARTERS CONSTRUCTION

| | 1968 estimate | 1969 estimate | Increase or decrease |
|---|---|---|---|
| Other expense | $4,063,000 | $9,462,000 | +$5,399,000 |
| Total | 4,063,000 | 9,462,000 | +5,399,000 |

EXPLANATION OF ESTIMATED OBLIGATIONS

Included in the actual and estimated obligations for this activity are the following existing and proposed construction projects at the Social Security headquarters in Baltimore County, Maryland.

1. Construction of an office building and a separate warehouse to provide for expansion needs prior to enactment of the 1965 amendments. (Funds provided in 1965 and 1966).

Fiscal year:

| | *Obligations* |
|---|---|
| 1965 | $413,970 |
| 1966 | 32,365 |
| 1967 | 7,826,278 |
| 1968 | 2,570,500 |
| 1969 | 399,587 |
| Total project cost | 11,242,700 |

2. Construction of another office bulding and expansion of operations space to provide for additional needs resulting from the 1965 amendments. (Funds provided in 1966 and 1967).

Fiscal year:

| | *Obligations* |
|---|---|
| 1966 | ---------- |
| 1967 | $83,005 |
| 1968 | 355,000 |
| 1969 | 9,012,413 |
| Future years | 7,926,882 |
| Total project cost | 17,377,300 |

3. Purchase of additional land adjacent to headquarters site. (Funds provided in 1966 and 1967).

| Fiscal year: | *Obligations* |
|---|---|
| 1966 | $13,777 |
| 1967 | 123,704 |
| 1968 | 1,137,500 |
| 1969 | 50,000 |
| Future years | 50,019 |
| Total project cost | 1,375,000 |

STATUS OF HEADQUARTERS PROJECTS AS OF JANUARY 1, 1968

1. Construction of office building and warehouse:
   a. Construction of office building began in August 1967.
   b. Warehouse option was approved in September 1967 and excavating operations are nearly complete.
   c. Completion of both structures is scheduled for June or July 1969.
2. Design and construction of office building and expansion of operations space:
   a. Design contract for office building awarded in July 1967.
   b. Construction is estimated to begin about April 1969 with completion estimated in about two years from start of construction.
   c. Expansion of operations space deferred until further site utilization plans are developed.
3. Purchase of land:
   As of January 1, 1968, 12 parcels (11.9 acres) have been purchased directly at a cost of $45,499; declaration of taking has been filed to clear title on 12 parcels (10.2 acres) at a cost of $59,850; declaration of taking to establish price has been filed on 17 parcels (25.8 acres); and contracts have been executed for nine more parcels (8.2 acres) for direct purchase but transaction has not been completed.

ACTIVITY 2—DISTRICT OFFICE CONSTRUCTION

| | 1968 estimate | 1969 estimate | Increase or decrease |
|---|---|---|---|
| Other expense | $500,000 | $15,444,000 | +$14,944,000 |
| Total | 500,000 | 15,444,000 | +14,944,000 |

EXPLANATION OF ESTIMATED OBLIGATIONS

The above schedule of obligations reflects the following district office construction program:

1. Construction of 25 district office buildings (funds provided in fiscal year 1965 appropriation and the fiscal year 1966 supplemental).

| Fiscal year: | *Obligations* |
|---|---|
| 1965 | $141,735 |
| 1966 | 1,073,757 |
| 1967 | 700,803 |
| 1968 | 444,800 |
| 1969 | 2,728,350 |
| Future years | 718,055 |
| Total project cost | 5,807,500 |

2. Construction of 12 district office buildings (funds provided in fiscal year 1966 regular and supplemental appropriations).

| Fiscal year: | Obligations |
|---|---|
| 1966 | $340,813 |
| 1967 | 322,751 |
| 1968 | 47,700 |
| 1969 | 1,927,700 |
| Future years | 922,536 |
| Total project cost | 3,561,500 |

3. Construction of 72 district office buildings (funds provided in the fiscal year 1967 appropriation).

| Fiscal year: | Obligations |
|---|---|
| 1967 | $20,391 |
| 1968 | 7,500 |
| 1969 | 10,787,950 |
| Future years | 13,807,159 |
| Total project cost | 24,623,000 |

STATUS OF DISTRICT OFFICE CONSTRUCTION PROGRAM

Although no new funding authority is requested for construction of district office buildings in the 1969 budget, it is expected that progress will be made in 1968 and 1969 on the projects already authorized.

Construction activities have been curtailed in line with current government-wide restrictions. The status as of January 1, 1968, of the 109 offices authorized in the 1965, 1966, and 1967 appropriations is summarized below:

*1. Acquisition of Sites*

*1965 program:* 25 offices—19 have been completed; of the remaining six, one is in the process of condemnation; four are urban renewal sites; one is federally-owned and transfer to SSA is required.

*1966 program:* 12 offices—10 of the 12 sites have been acquired; one requires site purchase by the city and transfer to SSA; one site has been selected.

*1967 program:* 72 offices—13 sites have been selected; six locations have completed the site survey and are being evaluated; one location has been deferred pending decision on proposal to renovate a post office building.

*2. Design Phase*

*1965 program:* 22 offices are completed; two offices are presently in design; the design for the office to be erected on the federally-owned site has been delayed until it is determined when the site will be available.

*1966 program:* seven offices are completed, the remaining five are in design and their completion is expected in February 1968.

*1967 program:* none have entered the design phase.

*3. Construction*

*1965 program:* Anniston and Gadsden, Alabama, are complete; construction contracts for four offices will be awarded in January 1968.

CONSTRUCTION (TRUST FUND)

We are not requesting any new construction funds in our 1969 budget. Also, our current year estimates of previously appropriated funds to be obligated reflect a slowdown in district office construction as a part of government-wide restrictions on construction. Before the imposition of these restrictions, we were making very substantial progress in acquiring sites, designing buuildings and completing all work preparatory to soliciting bids for construction of district office buildings. As of now two offices have been completed and four are in the process of construction. As government-wide restrictions are relaxed, we intend to keep pace and move ahead in acquiring additional sites, preparing designs and entering the construction phase. At our headquarters site an office building providing 177,000 net square feet of space is well underway. The site for a warehouse building has been cleared and graded, and footings are being poured. A contract for the design of an additional office building providing for 145,000 net square feet of space has been let and acquisition of additional land adjacent to our present site is on schedule. However, because of the inadequacy of current facilities at

the headquarters site, we have 4,000 employees located in leased space in Baltimore City and County.

APPROPRIATION ESTIMATE

"PAYMENT TO TRUST FUNDS FOR HEALTH INSURANCE FOR THE AGED

"For payment to the Federal Hospital Insurance and Federal Supplementary Medical Insurance trust funds, as authorized by sections 103(c) and 111(d) of the Social Security Amendments of 1965, and section 1844 of the Social Security Act, [$906,631,000] *$1,360,227,000.*"

AMOUNTS AVAILABLE FOR OBLIGATION

| | 1968 | 1969 |
|---|---|---|
| Appropriation | $906,631,000 | $1,360,227,000 |
| Proposed for separate transmittal | 373,028,000 | |
| Unobligated balance brought forward (contingency reserve) | 100,000,000 | |
| Unobligated balance lapsing Dec. 31, 1967 | −100,000,000 | |
| Total | 1,279,659,000 | 1,360,227,000 |

OBLIGATIONS BY ACTIVITY

| | 1968 estimate | 1969 estimate | Increase or decrease |
|---|---|---|---|
| Reimbursement for hospital insurance expenditures for the uninsured | $540,935,000 | $465,227,000 | −$75,708,000 |
| Contributions to supplementary medical insurance trust fund | 738,724,000 | 895,000,000 | +156,276,000 |
| Total obligations | 1,279,659,000 | 1,360,227,000 | +80,568,000 |

OBLIGATIONS BY OBJECT

| | 1968 estimate | 1969 estimate | Increase or decrease |
|---|---|---|---|
| Grants subsidies, and contributions | $738,724,000 | $895,000,000 | +$156,276,000 |
| Insurance claims and indemnities | 540,935,000 | 465,227,000 | −75,708,000 |
| Total obligations by object | 1,279,659,000 | 1,360,227,000 | +80,568,000 |

*Summary of Changes*

| | |
|---|---|
| 1968 enacted appropriation | $906,631,000 |
| Proposed supplemental | 373,028,000 |
| 1968 total estimated obligations | 1,279,659,000 |
| 1969 estimated obligations | 1,360,227,000 |
| Total change | +80,568,000 |

| | Base | Change from base |
|---|---|---|
| Increases: | | |
| A. Built in: | | |
| 1. Annualization of $1 increase in SMI premium effective Apr. 1, 1968 | $56,000,000 | +$168,000,000 |
| B. Program: | | |
| 1. Increase in aged population covered by SMI program | 658,000,000 | +13,000,000 |
| 2. Increase in costs of hospital services and in utilization of services by uninsured individuals | 435,200,000 | +16,000,000 |
| Total increases | | +197,000,000 |
| Decreases: | | |
| A. Built in: | | |
| 1. Adjustment in appropriation for 1967: | | |
| (a) For reimbursement to HI trust fund for uninsured individuals | 90,344,000 | −90,344,000 |
| (b) For deficit in matching contributions to the SMI trust fund | 24,724,000 | −24,724,000 |
| B. Program: | | |
| 1. Administrative costs related to hospital insurance for uninsured individuals | 15,391,000 | −1,364,000 |
| Total decreases | | −116,432,000 |
| Total net changes requested | | +80,568,000 |

## Explanation of Changes

### INCREASES

*A. Built-in*

1. Annualization of $1 increase in SMI premium effective 4/1/68 — +$168,000,000

The one dollar premium rate increase effective April 1, 1968, will result in an additional $56,000,000 matching contribution to the SMI trust fund during fiscal year 1968. This increase, annualized, is $224,000,000 of which $168,000,000 is the net increase in 1969 over the 1968 base.

*B. Program*

1. Increase in aged population covered by SMI program — +13,000,000

This represents the increase in contributions to the trust fund from the general fund due to an estimated increase in the average number of enrollees from 18,300,000 to 18,600,000.

2. Increase in costs of hospital services and in utilization of services by uninsured individuals — +16,000,000

Benefit payments to the uninsured increase from $435,200,000 to $451,200,000 because of rising hospital costs and greater utilization of services. The number of uninsured individuals covered by the hospital insurance program will decrease in fiscal year 1969. However, utilization of services is expected to increase because of the advancing age of the uninsured group.

DECREASES

*A. Built-in*

1. Adjustment in appropriation for 1967:

a. For reimbursement to HI trust fund for uninsured individuals ---------- —90,344,000

Benefits and administrative costs for fiscal year 1967 were $79,246,000 higher than the amount appropriated for fiscal year 1967. The principal causes were underestimation of the size of the uninsured group and greater than estimated utilization and costs of hospital and extended care facilities per individual covered by the program. Also included in the adjustment is interest amounting to $11,098,000.

b. For deficit in matching contributions to the SMI trust fund---------- —24,724,000

Actual 1967 premium collections exceeded the 1967 appropriation by $23,682,000. The adjustment covers this amount plus $1,042,000 interest.

*B. Program*

1. Administrative costs related to hospital insurance for uninsured individuals ---------- —1,364,000

The decrease is related to the decline in the number of uninsured individuals. The average number of uninsured persons on the hospital benefit rolls drops from 2,301,000 in 1968 to 2,055,000 in 1969 and estimated administrative costs drop from $15,391,000 to $14,027,000.

JUSTIFICATION

PAYMENT TO TRUST FUNDS FOR HEALTH INSURANCE FOR THE AGED

*General statement*

The Social Security Amendments of 1965, enacted July 30, 1965, provided a basic hospital insurance plan to pay, for most individuals age 65 and over, the costs of hospital and related post-hospital services, and a voluntary medical insurance plan to cover the costs of physician and related services. Both plans provide for payment of these costs subject to certain deductible and co-insurance amounts.

The hospital insurance plan covers all persons entitled to social security or railroad retirement benefits, as well as practically all others who are age 65 and over. The hospital insurance benefits and administrative costs for those on the social security or railroad retirement rolls are financed by a payroll tax on employees, employers, and self-employed persons. The tax receipts are deposited in the Hospital Insurance Trust Fund, from which all benefit and administrative costs of the hospital insurance program are paid. Costs of providing benefits to those not insured under the social security or railroad retirement programs, and related administrative costs, are financed by general fund appropriations to the Hospital Insurance Trust Fund. During fiscal year 1969, an estimated $3,865,000,000 in benefits will be paid under the hospital insurance plan. Of this total, $451,200,000 will be paid to uninsured individuals, who represent 10.5 percent of the 19,573,000 aged persons covered for hospital benefits.

The voluntary medical insurance plan is financed by monthly contributions from persons age 65 and over who elect to enroll in this plan. The Federal Government matches these contributions by appropriations from general revenues. The contributions of both the enrolled individuals and the Federal Government are deposited in the Supplementary Medical Insurance Trust Fund, from which all benefit and administrative costs are paid.

Of the estimated 20 million persons age 65 and over in the United States in fiscal year 1969, an average of about 18.6 million will be enrolled in the supplementary medical insurance plan.

The general fund financing in fiscal year 1969 of the hospital plan for the uninsured and of the government's matching contributions for the supplementary

medical insurance program is estimated to amount to $1,360,227,000. The basis for this estimate is explained in the activity justifications.

ACTIVITY 1—REIMBURSEMENT FOR HOSPITAL INSURANCE EXPENDITURES FOR THE UNINSURED

| | 1968 estimate | 1969 estimate | Increase or decrease |
|---|---|---|---|
| Insurance claims and indemnities | [1] $540,935,000 | $465,227,000 | —$75,708,000 |

[1] Includes $268,304,000 proposed for separate transmittal.

The 1968 and 1969 estimates for reimbursing the Hospital Insurance Trust Fund for costs of the hospital program for persons not insured under the social security or railroad retirement programs is composed of the following main elements:

| | 1968 estimate | 1969 estimate | Increase or decrease |
|---|---|---|---|
| Benefits paid | $435,200,000 | $451,200,000 | +$16,000,000 |
| Administrative costs | 15,391,000 | 14,027,000 | —1,364,000 |
| Adjustment of underfinancing in 1967 appropriation | 79,246,000 | | —79,246,000 |
| Interest loss to trust fund | 11,098,000 | | —11,098,000 |
| Total | 540,935 000 | 465,227,000 | —75,708,000 |

BENEFIT PAYMENTS

It is estimated that during fiscal year 1969 the average number of uninsured individuals on the hospital benefit rolls will be 2,055,000 as compared with an average of 2,301,000 in fiscal year 1968. Hospital benefits for these individuals during fiscal year 1969 are estimated to be $451,200,000; this compares with estimated benefits of $435,200,000 in fiscal year 1968. The decline in the number of uninsured individuals on the rolls does not result in a commensurate decline in benefit payments because the advancing age of the individuals on the rolls results in increased utilization of services and because costs of hospital and related services are rising.

ADMINISTRATIVE COSTS

The detail supporting the estimates of administrative costs for the hospital insurance program for both the insured and uninsured groups is contained in the Salaries and Expenses, SSA, appropriation request. The distribution of costs between the insured and uninsured groups is based on an identification of costs which are 100 percent chargeable to the general fund, such as claims filed by uninsured persons for hospital benefits, and adding to that amount a pro-rata share of other hospital insurance costs based on the ratio of benefit payments for the uninsured group to total hospital insurance benefit payments (11.7 percent in fiscal year 1969 as compared with 12.9 percent in fiscal year 1968). Estimated administrative costs in 1969 are $14,027,000 or 3.11 percent of estimated hospital insurance benefits for the uninsured group.

ACTIVITY 2—CONTRIBUTIONS TO SUPPLEMENTARY MEDICAL INSURANCE TRUST FUND

| | 1968 estimate | 1969 estimate | Increase or decrease |
|---|---|---|---|
| Grants, subsidies, and contributions | [1] $738,724,000 | $895,000,000 | +$156,276,000 |

[1] Includes $104,724,000 proposed for separate transmittal.

The 1968 and 1969 estimates for the government's matching contributions to the Supplementary Medical Insurance Trust Fund are based on the assumption that about 18.3 million persons will be enrolled in the program in fiscal year

1968 and that the growth in aged population will result in an average of about 18.6 million enrollees in 1969. The principal components of the 1968 and 1969 estimates are as follows:

| | 1968 estimate | 1969 estimate | Increase or decrease |
|---|---|---|---|
| 1. Contributions at the initially established rate of $3 per month | $658,000,000 | $671,000,000 | +$13,000,000 |
| 2. Additional contributions resulting from increase of rate from $3 to $4 per month | 56,000,000 | 224,000,000 | +168,000,000 |
| 3. Adjustment of underfinancing in 1967 appropriation | 23,682,000 | ---------- | −23,682,000 |
| 4. Interest on above adjustment | 1,042,000 | ---------- | −1,042,000 |
| Total | 738,724,000 | 895,000,000 | +156,276,000 |

On December 29, 1967, the Secretary of the Department of Health, Education and Welfare announced an increase from $3 to $4 in the monthly premiums under the supplementary medical insurance program, effective April 1, 1968, through June 30, 1969.

The $1 increase effective in April 1968 is composed of the following factors:

1. About 20 cents increase is necessary to finance the program at the level of operation of the past. It is estimated that costs on an accrual basis in 1966 and 1967 exceeded income from premiums and matching contributions by about 7 percent. However, the program has more than ample funds on a cash basis to meet its obligations. The balance in the trust fund at the beginning of fiscal year 1968 was $485,791,000.

2. About 25 cents increase is based on an estimated increase of 2 percent in utilization of covered services and on the lesser effect the $50 deductible will have in reducing benefit costs as utilization of services and the level of physicians' fees increase.

3. About 27 cents of the increase is based on expected increases of about 5 percent a year in physicians' fees.

4. About 23 cents of the increase will be used for the improvements in coverage under the Social Security Amendments of 1967—for example: payment of the full charge for x-ray and pathology services to patients in hospitals, and coverage of more physical therapy services than under the old law.

5. The remaining increase is available for contingency purposes.

PAYMENT TO HEALTH INSURANCE TRUST FUNDS (GENERAL FUND)

The medicare program is partially financed by two types of payments to the trust funds from general revenues: (1) Payment to the hospital insurance trust fund for those persons age 65 and over who are not insured for social security or railroad retirement cash benefits but are covered for hospital benefits; and (2) contributions to the supplementary medical insurance trust fund equivalent to the premiums paid by enrollees in the program. For both types of payments we have an appropriation request of $1,360,227,000 of which $465,227,000 is for payment to the hospital insurance trust fund for the uninsured and $895,000,000 is for Federal matching contributions to the medical insurance trust fund.

If we exclude from the 1968 base the under-financing of 1967 costs amounting to $115,068,000 contained in the 1968 supplemental, the adjusted base for 1968 is $1,164,591,000 and the 1969 estimate of $1,360,227,000 represents an increase of $195,636,000. Of this increase, $168,000,000 is due to the annualization in 1969 of the $1 increase in monthly premium rate under the medical insurance program. The remaining $27,636,000 is based on a growth in enrollees in the medical insurance program and increases in costs for hospital insurance coverage of the uninsured.

OTHER GENERAL FUND APPROPRIATION ACCOUNTS

The remaining two appropriation requests for fiscal year 1969 cover reimbursements from general funds to the trust funds for benefits to special groups of individuals. These are:

1. Our request for $105,000,000 for payment to the trust funds for military service credits. This represents the annual installment required to amortize the current debt over a 50-year period plus a projection of the future costs of noncontributory military service credits, and is the same amount as appropriated for 1968.

2. A request for payment of $225,545,000 for cash benefits for certain noninsured persons. Section 228 of the Social Security Act, which was added to the Act by Section 302 of the Tax Adjustment Act of 1966, provides for monthly benefit payments to certain non-insured persons aged 72 and over. This Section also authorizes an appropriation for the amount necessary to place the old-age and survivors insurance trust fund in the same position as it would have been in if the payments to these beneficiaries had not been made. This request covers benefit payments, administrative expenses, and interest lost to the trust fund for the year 1967 and is the first appropriation request under this authorization: $199 million is for the benefit payments, $13 million for administrative expenses, and $14 million for interest lost to the fund.

APPROPRIATION ESTIMATE

"PAYMENT FOR MILITARY SERVICE CREDITS

"For payment to the Federal Old-Age and Survivors Insurance, the Federal Disability Insurance, and the Federal Hospital Insurance trust funds for benefit payments and other costs resulting from noncontributory coverage extended certain veterans, as provided under section 217(g) of the Social Security Act, as amended, $105,000,000."

AMOUNTS AVAILABLE FOR OBLIGATION

| | 1968 | 1969 |
|---|---|---|
| Appropriation | $105,000,000 | $105,000,000 |

OBLIGATIONS BY ACTIVITY

| | 1968 estimate | 1969 estimate | Increase or decrease |
|---|---|---|---|
| Reimbursement for noncontributory military service credits (object class 42) | $105,000,000 | $105,000,000 | ---------- |

*Summary of changes*

| | |
|---|---|
| 1968 enacted appropriation | $105,000,000 |
| 1969 estimated obligations | 105,000,000 |
| Total change | ---------- |

The 1969 request represents the annual payment to the trust funds, based on an estimate of the average yearly amount necessary to reimburse the trust funds over a 50-year period ending June 30, 2015, for the cost, including related administrative expenses and interest loss, of paying old-age, survivors, disability and hospital insurance benefits based on noncontributory military service credits.

PAYMENT FOR MILITARY SERVICE CREDITS

| | 1968 estimate | 1969 estimate | Increase or decrease |
|---|---|---|---|
| Insurance claims and indemnities | $105,000,000 | $105,000,000 | ---------- |

The estimate of $105,000,000 is the annual payment to the old-age and survivors insurance, the disability insurance, and the hospital insurance trust funds, for benefit payments (and related administrative costs and interest loss) based on noncontributory military service credits.

BACKGROUND

Amendments to the Social Security Act in 1946 and later years provided for (1) paying benefits to survivors of certain World War II veterans by extending protection on a noncontributory basis and (2) granting noncontributory wage credits of $160 for each month of active military service from September 1940 through December 1956.

The Social Security Act, as amended, provides for reimbursement to the old-age and survivors insurance, the disability insurance, and the hospital insurance trust funds for the additional costs incurred since September 1, 1950, in paying benefits based on noncontributory military service credits. (For costs incurred prior to September 1, 1950, the old-age and survivors insurance trust fund was reimbursed $15,500,000). The 1965 Social Security Amendments established a fifty-year period for reimbursement, instructing the Secretary to determine by September 1965 (and to redetermine each fifth September thereafter ending September 2010) the amount of reimbursement, in equal annual installments, necessary to place the trust funds in the same position on June 30, 2015, as they would have been in if noncontributory military service credits had not been provided. After June 30, 2015, annual appropriations for current costs are authorized.

Public Law 90–248 further amended the Social Security Act to provide, for social security benefit purposes, that, after December 1967, the pay of a person in the uniformed services would be deemed to be up to $300 a quarter more than his basic pay to cover the cost of wages-in-kind—such as food, shelter, and medical services. The additional cost of paying the benefits resulting from these deemed additional earnings will be borne by general revenues. Under the law, the Secretary is instructed to determine annually the amount of the additional costs. The Congress recommended, however, that annual reimbursements of the trust funds for these additional costs be provided for in the Defense Department appropriation. Actuarial data required for the determination of additional costs for the six-month period, January–June 1968—these new provisions first became effective after December 31, 1967—are expected to become available in the latter part of calendar year 1968 or early in 1969. The amount of the first reimbursement of the trust funds is therefore expected to be included in the appropriation request for the fiscal year beginning July 1, 1969, or possibly not until the fiscal year beginning July 1, 1970.

ESTIMATED ANNUAL PAYMENT

The accumulated liability to the trust funds as of June 30, 1965, based on a detailed actuarial analysis of a random sample of actual benefit awards, was $1,005,000,000—$853,000,000 to the OASI trust fund and $152,000,000 to the DI trust fund. The annual installment required to amortize this debt over a 50-year period at the statutorily-determined rate of 4⅛ percent interest is $45,900,000. The estimate of $105,000,000 includes this liability plus an estimate of future costs. The payment will be distributed by trust fund as follows:

| | |
|---|---|
| OASI trust fund | $78,000,000 |
| DI trust fund | 16,000,000 |
| HI trust fund | 11,000,000 |
| Total | 105,000,000 |

APPROPRIATION ESTIMATE

*"PAYMENT FOR SPECIAL BENEFITS FOR THE AGED*

*"For payment to the Federal Old-Age and Survivors Insurance Trust Fund, as authorized by section 228(g) of the Social Security Act, $225,545,000."*

EXPLANATION OF LANGUAGE

"Payment to OASI Trust Fund for Benefits for Certain Non-Insured Persons" is a new appropriation account in the Social Security Administration budget. The

authorization for this appropriation is contained in section 228(g) of the Social Security Act.

"(g) There are authorized to be appropriated to the Federal Old-Age and Survivors Insurance Trust Fund for the fiscal year ending June 30, 1969, and for each fiscal year thereafter, such sums as the Secretary of Health, Education, and Welfare deems necessary on account of—

(1) payments made under this section during the second preceding fiscal year and all fiscal years prior thereto to individuals who, as of the beginning of the calendar year in which falls the month for which payment was made, had less than three quarters of coverage.

(2) the additional administrative expenses resulting from the payments described in paragraph (1), and

(3) any loss in interest to such Trust Fund resulting from such payments and expenses,

in order to place such Trust Fund in the same position at the end of such fiscal year as it would have been in if such payments had not been made."

AMOUNTS AVAILABLE FOR OBLIGATION

| | 1968 | 1969 |
|---|---|---|
| Appropriation | | $225,545,000 |

OBLIGATIONS BY ACTIVITY

| | 1968 estimate | 1969 estimate | Increase or decrease |
|---|---|---|---|
| Reimbursement for benefits for certain noninsured persons | | $225,545,000 | +$225,545,000 |

OBLIGATIONS BY OBJECT

| | 1968 estimate | 1969 estimate | Increase or decrease |
|---|---|---|---|
| 42 Insurance claims and indemnities | | $225,545,000 | +$225,545,000 |

*Summary of changes*

| | |
|---|---|
| 1968 enacted appropriation | ---------- |
| 1968 total estimated obligations | ---------- |
| 1969 estimated obligations | $225,545,000 |
| Total change | +225,545,000 |

| | Base | Change from base |
|---|---|---|
| Increases: A. Built-in: | | |
| 1. Reimbursement for benefits for certain noninsured persons | | +$225,545,000 |
| Total increases | | +225,545,000 |
| Decreases: Total decreases | | ---------- |
| Total net changes requested | | +225,545,000 |

EXPLANATION OF CHANGES

The total 1969 obligation is the total net change requested. This appropriation account did not exist in 1968.

JUSTIFICATION

PAYMENT TO OASI TRUST FUND FOR BENEFITS FOR CERTAIN NON-INSURED PERSONS

This appropriation provides for a general fund payment of $225,545,000 to the old-age and survivors insurance trust fund as reimbursement for funds expended in fiscal year 1967 on account of payment of benefits to certain non-insured in-

dividuals aged 72 and over. The appropriation represents reimbursement for benefit payments, related administrative expenses, and interest loss to the trust fund.

*Background*

Section 302 of the Tax Adjustment Act of 1966 (Public Law 89–368, approved March 15, 1966) added section 228 to the Social Security Act. This section provided monthly payments of $35 to certain non-insured persons aged 72 and over. However, an eligible woman who is married to a man who qualifies, receives a monthly payment of $17.50. (The 1967 Amendments to the Social Security Act increased the monthly benefit amounts to $40 and $20 respectively beginning February 1968.) These monthly benefits are reduced by the amount of any government pension, other than workmen's or veterans' compensation, that the individual or his spouse is receiving or is eligible to receive. Also benefits are not payable to persons receiving public assistance cash payments.

Section 228(g) authorizes an appropriation for the amount which is necessary to place the old-age and survivors insurance trust fund in the same position as it would have been in if the payments made from the trust fund to persons with fewer than three quarters of coverage had not been made. The first such authorized appropriation is for the fiscal year ending June 30, 1969, on account of payments made in the fiscal year ending June 30, 1967. Similar appropriations are authorized for each fiscal year thereafter.

*The 1969 request*

The 1969 appropriation request consists of the following costs incurred during fiscal year 1967.

| | *1969 estimate* |
|---|---|
| Benefit payments | $198,528,000 |
| Administrative expenses related to benefit payments | 12,880,000 |
| Interest loss to the trust fund | 14,137,000 |
| Total | 225,545,000 |

BENEFIT PAYMENTS

Benefits first became payable for October 1966 (first payment was made early in November). Total benefit payments during the eight-month period, November 1966–June 1967, amounted to $199,745,000. Of this total, $1,217,000 was paid to persons with three or more quarters of coverage. The cost represented by these payments is borne by the old-age and survivors insurance trust fund. The remaining $198,528,000—representing benefit payments to persons with fewer than three quarters of coverage—is borne by the general fund.

ADMINISTRATIVE EXPENSES RELATED TO BENEFIT PAYMENTS

This represents the cost to the Social Security Administration of determining eligibility to the special benefit payments and maintaining the benefit roll. Also included are the costs of the Treasury Department for issuing and mailing benefit checks.

The principal administrative cost item in fiscal year 1967 was establishing eligibility for monthly benefits for the first time for 940,020 individuals. At a unit cost of $10.04 per benefit awarded, the cost of this operation amounted to $9,441,695. The overall cost in subsequent fiscal years should be substantially less, as the number of 1967 benefit awards was abnormally large because of a large backlog of individuals who were immediately eligible for benefits when first payable for the month of October 1966.

Additional administrative costs incurred in fiscal year 1967 include: (1) The cost of making 1,217,765 changes to the beneficiary rolls such as terminations and changes of address which were processed at a total cost of $2,938,822 or $2.41 per item; and (2) the cost of issuing and mailing benefit checks. (This is a cost initially incurred by the Treasury Department for which that Department is reimbursed by the trust fund.) Checks issued totaled 6,243,543 at a cost of $.08 each, or $499,483 in total.

INTEREST LOSS TO THE TRUST FUND

Interest loss to the trust fund has been computed as explained below on the assumption that reimbursement takes place July 1, 1968.

For benefit payments: An amount equal to total benefits paid in each month

was assumed to be available for investment at the beginning of such month at a rate of interest applicable to special obligations issued during that month. Interest was assumed to be payable semi-annually on June 30 and December 31. For the calculation of interest loss for the period June 30, 1967,-July 1, 1968, an interest rate of 4¾ percent was used—the same rate that applied to special obligations issued in June 1967.

For administrative costs: For administrative costs incurred in fiscal year 1967, the interest rate used was 4.923S—the average of the rates applicable to new special issues for the 12 months of fiscal year 1967. For the calculation of interest loss for the period June 30, 1967,-July 1, 1968, and interest rate of 4¾ percent was used.

UNCONTROLLABLE WORKLOAD AND ATTENDANT COSTS

Senator HILL. There is nothing you can do about your request—it is fixed by law.

Mr. BALL. The amount we need for administrative expenses arises from the workloads of the program which are in turn fixed by statute and matters over which we have no control such as the size of the population, the level of economic activity, and incidence of illness among the aged, mortality rates that affect survivors' insurance, and so on.

Senator HILL. So you are compelled to do this under statute?

Mr. BALL. That is correct, and there is little we can do to control the workload.

1965 AND 1967 STATUTORY AMENDMENTS

Our budgets for 1969 are affected by the 1965 amendments to the act which established a medicare program and made significant payments in the cash benefit program as well as by the recently enacted 1967 amendments.

In other words, we are still operating very considerably in reaction to both the 1965 amendments and the 1967 amendments.

EARLIER AMENDMENTS

These recent amendments were the latest in a whole series of changes in the social security program that began in the early 1950's and have continued right up to the present date.

PROGRAM GROWTH AND MAGNITUDE

The result is that the social security program has been greatly strengthened and broadened until today we have a national social insurance system which importantly affects practically every man, woman, and child in the United States, Mr. Chairman.

Twenty-four million people—one out of every eight people in the United States—get a monthly check from the social security system. In other words, the beneficiaries have reached that level of one out of every eight. If we think not of the beneficiaries but the people who are at work, nine out of 10 of them are covered under social security, building up their protection for the future.

BENEFICIARIES

Almost 90 percent of the people 65 and over are protected under social security and 95 out of 100 of the mothers and children of the

country would be eligible for monthly benefits in the event of the death of the main breadwinner in that family.

If you just take the survivors' insurance alone, the face value of that protection after the 1967 amendments is now $940 billion which coincidentally is approximately the same as all of the private life insurance in the country.

Nearly 90 million people will contribute to the social security system during 1968.

ANNUAL BENEFIT PAYMENTS

One way of seeing the great growth of this program recently, very largely as a result of the 1965 and 1967 amendments, is to compare the benefits that we were making just before those 1965 amendments and what we are making today.

Senator HILL. How does that compare?

Mr. BALL. In June of 1965, Mr. Chairman, we were making benefit payments at the annual rate of $17 billion which is, of course, a very sizable figure, but today we are making payments at the annual rate of $31 billion.

MEDICARE

This is including, of course, the addition of medicare to the program.

Senator HILL. That medicare adds a good deal, does it not?

Mr. BALL. Yes, sir; that will run a little over $6 billion out of the $31 billion.

Senator HILL. How about your medicaid?

Mr. BALL. That is really a different program.

Senator HILL. That depends a good deal on the State?

Mr. BALL. That is right. That is a different program. The Federal end of it is administered by the agency headed by Miss Switzer and in that program the State and Federal Government both participate.

But medicare is the program entirely for the people 65 and over that is connected with the social security national system.

In the brief period since July 30, 1965, the date this medicare law was signed, the monumental task of establishing medicare as a going program has been completed. I believe that the successful implementation of medicare flows from what was really a new high in cooperative effort undertaken by the Federal Government and public and private organizations and individuals.

Effective working relationships were established among Federal and State organizations, medical institutions, insurance companies, doctors, and 19½ million elderly Americans.

Today, just about 6,900 hospitals, 4,500 extended care facilities, 2,400 independent laboratories, 1,900 home health agencies, and 130 private insuring organizations and thousands of Government and health personnel at all Government levels are directly involved in making medicare a success.

ADMINISTRATION COMPLEXITY

The task of administering this program is immense. Practically all of the people 65 and over in the country have the hospital insurance automatically the way the law is set up and those who are insured under social security or railroad retirement receive this protection from the contributions of covered workers and their employers.

Those who are uninsured under these programs, those 65 and over who do not meet the insured status requirements, receive the protection as a result of general revenue contributions. There is an item later on for reimbursement of the trust fund for that purpose.

VOLUNTARY PARTICIPANTS

The voluntary part of the program as you will remember covers primarily physicians services and the individual over 65 elects to pay a premium and the Government matches it; when the program started, just about 92 percent of all of the people over 65 signed up for that.

Mr. Chairman, frankly, I was amazed that such a high proportion of people would enter a voluntary program of any kind, but I can report to you today that the first open enrollment period that we have ever had in the program has been completed and that percentage has increased with the first open enrollment period.

About 700,000 more people signed up and only about 35,000 dropped out. So, we now have the participation of about 95 percent of all of the people 65 and over. I really think that that is probably all that should be signed up.

Senator HILL. It is getting pretty close to that 100 percent.

Mr. BALL. There are some people for whom it is really not advantageous. There are some Federal employees where there is a significant overlap in the protection of medicare and other protection they have and it is doubtful whether it is wise for all of them to be covered.

Puerto Rico, for example, has a system of governmental medicine that makes it questionable whether they should all be signed up, and groups like that. So, I really feel that we have reached just about everybody with the story, and that just about all those who correctly should be under the program are under it even though it is voluntary.

BENEFIT PAYMENTS

Under medicare in its first year and one-half of operation, a total of $5½ billion was paid out. The figure I was talking about was the current rate projected for a year; $4.2 billion under hospital insurance and $1.2 billion paid out under the voluntary part of the program.

BENEFIT INCREASES PURSUANT TO 1967 AMENDMENTS

The 1967 amendments resulted in an across-the-board benefit increase of at least 13 percent for everyone. Beginning for the month of February of 1968, we made a conversion to new benefit amounts.

There was an increase in the minimum from $44 to $55.

In addition to that, a few benefit categories were added to the cash benefits making about 350,000 additional people immediately eligible, and the retirement test was liberalized. Also, additional protection was provided under the medicare program and some changes were made in administrative arrangements under the medicare program.

If you took all of those cash benefit changes in the 1967 amendments together, instead of a 13-percent increase in benefits, you actually come out with about a 16-percent increase in actual expenditures as compared with the situation before the amendments.

FINANCING SOUNDNESS

These vast program changes, both the establishment of medicare and the substantial improvements in cash benefits in both 1965 and 1967

have been accomplished while at the same time the sound financing of the program both for the short run and for the long run has been maintained.

The long-range cost estimates show the program to be in actuarial balance as a whole and for each of the individual programs.

Beginning in calendar year 1968 there is substantial increase of income over outgo and according to our best estimates for each year on into the future.

REPORT OF TRUSTEES

I might say, Mr. Chairman, that the printed copies of the trustees' report that were submitted to the Congress on April 1 have just become available, which go into the details of the financial situation of each one of these four separate trust funds.

Senator HILL. Would you let us have a copy of that, please?

Mr. BALL. Yes; I will.

WORKLOAD INCREASE

The 1965 amendments, as I am sure you recognize, caused a tremendous change in the volume of the work handled by the Social Security Administration.

In a single year our workloads increased by 44.8 percent.

Senator HILL. In a single year?

Mr. BALL. In the single year of 1966 the workload went up 44.8 percent, and workloads for the year since then have continued to increase over the new high. So, the volume of work projected in the 1969 budget which is before you represents approximately a doubling of the work over the last pre-1965 amendment year.

CONTRACTED ORGANIZATIONAL SERVICES

Not only have our own workloads increased, that is the workload of the Government employees working for Social Security, but so, too, has the workload of those organizations that assist us in administering the medicare programs.

You will remember that we contract with Blue Cross-Blue Shield and private insurance companies to perform certain specified services under the program. They are primarily responsible for reviewing and paying bills and auditing services and making determinations of reasonable costs and charges under the program.

Mr. Chairman, that is the broad background of our request and I would like to turn now to the specifics of the dollar amounts that we are requesting under the salary and expense item.

PRESENT EMPLOYEES

Senator HILL. How many employees do you have now?

Mr. BALL. Just about 52,000 permanent employees and about 52,900 counting some temporaries and part-time employees.

EMPLOYEE INCREASE

Senator HILL. I have here that you contemplate 55,224 for next year; is that correct?

Mr. BALL. That is correct. to a very considerable extent, what the difference is between 1969 and 1968 in manpower is that we are dropping a lot of overtime. We had to use overtime in the periods

immediately following the amendments because there were really no alternatives to using the trained people on duty but we will be reducing that by about 2,500 man-years in 1969 as compared to 1968 and we will also be dropping some temporaries and some part-time employees and changing that into a level of around 55,000 permanent employees.

The total increase in man-years that we are requesting is only a little over 300.

BUDGET REQUEST

The request for salaries and expenses amounts to $753,145,000 and in addition the restoration of a $25 million contingency fund which will be used up in 1968.

That is to be compared with a revised estimate of our appropriated fund plus the request for a supplement pending in the Congress of $884,928,000 for fiscal year 1968.

This increase of $36,717,000 is attributable primarily to two factors: First of all, to about a 4.2-percent increase in the volume of work.

This is largely due to a larger population to be serviced and that, of course, applies not only to us but to those organizations that do work for us.

Now, if you computed the cost of that increase in workload it would come by itself to $32 million, but we will be absorbing a very large part of that because of increased productivity and what we are actually asking for this additional workload is only $16.3 million.

So, if you take the budgeted increase of $36.7 million, the items that make that up are $16.3 million for the handling of the increased volume of work after netting out the increased productivity and then $19.3 million for built-in salary-and-price increases; and $1.1 million for all other changes in requirements.

As we were indicating a little bit earlier, Mr. Chairman, and perhaps for the record I might put in these actual figures, the 1969 budget estimates provides for an increase of 1,728 permanent positions over 1968 or a total of 55,224 as you were saying.

However, the increase in man-years is only about one-fifth of that figure, 335 man-years. As I was saying, to a considerable extent that is a substitute for overtime and temporary and part-time employees. I believe that it is really very important to the health of the administration of this program that we move as rapidly as possible away from getting work done on overtime and with part-time and temporary employees to using permanent employees on regular time.

Senator HILL. Have an adequate force, so to speak?

Mr. BALL. Yes, that you can train and hold. There is no alternative to overtime when major amendments are enacted. But carried as longer than necessary, it is not only more expensive to the Government but it is damaging to employee morale to have all of this overtime.

CONTRIBUTION PERCENTAGE EQUIVALENT

The administrative expenses covered in our 1969 salaries and expense budgets plus expenses budgeted for the Department of the Treasury, HEW, and other components financed by the trust fund, are equivalent to 2 percent of the contributions of the program for the old-age

and survivors' and disability insurance program. In other words, we run this program for total administrative expenses of about 2 percent and then in the voluntary program which covers physicians' fees, the administrative expenses are considerably more because there is a big voume of very small bills. There the percentage for administration is about 9¼ percent but in both parts of this program where it is 2 and 9¼ percent you would find these administrative ratios compare very favorably with private insurance of a comparable kind, such as group insurance and after you have taken out their selling costs and other things which are not comparable. That concludes my presentation on salaries and expenses.

There are four other items about which I have much less supporting material but I would pause at this point to answer any questions on salaries and expenses.

BUDGET BUREAU REDUCTIONS

Senator HILL. Did you get from the Bureau of the Budget what you felt you needed for salaries and expenses?

Mr. BALL. The reductions in the salaries and expense items that were made.

Senator HILL. They cut you down quite a bit?

Mr. BALL. $11.8 million in salaries and expenses and $2.5 million in the contingency fund. In the amount for operating expenses they cut $11,800,000 but it is my judgment that if we receive the full amount that the Bureau approved that, although it won't be possible to do all of the things we planned originally, we will be able to administer this program at a satisfactory level of service to the people.

Senator HILL. You will be?

LIMITATION ON CONSTRUCTION

Mr. BALL. Yes, sir; the next item is a limitation on construction. Here actually we are not requesting any new construction funds in our 1969 budget.

BUDGET BUREAU REDUCTION

Senator HILL. When you say "We," do you mean the Budget Bureau?

Mr. BALL. There was a sizable cut in our request, Mr. Chairman, in this item. We requested authority for 30 additional district office buildings from the Bureau of the Budget and that request was denied as part of an overall policy of Government restriction on construction.

LIMITATION WITHDRAWAL

Senator HILL. How much is that going to affect you?

Mr. BALL. I am personally very much interested in pursuing, just as rapidly as we can, this policy that we adopted a few years ago of building district offices out of trust fund money.

I think the development of those buildings where we have been able to move ahead has proven to be a saving and also has proven to be much better designed for the usefulness of the people to be served and I hope very much that this limitation will not extend very long.

RELEASE OF 1968 EXPENDITURE REDUCTION FUNDS

We are now seeking construction bids for 11 offices that had previously been frozen.

Senator HILL. Frozen in the budget for 1968?

Mr. BALL. Yes; which had previously been approved.

Senator HILL. This is for 11 offices?

Mr. BALL. Yes; I think before these restrictions we were making some very substantial progress in acquiring sites and designing buildings and completing all work preparatory to soliciting bids for construction.

PROGRAM STATUS

As of now, two offices have been completed and four are in the process of construction. As I was saying, GSA has now been authorized to ask for construction bids on 11 more.

As Government-wide restrictions are relaxed, we are in a position to move ahead in acquiring additional sites, preparing designs, and entering the construction phases. That is the district office part.

At our headquarters site, an office building providing an additional 177,000 net square feet of space is well under way.

The site for a warehouse building has been cleared and graded and footings are being poured. A contract for the design of an additional office building providing for 145,000 square feet of space has been let and acquisition of land adjacent to our previous site is on schedule.

LEASED SPACE

However, because of inadequate facilities at the headquarters site, we have 4,000 employees located in leased space in Baltimore City and County.

Mr. Chairman, that is the end of our brief report.

Senator HILL. You have 4,000 employees in leased space in Baltimore?

Mr. BALL. Yes; we have had to go back downtown and put employees in buildings that are somewhat distant from the main site. This is quite inefficient and we hope that it does not have to last too long.

We have in process a building right near us for rental that will relieve this very considerably and we will be able to bring a lot of those people back.

RENT FUNDS

Senator HILL. Do you have the funds to pay that rent?

Mr. BALL. Yes, sir; that is included in the 1969 budget.

Senator HILL. That will help your situation considerably, will it not?

Mr. BALL. Yes.

PROGRAM COST

Senator HILL. What would the overall construction cost?

I am talking about your additional buildings.

Mr. FUTTERMAN. They were appropriated in 1967. We had $17 million.

Senator HILL. Did they not delay you?

Mr. FUTTERMAN. No, sir; we testified last year that we were moving ahead on two buildings, one of which is four stories high today and we are moving ahead on the warehouse and we have in design stage another building of 145,000 square feet.

We were authorized, in addition, operating space building of around 288,000. That is the one that last year we said we preferred to hold up because we foresaw that the building would be inadequate when built,

so we want to get some more information, study the situation a little longer before we come back to the committee with revised figures.

Senator HILL. Are you studying that now?

Mr. FUTTERMAN. Yes, sir; we are studying it now.

Mr. Chairman, we have $11,243,000 for the buildings that are now going up and in 1967 we got an appropriation of $17 million some-odd thousand for the building that is in the design stage plus the one we said we would not go ahead with until we had a better opportunity to study our future requirements.

Senator HILL. But you do think you will be able to erect this building and it will be helpful for you?

Mr. BALL. It is being built for us. It is right across the road from our main building.

### PAYMENT TO HEALTH INSURANCE PROGRM FOR AGED

Senator HILL. What is your next fund?

Mr. BALL. The next item is payment to the health insurance program for the aged.

The medicare program is partially financed by two types of payments from general revenue. If I could remind you of what those two types of reimbursement are: first of all, it is for the group of people who are 65 and over but who are not insured under social security. Now, all of their hospital insurance and extended care coverage and the home health part that is associated with hospital insurance and the out patient—all of that coverage and the administrative expenses that are associated with that coverage are by the basic law payable from general revenue. Our task is to estimate the number of such uninsured people who will be receiving service and how much that will be and request on that basis the money from the general fund to pay those benefits.

### VOLUNTARY PARTICIPANTS

The other part to come from general revenue is that in the voluntary program that I was speaking of earlier—that 95 percent of the people signed up for and that is primarily for physicians' services—there the basic design of the program is that the individual pays a monthly premium, usually deducted from his social security benefit or railroad retirement or civil service retirement check though some people pay us on a cash basis quarterly. Then the general revenue matches that premium payment dollar for dollar so it is paid half by the older person and half by general revenues. Here the second item in the request is for the payment from the general revenues that would match the premium payments of the individuals.

### PREMIUMS AND MATCHING INCREASES

I might point out, Mr. Chairman, that initially the premium for this voluntary coverage was $3 when the program was first set up. Each individual 65 or over paid that $3 premium and the Government matched it but the basic law provides that the Secretary of Health, Education, and Welfare has the responsibility to set a new premium rate at specified times if that previous rate does not seem an adequate one for the period ahead.

Senator HILL. Do you contemplate an increase?

Mr. BALL. Yes. We have promulgated an increase in that rate to $4

and that is now in effect as of April 1, and the increase will require, of course, an additional matching amount from general revenues. This is partly the explanation of the incerase in the request for 1969 over 1968.

BUDGET REQUEST

With that background of the two types of reimbursements, if I can give you the actual figures of our estimates here, Mr. Chairman, in putting both of these together we have an appropriation request of $1,360,227,000 of which $465,227,000 is for the payment to the hospital insurance trust fund for the uninsured and $895 million is for the Federal matching contributions to the medical insurance trust fund.

INCREASE OVER 1968

To get a good comparison for what we are asking in 1969—if we exclude from the 1968 base the underfinancing of 1967 costs which amount to $115,068,000, an amount that we have in our 1968 supplementation that is now pending—we have an adjusted base for 1968 of $1,164,591,000. That is to be compared with the 1969 estimate that I just gave you of $1,360,227,000. Thus, there is really an increase in this request of $195,636,000.

ANNUALIZATION OF MATCHING INCREASES AND ENROLLEE AND HOSPITAL INSURANCE COST FOR UNINSURED INCREASES

If I could explain, Mr. Chairman, what the reason for that increase is: $168 million of it, in other words, by far the major part, is due to the annualization in 1969 of the dollar-a-month increase in the matching premium and, of course, that is quite automatic under the basic statute. The remaining $27,636,000 is based on two factors—the increase in the number of enrollees under medical insurance, and increases in the cost for hospital insurance coverage of the uninsured. There has been an increase in the cost of those hospital benefits for everybody.

Senator HILL. It is going up for everybody?

Mr. BALL. Yes, and this item reflects the part of the increase that is attributable to the uninsured.

Mr. Chairman, that is the basis of the request for this money from general revenue in accordance with the statute for reimbursement of the social security funds.

ESTIMATE VALIDITY

Senator HILL. Will these funds meet your situation?

Mr. BALL. According to the best estimates that our actuaries and economists have been able to make, Mr. Chairman, these will bring us out just about right. Of course, it is always possible that after the fact we may have to request adjustment one way or the other, but, of course, we keep track of how this operates so that there is equity between the trust fund and the general fund, and we would request a change in future requests to make up for any slight errors that there might be in this one.

PREMIUM INCREASE

Mr. Chairman, you might be interested perhaps in more detail on why it was necessary to increase that premium rate from $3 to $4——

Senator HILL. What was it?

Mr. BALL. That is the main reason for this increase of 1969 over 1968. I could quickly tell you now what it was and perhaps suggest that we insert in the record the full statement that we developed on that.

Senator HILL. I think that would be a good idea.

(The statement follows:)

SUPPLEMENTARY MEDICAL INSURANCE PROGRAM FOR APRIL 1968 THROUGH JUNE 1969

STATEMENT OF ACTUARIAL ASSUMPTIONS AND BASES EMPLOYED IN ARRIVING AT AMOUNT OF STANDARD PREMIUM RATE

On December 27, 1967, announcement was made of the premium rate of $4 a month necessary to finance benefits under part B of title XVIII of the Social Security Act for the period beginning April 1968. In the notice of premium rate published in F.R. Doc. 67–15172, appearing at page 21044 of the issue of the FEDERAL REGISTER for Saturday, December 30, 1967, notice was given that upon approval of H.R. 12080 by the President of the United States, the aforementioned premium rate would be effective for the 15-month period from April 1968 through June 1969. H.R. 12080 (Public Law 90–248) was approved by the President on January 2, 1968.

There follows a statement of actuarial assumptions and bases employed in arriving at the amount of the standard premium rate for the Supplementary Medical Insurance program for the period April 1968 through June 1969. This statement will, in accordance with section 1839(b)(2) of the Social Security Act, as amended, present a summary of the actuarial assumptions and bases employed in arriving at the amount of the standard premium rate under the Supplementary Medical Insurance Program (part B of title XVIII of the Social Security Act) that has been promulgated for the 15-month period, April 1968 through June 1969. The standard premium rate is that rate which is payable by those who enroll in their initial enrollment period and by those who enroll in a general enrollment period that terminates less than 12 months after the close of their initial enrollment period.

The actuarial determination has been made on the basis of both the actual operating experience under the program and the results of a current continuing sample survey of beneficiaries (which gives certain information more promptly than do the aggregate operations of the program). Because of the time lag in the submission of bills in this program, complete figures for the 6 months of 1966 are not yet available, and the processed data for the first 10 months of 1967 are rather incomplete.

There are current figures for cash expenditures under the program, but these figures taken alone are misleading because they do not take into account the liabilities arising from the natural delay in benefit payments until well after the date that services were received. Such delay is due to the tendency of enrollees to accumulate a number of bills before submitting a claim, the inherent delays by physicians and enrollees in making requests for payment, and the time required by the carriers to adjudicate and pay claims. There was a balance of $394 million in the Supplementary Medical Insurance Trust Fund at the end of October 1967 (a decline from a peak of $570 million at the end of March 1967), but there were at that time substantial outstanding liabilities incurred for services rendered during the first 16 months of the program.

On the basis of claims and administrative expenses paid (cash basis), the average monthly per capita expenditures of the program for the 6 months of 1966 were $1.93; for the first 10 months of 1967, the average was $6.06. However, these figures need to be adjusted for the estimated increase in liability that took place during the period for benefits that will be paid for services rendered during the period but had not been paid at the end of the period; i.e., the premium rate must be set on an accrual basis, rather than a cash basis.

Figures on an accrual basis for the 6 months of 1966 are, of course, much more complete than for 1967. On the basis of the 1966 accrual figures, it is now estimated that, for this 6-month period, benefits and administrative expenses per capita exceeded the income from premiums and matching Government contributions by 30 cents per month (i.e., 15 cents each). It is further estimated that the liability of the system for the entire 1½-year period, July 1966–December 1967, will be about 7 percent higher than the income from the premiums and the matching Government contribution. In other words, it is expected that the $3

premium for the entire period will be lower than half the cost for benefits and administrative expenses by about 20 cents. About 12 cents of this 20 cents is accounted for by the fact that apparently physicians' fees were higher during this period than had been assumed in setting the premium; the remaining 8 cents arises from the fact that there has apparently been a somewhat greater utilization of services under the program than had been anticipated. Projecting costs of the program for the 15-month period following March 1968 at the level of operation in 1966–67 thus would require an additional 20 cents in the premium rate. These estimates are based upon incomplete data for past periods and upon projections thereof and may be somewhat more or less when the final accounts are in.

In estimating the cost of the program for April 1968 through June 1969, it is necessary to provide for the long-term trend toward greater utilization of medical services (including the effects of the discovery and more frequent use of new, highly expensive medical techniques) and the long-range upward trend of the general earnings levels, which will be reflected in higher physicians' fees and administrative expenses. It is also necessary to take into account the liberalized benefits provided by the Social Security Amendments of 1967.

It is assumed that, in 1968–69, physicians' fees will increase at an annual rate of 5 percent and utilization of medical services by enrollees will increase at an annual rate of 2 percent. Administrative expenses are assumed to represent 9½ percent of the benefit payments; this figure is based on the actual operating results in 1967, when the average per capita administrative expenses of $0.56 per month represented 9.5 percent of the average per capita benefit costs on an incurred basis. (The administrative expenses, on a paid basis, represented an average monthly per capita amount of $0.70 for the 6 months of 1966. The 1966 average was relatively high because of the necessary one-time startup costs.) The average interest rate on the invested assets of the trust is assumed to be 4¾ percent (the rate applicable to virtually the entire portfolio as of Oct. 31, 1967).

It is estimated that, if the law had not been changed, the monthly per capita cost on a calendar-year basis would be $7.18 for 1968 and $7.81 for 1969. The cost for the 15-month period beginning April 1968 would average out at $7.43 a month. The effect of the 1967 amendments (by moving the hospital outpatient diagnostic benefits to Supplementary Medical Insurance from Hospital Insurance; by eliminating the cost-sharing provisions for inpatient radiology and pathology; and by liberalizing the outpatient physical therapy services) increases the cost of the program by 6 percent relatively—or to $7.89 per month (half of which is $3.95).

A standard premium rate of $4 per month for the 15-month period beginning April 1968 has been promulgated, to allow a margin for contingencies, as required by law.

In addition, the interest earnings of the trust fund are available as a margin for contingencies and, if not needed to pay benefits and administrative expenses in the current period, will reduce the unfunded liability for the past deficiency in the premium rate. Interest earnings are the equivalent of another 10 cents per capita in available income.

The explanation of the $1 increase in the monthly premium rate for the new premium period can be summarized in the following manner:

(a) The cost of the protection under the program as in effect in 1966–67 is estimated to have exceeded the income from premiums and Government matching contribution by about 7 percent—an increase of about 20 cents.

(b) The cost of the program in 1966–67 was abnormally low as a result of the fact that in the 6 months of operation in 1966 the full $50 deductible was applicable, and it had a much stronger effect in reducing benefit costs than will be the case in later years; in other words, with all other things being the same, the program cost is higher for future years, in which the $50 deductible is usually applicable for 12-month periods, than for the initial period—an increase of about 3 cents.

(c) The $50 deductible represents a smaller proportion of the total covered medical charges when these increase as a result of either higher physician fees or higher utilization—an increase of about 11 cents.

(d) The utilization of medical services is assumed to be higher in the new premium period than in 1966–67, and so the program cost is higher—an increase of about 11 cents.

(e) The level of physicians' fees is assumed to be higher in the new premium period than in 1966–67, and so the program cost is higher—an increase of about 27 cents.

(f) The 1967 amendments increased the benefit protection under this program, and so the program cost is higher—an increase of about 23 cents.

(g) The promulgated rate includes an amount to provide a margin for contingencies—an increase of about 5 cents.

As indicated previously, the program has more than ample funds, on a cash basis, to meet its expected obligations for benefit payments and administrative expenses now and in the period to which the promulgated premium rate applies.

Dated: January 23, 1968.

[SEAL] WILBUR J. COHEN,
*Acting Secretary.*

[F.R. Doc. 68-1120; Filed, Jan. 29, 1968; 8:48 a.m.]

PROGRAM LIABILITIES

Mr. BALL. I might say—because there has been considerable confusion on this—our actual experience for the first year of medicare came out remarkably well as compared to what we estimated. In both hospital insurance and voluntary programs, costs ran about 7 percent more than we thought, but for a brandnew program I consider that quite close. You may have seen stories that we were way off and it was costing a great deal more. That is just not true.

Senator HILL. The facts do not sustain that, do they?

Mr. BALL. No, sir; the voluntary program on an accrual basis, that is, in setting the premium rate, it is clear that you have to look at how much liability the program has received during this year, not how much money we paid out, because there is a lag in making payments under the voluntary program. Individuals tend to accumulate their bills and send them in to us at one time, and payments are always considerably behind what the liabilities are.

So we have estimated if we look at that first year experience in terms of the liability—not just what we paid out but the liability—it is probably about 7 percent over and would require about a 20-cent increase in the premium rate to have it come out right for that past period. In other words, the premium should have been not $3 but $3.20. That takes care of one part of the reason why we had to raise the rate because it really should have started from $3.20 rather than $3.

UTILIZATION INCREASE

Then we estimate that there will be an increase in utilization of about 2 percent a year. Every insurance program, as it is in existence longer, has the experience of people learning more about the benefits and what is available to them as well as the general underlying factor in this country, Mr. Chairman, that I think applies to medical services generally and that is people are using medical services more than they did in the past. So that factor of increased utilization accounts for about 25 cents more of the increase when combined with a change in the effect of the deductible.

PHYSICAN FEES INCREASE

Then we expect a continued increase in physicians' fees during this period. We think they will continue to go up some, Mr. Chairman. We have not estimated as large an increase as in the immediate past. Since medicare has been in effect, fees have risen between 6 and 7 percent a year. We are estimating for this $4 premium only 5 percent a year. I am hopeful that that will turn out to be the case, but we do have some money here for contingency purposes if we are wrong.

1967 AMENDMENT INCREASES

About 23 cents of the increase—and I think this is a factor which is sometimes overlooked—was necessary because of improved coverage growing out of the 1967 amendments. For one thing, inpatient radiology and lab services are now covered completely under the medicare program. This is one of the main improvements in the program and that costs some more money.

Mr. Chairman, that really completes the background on the request for this general fund reimbursement.

MILITARY SERVICE CREDITS

Senator HILL. Turn to your military service credits.

Mr. BALL. This is just a continuation of asking for the same amount of an annual appropriation similar to last year. It is the same amount as last year.

Under the basic statute, we are required to estimate what would amortize the past debt, the current and as well the projection of the future cost of these noncontributory military services. This is a request of $105 million.

BUDGET BUREAU REDUCTION

Senator HILL. The Budget Bureau denied your request. What will be the effect of that?

Mr. BALL. The judgment of our actuaries studying this program was that the correct amount over the 50year period would be $120 million rather than $105 million, but this is an estimate. Of course, the basic statute will require us to revise this estimate at a later point, and if the $120 million is a correct one, we will have to come back for the additional amount. The Bureau of the Budget disagreed with this estimate and thought $105 million was proper.

Mr. Futterman is reminding me that we originally requested $135 million in 1969 to make up for the deficit that we felt existed between the $105 million and $120 million of the previous year. Then the $135 million was reduced to $120 million by the Department and the Bureau of the Budget reestablished the $105 million request that they reduced us to in the previous year, so our 1969 request is the same as appropriated last year.

STATUTORY REESTIMATION

Senator HILL .How long do you imagine it will be before you know who is right?

Mr. BALL. We will make a new estimate on this at a specified time according to the statute, and I have really forgotten the statute—I am informed it is every 5 years—but we will make another estimate, and we will have had more experience and perhaps at that time we will be more convincing.

Senator HILL. If you do not have the fund, you will just have to come back and ask for a supplemental.

Mr. BALL. That is true. There is a provision for interest earnings on this. I must say it does not do any long-range damage as long as we keep it up to date and come back and get the additional amount.

REIMBURSEMENT TO TRUST FUND

Mr. FUTTERMAN. This is not reimbursement to the appropriation but reimbursement to the trust fund, so it is not likely to be in a supple-

mental. We would take care of it in the next regular budget. This is the reimbursement to the trust funds for expenditures which are being and have already been incurred and projected for the future, and its purpose is to make the two funds even.

PAYMENT FOR SPECIAL BENEFITS TO AGED

Senator HILL. What about your payments for special benefits to the aged?

Mr. BALL. This is a new item. This is the first time under the statute we were empowered to come in and request this. The statute provides special benefits to individuals at age 72 or more when they are not receiving assistance payments and are not insured under social security. Then we pay the difference between any other governmental pension and the amount specified in the statute. Under the 1967 amendment, it is $40 for a single individual and $20 for a spouse. The basic statute provides for these amounts to be reimbursed from general revenues. This request is based on our experience, for the fiscal year 1967 with this particular provision.

For the record, I might point out, Mr. Chairman, that this resulted from an addition to section 228 of the Social Security Act by section 302 of the Tax Adjustment Act of 1966. This was a floor amendment proposed by Senator Prouty. It authorizes an appropriation for general revenues beginning with fiscal year 1969 for the amount that is necessary to place the trust funds in the same position as they would have been if these payments had not been made. In other words, we have made the payments, we have spent administrative funds and there is an interest loss as well. All of those things are to be made up.

So to give you the detail on it: our request for $225,545,000—the request in the budget for fiscal year 1969—covers the benefit payments, the administrative expenses and the interest. Of the total amount requested, $198,528,000 is for benefits which we have already made in the fiscal year of 1967, $12,880,000 for administrative expenses that we have spent in connection with this provision and $14,137,000 for an interest loss to the funds since the funds advanced the payments and thus lost interest.

That completes the five items we had to present to you, Mr. Chairman, in connection with 1969.

SUBCOMMITTEE RECESS

Senator HILL. Is there anything else you would like to add? We want to thank you all very, very much for your testimony. We appreciate it very much.

The subcommittee will stand in recess until 10 a.m. tomorrow morning.

(Whereupon, at 1:30 p.m., Wednesday, May 1, the subcommittee was recessed to reconvene at 10 a.m., Thursday, May 2.)

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